



Yearbook of Statistics Singapore, 1998



SINGAPORE DEPARTMENT OF STATISTICS

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PREFACE

The Yearbook of Statistics, 1998 is the thirty-second edition of a series first published in 1967. The publication provides a comprehensive, current statistical record of the key socio-demographic and economic characteristics of Singapore. Users are able to get a snapshot picture of the Singapore economy and population based on the latest available information.

Improvements are continuously made to the Yearbook to enhance its value to users. New data series on topics of interest are added as and when appropriate. Since 1967 when the Yearbook was first published, the number of tables in the publication has increased from 124 to 257. The Yearbook has been produced from an automated system since the 1995 edition.

In addition to this Yearbook, the Department disseminates official statistics on Singapore through a variety of electronic services. These include the Statistics Singapore Home Page, SingStat DataShop, Time Series Retrieval and Dissemination System and MTI Telelink. Internet users can now purchase softcopies of statistical tables in the Yearbook through the DataShop. For users who have specific data needs, the Department's Statistical Information Services offers personalized assistance on cost-recovery basis.

The data series in the Yearbook are compiled by the Singapore Department of Statistics and other government departments and statutory boards. I would like to extend my grateful thanks to all the organisations that have contributed to the success of this publication for the past thirty-two years. I look forward to their continued support.

Dr Paul Cheung
Chief Statistician
Singapore

May 1999

SINGAPORE DEPARTMENT OF STATISTICS

OUR MISSION

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NOTATIONS

na	not available
nec	not elsewhere classified
-	nil or negligible

NOTES

Figures may not add up to the totals due to rounding.

Some figures, particularly those for the most recent time periods, are provisional and may be subject to revision in later issues.

NOTES ON CHANGES AND REVISIONS

From time to time, changes are made to the Yearbook of Statistics to maintain its currency and relevance. Such changes include addition of new series and replacement of existing series as a result of revision necessitated by changed circumstances. In this edition, the following changes are made :

New Tables

The following four tables are included :-

Table 5.9	Income Components of Gross Domestic Product
Table 16.1	Government Finance
Table 16.6	Government Debt by Instrument
Table 16.7	Government Debt by Maturity

Replacement of Existing Series

Indicator on “International Telephone Call Minutes” instead of “Number of Calls” is published in Table 13.14 Postal Articles Handled and Telecommunications.

Table 15.16 Turnover of Stocks and Shares and Table 15.17 SES Sectoral Indices replace the previous series.

Table 17.10 Price Indices of Selected Farm Products using 1997 as base year replaces the previous series with 1985 as base year.

The following twelve tables in the Education Section replace the previous series :-

Table 18.1	Enrolment in Educational Institutions
Table 18.7	Students Admitted to Institutions of Higher Learning by Sex
Table 18.8	Enrolment in Institutions of Higher Learning by Sex
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Table 18.15	Enrolment in Higher Degree Courses by Type of Course
Table 18.16	Graduates from Polytechnic Advanced Diploma Courses by Type of Course
Table 18.17	Graduates from Higher Degree Courses by Type of Course

Other Changes

“POSBank Deposit Rate” in Table 15.13 Domestic Interest Rates, and Table 15.14 Number of Accounts and Deposits of Post Office Savings Bank (in previous editions) have been discontinued.

Year	GDP (Billion TND)	Per Capita GDP (TND)	Population (Million)	Urban Population (Million)	Rural Population (Million)	Urban % of Total	Rural % of Total
1998	147,340.0	1,473.40	100.0	47.34	52.66	47.34	52.66
1997	147,310.4	1,473.10	100.0	47.31	52.69	47.31	52.69
1996	147,280.8	1,472.81	100.0	47.28	52.72	47.28	52.72
1995	147,251.2	1,472.51	100.0	47.25	52.75	47.25	52.75
1994	147,221.6	1,472.22	100.0	47.22	52.78	47.22	52.78
1993	147,192.0	1,471.92	100.0	47.19	52.81	47.19	52.81
1992	147,162.4	1,471.62	100.0	47.16	52.84	47.16	52.84
1991	147,132.8	1,471.33	100.0	47.13	52.87	47.13	52.87
1990	147,103.2	1,471.03	100.0	47.10	52.90	47.10	52.90
1989	147,073.6	1,470.74	100.0	47.07	52.93	47.07	52.93
1988	147,044.0	1,470.44	100.0	47.04	52.96	47.04	52.96
1987	147,014.4	1,470.14	100.0	47.01	52.99	47.01	52.99
1986	146,984.8	1,469.85	100.0	46.98	53.02	46.98	53.02
1985	146,955.2	1,469.55	100.0	46.95	53.05	46.95	53.05
1984	146,925.6	1,469.26	100.0	46.92	53.08	46.92	53.08
1983	146,896.0	1,468.96	100.0	46.89	53.11	46.89	53.11
1982	146,866.4	1,468.66	100.0	46.86	53.14	46.86	53.14
1981	146,836.8	1,468.37	100.0	46.83	53.17	46.83	53.17
1980	146,807.2	1,468.07	100.0	46.80	53.20	46.80	53.20
1979	146,777.6	1,467.78	100.0	46.78	53.22	46.78	53.22
1978	146,748.0	1,467.48	100.0	46.74	53.26	46.74	53.26
1977	146,718.4	1,467.18	100.0	46.71	53.29	46.71	53.29
1976	146,688.8	1,466.89	100.0	46.69	53.31	46.69	53.31
1975	146,659.2	1,466.59	100.0	46.66	53.34	46.66	53.34
1974	146,629.6	1,466.30	100.0	46.63	53.37	46.63	53.37
1973	146,600.0	1,466.00	100.0	46.60	53.40	46.60	53.40
1972	146,570.4	1,465.70	100.0	46.57	53.43	46.57	53.43
1971	146,540.8	1,465.41	100.0	46.54	53.46	46.54	53.46
1970	146,511.2	1,465.11	100.0	46.51	53.49	46.51	53.49
1969	146,481.6	1,464.82	100.0	46.48	53.52	46.48	53.52
1968	146,452.0	1,464.52	100.0	46.45	53.55	46.45	53.55
1967	146,422.4	1,464.23	100.0	46.42	53.58	46.42	53.58
1966	146,392.8	1,463.93	100.0	46.39	53.61	46.39	53.61
1965	146,363.2	1,463.64	100.0	46.36	53.64	46.36	53.64
1964	146,333.6	1,463.34	100.0	46.33	53.67	46.33	53.67
1963	146,304.0	1,463.04	100.0	46.30	53.70	46.30	53.70
1962	146,274.4	1,462.75	100.0	46.27	53.73	46.27	53.73
1961	146,244.8	1,462.45	100.0	46.24	53.76	46.24	53.76
1960	146,215.2	1,462.15	100.0	46.21	53.79	46.21	53.79
1959	146,185.6	1,461.86	100.0	46.19	53.82	46.19	53.82
1958	146,156.0	1,461.56	100.0	46.16	53.85	46.16	53.85
1957	146,126.4	1,461.27	100.0	46.13	53.88	46.13	53.88
1956	146,096.8	1,460.97	100.0	46.10	53.91	46.10	53.91
1955	146,067.2	1,460.68	100.0	46.07	53.94	46.07	53.94
1954	146,037.6	1,460.38	100.0	46.04	53.97	46.04	53.97
1953	146,008.0	1,460.09	100.0	46.01	54.00	46.01	54.00
1952	145,978.4	1,459.79	100.0	45.98	54.03	45.98	54.03
1951	145,948.8	1,459.49	100.0	45.95	54.06	45.95	54.06
1950	145,919.2	1,459.20	100.0	45.92	54.09	45.92	54.09
1949	145,889.6	1,458.91	100.0	45.89	54.12	45.89	54.12
1948	145,860.0	1,458.62	100.0	45.86	54.15	45.86	54.15
1947	145,830.4	1,458.33	100.0	45.83	54.18	45.83	54.18
1946	145,800.8	1,458.04	100.0	45.80	54.21	45.80	54.21
1945	145,771.2	1,457.75	100.0	45.77	54.24	45.77	54.24
1944	145,741.6	1,457.46	100.0	45.74	54.27	45.74	54.27
1943	145,712.0	1,457.17	100.0	45.71	54.30	45.71	54.30
1942	145,682.4	1,456.88	100.0	45.68	54.33	45.68	54.33
1941	145,652.8	1,456.59	100.0	45.65	54.36	45.65	54.36
1940	145,623.2	1,456.30	100.0	45.62	54.39	45.62	54.39
1939	145,593.6	1,456.01	100.0	45.59	54.42	45.59	54.42
1938	145,564.0	1,455.72	100.0	45.56	54.45	45.56	54.45
1937	145,534.4	1,455.43	100.0	45.53	54.48	45.53	54.48
1936	145,504.8	1,455.14	100.0	45.50	54.51	45.50	54.51
1935	145,475.2	1,454.85	100.0	45.47	54.54	45.47	54.54
1934	145,445.6	1,454.56	100.0	45.44	54.57	45.44	54.57
1933	145,416.0	1,454.27	100.0	45.41	54.60	45.41	54.60
1932	145,386.4	1,453.98	100.0	45.38	54.63	45.38	54.63
1931	145,356.8	1,453.69	100.0	45.35	54.66	45.35	54.66
1930	145,327.2	1,453.40	100.0	45.32	54.69	45.32	54.69
1929	145,297.6	1,453.11	100.0	45.29	54.72	45.29	54.72
1928	145,268.0	1,452.82	100.0	45.26	54.75	45.26	54.75
1927	145,238.4	1,452.53	100.0	45.23	54.78	45.23	54.78
1926	145,208.8	1,452.24	100.0	45.20	54.81	45.20	54.81
1925	145,179.2	1,451.95	100.0	45.17	54.84	45.17	54.84
1924	145,149.6	1,451.66	100.0	45.14	54.87	45.14	54.87
1923	145,120.0	1,451.37	100.0	45.12	54.90	45.12	54.90
1922	145,090.4	1,451.08	100.0	45.09	54.93	45.09	54.93
1921	145,060.8	1,450.79	100.0	45.06	54.96	45.06	54.96
1920	145,031.2	1,450.50	100.0	45.03	54.99	45.03	54.99
1919	145,001.6	1,450.21	100.0	45.00	55.02	45.00	55.02
1918	144,972.0	1,449.92	100.0	44.97	55.05	44.97	55.05
1917	144,942.4	1,449.63	100.0	44.94	55.08	44.94	55.08
1916	144,912.8	1,449.34	100.0	44.91	55.11	44.91	55.11
1915	144,883.2	1,449.05	100.0	44.88	55.14	44.88	55.14
1914	144,853.6	1,448.76	100.0	44.85	55.17	44.85	55.17
1913	144,824.0	1,448.47	100.0	44.82	55.20	44.82	55.20
1912	144,794.4	1,448.18	100.0	44.79	55.23	44.79	55.23
1911	144,764.8	1,447.89	100.0	44.76	55.26	44.76	55.26
1910	144,735.2	1,447.60	100.0	44.73	55.29	44.73	55.29
1909	144,705.6	1,447.31	100.0	44.70	55.32	44.70	55.32
1908	144,676.0	1,447.02	100.0	44.67	55.35	44.67	55.35
1907	144,646.4	1,446.73	100.0	44.64	55.38	44.64	55.38
1906	144,616.8	1,446.44	100.0	44.61	55.41	44.61	55.41
1905	144,587.2	1,446.15	100.0	44.58	55.44	44.58	55.44
1904	144,557.6	1,445.86	100.0	44.55	55.47	44.55	55.47
1903	144,528.0	1,445.57	100.0	44.52	55.50	44.52	55.50
1902	144,498.4	1,445.28	100.0	44.49	55.53	44.49	55.53
1901	144,468.8	1,444.99	100.0	44.46	55.56	44.46	55.56
1900	144,439.2	1,444.70	100.0	44.43	55.59	44.43	55.59
1899	144,409.6	1,444.41	100.0	44.40	55.62	44.40	55.62
1898	144,380.0	1,444.12	100.0	44.38	55.65	44.38	55.65
1897	144,350.4	1,443.83	100.0	44.35	55.68	44.35	55.68
1896	144,320.8	1,443.54	100.0	44.32	55.71	44.32	55.71
1895	144,291.2	1,443.25	100.0	44.29	55.74	44.29	55.74
1894	144,261.6	1,442.96	100.0	44.26	55.77	44.26	55.77
1893	144,232.0	1,442.67	100.0	44.23	55.80	44.23	55.80
1892	144,202.4	1,442.38	100.0	44.20	55.83	44.20	55.83
1891	144,172.8	1,442.09	100.0	44.17	55.86	44.17	55.86
1890	144,143.2	1,441.80	100.0	44.14	55.89	44.14	55.89
1889	144,113.6	1,441.51	100.0	44.11	55.92	44.11	55.92
1888	144,084.0	1,441.22	100.0	44.08	55.95	44.08	55.95
1887	144,054.4	1,440.93	100.0	44.05	55.98	44.05	55.98
1886	144,024.8	1,440.64	100.0	44.02	56.01	44.02	56.01
1885	143,995.2	1,440.35	100.0	43.99	56.04	43.99	56.04
1884	143,965.6	1,440.06	100.0	43.96	56.07	43.96	56.07
1883	143,936.0	1,439.77	100.0	43.93	56.10	43.93	56.10
1882	143,906.4	1,439.48	100.0	43.90	56.13	43.90	56.13
1881	143,876.8	1,439.19	100.0	43.87	56.16	43.87	56.16
1880	143,847.2	1,438.90	100.0	43.84	56.19	43.84	56.19
1879	143,817.6	1,438.61	100.0	43.81	56.22	43.81	56.22
1878	143,788.0	1,438.32	100.0	43.78	56.25	43.78	56.25
1877	143,758.4	1,438.03	100.0	43.75	56.28	43.75	56.28
1876	143,728.8	1,437.74	100.0	43.72	56.31	43.72	56.31
1875	143,699.2	1,437.45	100.0	43.69	56.34	43.69	56.34
1874	143,669.6	1,437.16	100.0	43.66	56.37	43.66	56.37
1873	143,640.0	1,436.87	100.0	43.64	56.40	43.64	56.40
1872	143,610.4	1,436.58	100.0	43.61	56.43	43.61	56.43
1871	143,580.8	1,436.29	100.0	43.58	56.46	43.58	56.46
1870	143,551.2	1,436.00	100.0	43.55	56.49	43.55	56.49
1869	143,521.6	1,435.71	100.0	43.52	56.52	43.52	56.52
1868	143,492.0	1,435.42	100.0	43.49	56.55	43.49	56.55
1867	143,462.4	1,435.13	100.0	43.46	56		

1.1 NATIONAL INCOME

Year	Gross National Product (GNP) \$ M	Per Capita GNP \$	Gross National Saving \$M	Gross Capital Formation \$M	Gross Domestic Product \$M	Gross Fixed Capital Formation \$M
	At Current Market Prices				At 1990 Market Prices	
1988	51,494.8	18,093.1	21,228.6	17,329.8	55,587.9	16,899.9
1993	93,220.1	28,600.4	42,062.4	35,258.2	85,244.6	30,159.3
1994	108,873.5	32,369.1	53,114.3	35,701.8	94,777.8	33,069.5
1995	121,734.1	35,107.2	61,328.7	40,867.2	102,782.4	36,771.4
1996	133,348.3	36,918.1	68,235.4	47,777.3	110,510.2	45,328.0
1997	147,210.4	39,395.8	76,944.2	54,624.2	119,337.7	49,964.4
1998	147,548.0	38,169.5	76,834.4	47,355.7	121,111.5	47,597.6
Percentage Change Over Previous Year						
1988	19.6	16.6	32.1	6.3	11.6	3.8
1993	13.4	10.6	8.7	21.3	12.6	10.3
1994	16.8	13.2	26.3	1.3	11.2	9.6
1995	11.8	8.5	15.5	14.5	8.4	11.2
1996	9.5	5.2	11.3	16.9	7.5	23.3
1997	10.4	6.7	12.8	14.3	8.0	10.2
1998	0.2	-3.1	-0.1	-13.3	1.5	-4.7

1.2 INFLATION, LABOUR AND BUSINESS COSTS

Year	Measures of Inflation			Unit Labour Cost		Unit Business Cost of Manufacturing (1988 = 100)
	Consumer Price Index (Oct 92 - Sep 93 = 100)	Domestic Supply Price Index (1990 = 100)	Gross Domestic Product Deflator (1990 = 100)	Overall Economy (1988 = 100)	Manufacturing (1988 = 100)	
1988	87.8	95.9	91.2	100.0	100.0	100.0
1993	100.5	89.2	109.0	126.7	130.0	121.1
1994	103.6	87.3	112.4	130.0	126.0	120.1
1995	105.4	87.4	115.3	133.1	124.4	122.8
1996	106.9	87.5	116.7	136.3	127.3	125.3
1997	109.0	86.5	118.4	138.3	128.4	126.3
1998	108.8	83.8	116.6	140.3	127.3	124.8
Percentage Change Over Previous Year						
1988	1.5	-1.8	5.7	3.1	4.0	3.3
1993	2.3	-2.8	3.5	-0.8	-3.1	-0.9
1994	3.1	-2.0	3.1	2.6	-3.1	-0.8
1995	1.7	0.1	2.6	2.4	-1.3	2.2
1996	1.4	0.1	1.2	2.4	2.3	2.1
1997	2.0	-1.2	1.5	1.5	0.9	0.8
1998	-0.3	-3.0	-1.5	1.4	-0.9	-1.2

1.3 MANUFACTURING AND BUILDING & CONSTRUCTION

Year	Manufacturing			Building & Construction			
	Net Investment Commitments	Output ¹	Index of Industrial Production ¹ (1996=100)	Written Permission	Building Plan Approval ²	Building Commence-ment	Building Completed
	Million Dollars			Thousand Square Metres of Gross Floor Area			
1988	2,007.4	56,470	53.9	4,889	1,765	4,137	6,273
1993	3,922.6	87,639	77.7	8,162	3,157	9,040	6,506
1994	5,764.6	100,622	87.8	9,562	4,101	9,497	6,212
1995	6,809.1	113,358	96.8	12,750	4,106	11,889	8,193
1996	8,085.1	119,869	100.0	13,121	5,979	10,612	8,791
1997	8,488.4	126,531	104.6	14,422	6,607	12,427	11,064
1998	7,829.4	123,880	104.1	8,979	4,590	7,322	12,237
Percentage Change Over Previous Year							
1988	15.2	22.5	18.3	-33.7	65.1	-1.5	-11.1
1993	12.7	13.4	10.2	-14.6	9.3	2.4	-1.1
1994	47.0	14.8	13.0	17.2	29.9	5.1	-4.5
1995	18.1	12.7	10.3	33.3	0.1	25.2	31.9
1996	18.7	5.7	3.3	2.9	45.6	-10.7	7.3
1997	5.0	5.6	4.6	9.9	10.5	17.1	25.9
1998	-7.8	-2.1	-0.5	-37.7	-30.5	-41.1	10.6

1 Refer to establishments engaging 10 or more workers.

2 Refer to private sector only.

1.4 EXTERNAL TRADE AND TOURISM

Year	External Trade					Tourism	
	Total	Exports			Imports	Visitors Arrivals ¹	Hotel Rooms Available ²
		Total	Domestic Exports	Re-exports			
	Million Dollars						Thousand
1988	167,278.0	79,051.3	49,555.2	29,496.1	88,226.7	4,186.1	22,612
1993	257,076.4	119,473.4	75,394.0	44,079.4	137,602.9	6,425.8	23,959
1994	303,723.0	147,327.2	88,533.3	58,793.9	156,395.8	6,899.0	24,601
1995	343,828.2	167,514.7	98,472.7	69,042.0	176,313.5	7,137.3	25,590
1996	361,455.3	176,271.9	103,588.8	72,683.2	185,183.4	7,292.5	27,010
1997	382,217.7	185,612.5	107,535.2	78,077.3	196,605.2	7,198.0	27,915
1998	353,626.8	183,763.3	105,917.6	77,845.7	169,863.5	6,241.0	27,540
	Percentage Change Over Previous Year						
1988	30.0	31.2	26.8	39.2	29.0	13.8	3.3
1993	16.4	15.6	13.7	19.1	17.1	7.3	2.6
1994	18.1	23.3	17.4	33.4	13.7	7.4	2.7
1995	13.2	13.7	11.2	17.4	12.7	3.5	4.0
1996	5.1	5.2	5.2	5.3	5.0	2.2	5.5
1997	5.7	5.3	3.8	7.4	6.2	-1.3	3.4
1998	-7.5	-1.0	-1.5	-0.3	-13.6	-13.3	-1.3

1 Exclude arrivals of Malaysians by land.

2 Refer to gazetted hotels.

1.5 TRANSPORT AND COMMUNICATIONS

Year	Cargo Handled					International Telephone Call Minutes ²
	Air ¹		Sea		Container Throughput	
	Discharged	Loaded	General	Bulk		
	Tonnes		Thousand Freight Tonnes		Thousand TEUs	
1988	263,248	248,293	66,940	87,799	3,375	165
1993	444,019	394,397	142,643	131,080	9,047	376
1994	529,334	480,430	157,247	132,828	10,400	451
1995	577,749	528,024	169,745	135,739	11,846	550
1996	622,019	568,438	175,083	139,081	12,944	579
1997	696,778	639,570	185,559	141,948	14,136	697
1998	651,568	632,093	172,968	139,354	15,136	794
Percentage Change Over Previous Year						
1988	18.5	26.1	29.1	13.1	28.1	26.0
1993	14.8	18.7	13.5	16.3	19.7	16.0
1994	19.2	21.8	10.2	1.3	15.0	19.9
1995	9.1	9.9	7.9	2.2	13.9	22.0
1996	7.7	7.7	3.1	2.5	9.3	5.3
1997	12.0	12.5	6.0	2.1	9.2	20.4
1998	-6.5	-1.2	-6.8	-1.8	7.1	13.9

1 Refer to Changi Airport only.

2 Exclude calls to Malaysia. Figures prior to 1996 are based on financial year.
Figure for 1998 includes Real-Time Fax and Budgetcall Services.

1.6 GOVERNMENT FINANCE

Year	Operating Revenue ¹	Operating Expenditure ²	Development Expenditure ³	Public Debt ⁴		
				Total	Domestic	External
	Million Dollars					
1988	na	na	na	41,830.7	41,589.9	240.8
1993	19,527.2	9,144.0	3,410.3	69,822.0	69,810.4	11.6
1994	23,280.2	9,699.8	4,418.3	75,344.4	75,339.7	4.7
1995	24,781.6	10,883.7	4,671.3	86,507.6	86,507.6	-
1996	28,038.3	12,253.6	6,920.7	94,830.7	94,830.7	-
1997	30,612.7	15,159.0	10,705.9	102,371.9	102,371.9	-
1998	28,212.5	14,236.4	10,557.1	115,183.4	115,183.4	-
Percentage Change Over Previous Year						
1988	na	na	na	9.3	9.5	-20.6
1993	13.4	7.8	-10.1	3.8	3.8	-52.3
1994	19.2	6.1	29.6	7.9	7.9	-59.5
1995	6.4	12.2	5.7	14.8	14.8	-
1996	13.1	12.6	48.2	9.6	9.6	-
1997	9.2	23.7	54.7	8.0	8.0	-
1998	-7.8	-6.1	-1.4	12.5	12.5	-

1 Refer to receipts credited to the Consolidated Revenue Account, Development Fund Account and Sinking Fund Account, but excludes investment income and capital receipts.

2 Refer to Expenditure on Manpower, Other Operating Expenditure (excluding expenses on investment and agency fees on land sales), Grants-in-Aid and Pensions.

3 Exclude loans to statutory boards, industrial and commercial enterprises.

4 Refer to end of year.

1.7

BANKING AND FINANCE

End of Year	Money Supply (M1)	Official Foreign Reserves	Total Assets / Liabilities			
			Commercial Banks	Merchant Banks	Finance Companies	Asian Currency Units
			Million Dollars			
1988	11,957.7	33,276.6	96,441.2	36,923.8	8,478.8	280,477.2
1993	22,882.2	77,866.8	170,250.4	42,205.3	14,994.4	386,103.0
1994	23,411.5	85,165.5	201,952.5	45,049.4	18,997.7	416,345.4
1995	25,349.2	97,336.6	224,578.7	50,253.1	21,135.5	478,232.9
1996	27,040.0	107,750.8	252,723.4	53,580.6	21,189.4	506,870.2
1997	27,510.9	119,616.8	289,572.3	66,661.2	22,210.6	557,193.5
1998	27,239.1	124,584.4	309,974.6	60,548.2	21,941.9	503,609.9
Percentage Change Over Previous Year						
1988	8.4	9.3	11.5	15.0	10.0	14.5
1993	23.6	18.4	11.1	14.7	13.5	8.6
1994	2.3	9.4	18.6	6.7	26.7	7.8
1995	8.3	14.3	11.2	11.6	11.3	14.9
1996	6.7	10.7	12.5	6.6	0.3	6.0
1997	1.7	11.0	14.6	24.4	4.8	9.9
1998	-1.0	4.2	7.0	-9.2	-1.2	-9.6
End of Year	Commercial Banks		Finance Companies			CPF
	Deposits of Non-Bank Customers	Advances to Non-Bank Customers ¹	Deposits from Individuals & Institutions	Loans for		Amount Due to Members
				Hire Purchase of Motor Vehicles	Housing	
	Million Dollars					
1988	42,475.3	41,848.8	5,824.9	754.9	1,506.7	32,529.3
1993	85,400.8	78,454.3	10,567.8	3,390.0	1,826.9	52,334.3
1994	99,032.2	90,974.2	13,790.3	4,729.8	2,314.3	57,649.2
1995	108,885.5	108,974.0	15,417.8	4,651.1	2,637.3	66,035.4
1996	118,201.5	126,987.7	15,071.6	4,052.3	3,221.1	72,566.6
1997	124,143.0	143,243.8	15,611.8	3,975.2	3,721.7	79,657.4
1998	162,310.4	151,636.6	15,344.6	3,555.2	3,821.2	85,276.8
Percentage Change Over Previous Year						
1988	16.7	10.5	8.6	109.8	-2.5	6.3
1993	8.8	13.5	10.6	51.4	24.0	1.6
1994	16.0	16.0	30.5	39.5	26.7	10.2
1995	9.9	19.8	11.8	-1.7	14.0	14.5
1996	8.6	16.5	-2.2	-12.9	22.1	9.9
1997	5.0	12.8	3.6	-1.9	15.5	9.8
1998	30.7	5.9	-1.7	-10.6	2.7	7.1

1 Include bills financing.

1.8 POPULATION

Year	Mid-Year Population		Population Density	Median Age ²	Dependency Ratio ³	Sex Ratio ²
	Total ¹	Resident				
	Thousand		Per Square Kilometre	Years	Per Hundred	Males Per 1,000 Females
1988	2,846.1	2,598.5	4,549	28.8	41.4	1,027
1993	3,259.4	2,873.8	5,087	31.0	41.9	1,018
1994	3,363.5	2,930.2	5,206	31.4	42.2	1,015
1995	3,467.5	2,986.5	5,355	31.8	42.3	1,013
1996	3,612.0	3,044.3	5,578	32.2	42.3	1,012
1997	3,736.7	3,103.5	5,768	32.6	42.2	1,010
1998	3,865.6	3,163.5	5,965	32.9	42.1	1,008

1 Total population comprises Singapore residents and foreigners staying in Singapore for at least 1 year.

2 Refer to Singapore residents (citizens and permanent residents).

3 Residents under 15 years and those 65 years and over divided by residents aged 15 -64 years.

1.9 VITAL STATISTICS

Year	Population Growth Rate	Crude Birth Rate	Crude Death Rate	Infant Mortality Rate	Total Fertility Rate	Gross Reproduction Rate
	Per Cent	Per 1,000 Population		Per 1,000 Live-births	Per 1,000 Female Population Aged 15-44 years	
1988	1.7	19.8	4.9	5.5	1,956	945
1993	2.0	17.0	4.6	4.7	1,778	859
1994	2.0	16.4	4.7	4.1	1,749	846
1995	1.9	15.7	4.8	3.8	1,708	821
1996	1.9	15.3	4.7	3.6	1,696	813
1997	1.9	14.6	4.6	3.6	1,635	787
1998	1.9	13.2	4.6	3.8	1,500	727

Note : Data refer to Singapore residents (citizens and permanent residents).

1.10 EMPLOYMENT

Year	Labour Force ¹	Unemployment Rate ¹	Labour Force Participation Rate ¹			CPF Contributors in Labour Force	Union Members Among Employed
			Total	Males	Females		
	Thousand		Per Cent				
1988	1,377.7	3.3	62.9	78.5	47.8	70.0	15.8
1993	1,635.7	2.7	64.5	79.1	50.6	67.7	14.8
1994	1,693.1	2.6	64.9	79.6	50.9	67.3	14.1
1995	1,749.3	2.7	64.4	78.4	50.1	67.2	13.8
1996	1,801.9	3.0	64.6	78.7	51.5	66.3	14.6
1997	1,876.0	2.4	64.2	78.3	51.1	65.3	14.2
1998	1,931.8	3.2	63.9	77.5	51.3	62.0	14.6

1 Refer to persons aged 15 years and over in June of the respective years. Unemployment rates were non-seasonally adjusted.

1.11 HEALTH

Year	Life Expectancy at Birth			Doctors	Dentists	Nurses	Per Capita Government Expenditure on Health ¹
	Total	Males	Females				
	Years			Per 10,000 Population			Dollar
1988	74.8	72.6	76.9	11	2	31	210
1993	76.1	74.0	78.3	13	2	34	375
1994	76.3	74.2	78.5	13	2	35	400
1995	76.4	74.2	78.7	13	2	36	477
1996	76.7	74.6	79.0	13	2	37	484
1997	77.1	75.0	79.2	13	2	38	478
1998	77.3	75.2	79.3	13	2	39	494

1 Include expenditure of restructured hospitals.

1.12

EDUCATION AND LITERACY



Year	Pupils Per Teacher		Combined Gross Enrolment Ratio ¹	Literacy Rate ²	Residents Aged 25 Years & Over ³	
	Primary	Secondary			Mean Years of Schooling	% with Secondary or Higher Qualification
	Number					
1988	26	23	67.4	87.7	6.2	35.9
1993	24	21	69.4	90.8	7.1	41.2
1994	24	22	69.9	91.3	7.3	42.9
1995	25	23	71.5	91.8	7.7	47.5
1996	26	22	73.4	92.2	7.6	46.1
1997	25	21	75.3	92.8	7.8	46.4
1998	25	20	75.9	93.1	8.0	51.9

Year	Passes At			Annual Output		
	PSLE ⁴	GCE 'O' Level	GCE 'A' Level	ITE ⁵	Polytechnic ⁶	University ⁷
	Per Cent			Number		
1988	86.5	89.1	72.5	8,068	6,469	4,746
1993	92.2	90.5	86.1	8,224	9,340	7,248
1994	92.9	89.3	88.1	8,035	10,287	7,514
1995	94.2	90.9	86.3	7,325	11,008	7,926
1996	95.5	90.8	85.4	5,581	12,105	8,218
1997	95.7	90.3	84.2	4,918	12,919	8,679
1998	95.0	91.1	86.0	6,234	13,904	9,331

1 Defined as students enrolled in primary, secondary and pre-university classes, Institute of Technical Education (ITE) and tertiary institutions divided by resident population aged 6-23 years.

2 Refer to resident population aged 15 years and over.

3 Refer to non-students.

4 From 1993, figures refer to students eligible for secondary schools.

5 Refer to trainees who completed full-time institutional training or apprenticeship programmes.

6 Data are revised to refer to graduates from full-time and part-time diploma courses.

7 Refer to first degree graduates from National University of Singapore and Nanyang Technological University.

1.13 PUBLIC HOUSING AND UTILITIES USAGE

Year	Public Housing ¹				Utilities Usage	
	Public Flats		Per Cent of Population ⁴ Living in		Domestic Electricity Consumption Per Resident	Domestic Water Consumption Per Resident
	Total ² Number Managed	Per Cent ³ Owner-occupied	Public Flats	Owner-occupied Public Flats	Kilowatt Hour	Cubic Metre
1988	630,645	82	87	71	717.4	61.4
1993	655,487	89	87	81	1,087.2	71.4
1994	676,558	90	86	80	1,182.9	73.7
1995	700,060	90	86	81	1,283.5	73.0
1996	725,144	91	86	81	1,367.4	73.9
1997	755,313	91	86	81	1,526.3	74.7
1998	790,898	91	86	82	1,684.3	74.1

1 Refer to flats managed by Housing and Development Board.

2 As at end of year.

3 Percentage of sold flats over total units under management.

4 Data from 1990 refer to resident population.

1.14 OTHER SOCIAL INDICATORS

Year	Television ^{1,2} Licences	Residential ¹ Telephone Lines	Private Cars ¹	Public Buses	Daily Newspaper Circulation	Crime Rate ³ Per 100,000 Population
	Per 1,000 Population					
1988	213	249	83	3	261	2,032
1993	222	270	100	3	300	1,499
1994	220	279	105	3	306	1,451
1995	219	287	110	3	290	1,401
1996	224	305	115	3	279	1,305
1997	193	321	117	3	274	1,228
1998	223	338	114	3	273	1,240

1 Indicator computed based on resident population.

2 Data prior to 1998 were based on cumulation of 12 months' figures. From 1998, data are as at end of the period.

3 Refer to total offences reported.

CLIMATE, AIR QUALITY AND LAND USE

Geography

The land area of Singapore is approximately 681 square kilometres, comprising the main island and a number of islets scattered off its north-east and south-east coasts. The main island measures about 43 kilometres from north to south and 23 kilometres from east to west. Singapore can be geographically divided into three major areas - the central area with heavy deposits of granite in Bukit Timah, Bukit Panjang, Bukit Mandai and Bukit Batok; the western industrial area comprising Mount Faber Ridge and East Tjanjong Ridge; and the eastern coastal area consisting of alluvium and sediment stretches from Kallang to Bedok and Changi.

Climate

The main features of the climate of Singapore are the relatively stable temperatures throughout the year due to its close proximity to the Equator and high humidity and abundant rainfall due to the maritime exposure of the island. The average maximum and minimum temperatures are around 32°C and 25°C respectively. The relative humidity is usually between 65 and 70 per cent on dry afternoons but frequently exceeds 90 per cent in the early hours of the morning before sunrise. Although

Land Use

Of the total land area, about 49.8 per cent has been developed for residential, commercial and industrial usage and another 1.6 per cent used for agriculture. The rest consists of forest reserves, marsh and other non-built up areas.

2 CLIMATE, AIR QUALITY AND LAND USE

Location

The Republic of Singapore, is located between latitudes 1° 09'N and 1° 29'N and longitudes 103° 36'E and 104° 25'E. This location at the focal point of the trade routes in Southeast Asia contributes greatly to the development of Singapore as a regional centre for commerce, finance, transport and communications, and other services.

Geography

The land area of Singapore is approximately 648.1 square kilometres. It comprises the main island and a number of islets scattered off its north-east and south. The main island measures about 42 kilometres from east to west and 23 kilometres from north to south with a coastline of 150.5 kilometres.

Singapore can be geographically divided into three major areas - the central hilly area with heavy deposits of granite in Bukit Timah, Bukit Panjang, Bukit Mandai and Bukit Batok; the western undulating area comprising Mount Faber Ridge and Pasir Panjang Ridge and the eastern coastal area consisting of alluvium and sediment stretches from Katong to Bedok and Changi.

Climate

The main features of the climate of Singapore are the relatively stable temperature throughout the year due to its close proximity to the Equator and high humidity and abundant rainfall due to the maritime exposure of the island. The average maximum and minimum temperatures are around 32°C and 25°C respectively. The relative humidity is usually between 65 and 70 per cent on dry afternoons but frequently exceeds 90 per cent in the early hours of the morning before sunrise. Although

rain falls throughout the year, the wettest months are usually during the first part of the Northeast Monsoon season from November to January. During the Southwest Monsoon season, from May to September, early morning line squalls occasionally hit the island.

Air Pollution

The ambient air quality in Singapore is closely monitored by the Ministry of the Environment through the Telemetric Air Quality Monitoring and Management System (TAQMMS). The system comprises 15 remote air monitoring stations linked to a Central Control Station (CCS) via dial-up telephone lines.

Twelve of the stations monitor ambient air quality and three monitor roadside air quality. Automated analysers and equipment are deployed at the monitoring stations to measure the concentrations of major air pollutants such as sulphur dioxide, oxides of nitrogen, carbon monoxide, ozone, hydrocarbon and respirable suspended particles.

The air quality in terms of Pollutant Standards Index (PSI) was good on 70 per cent of the days and moderate on 30 per cent of the days. The overall air pollution levels for 1998 were within the WHO Long Term Goals and the US Environmental Protection Agency (USEPA) standards.

Land Use

Of the total land area, about 49.8 per cent has been developed for residential, commercial and industrial usage and another 1.6 per cent used for agriculture. The rest consists of forest reserves, marsh and other non-built up areas.

2.1 AIR TEMPERATURE AND SUNSHINE

	1988	1993	1994	1995	1996	1997	1998
Air Temperature in Degree Celsius							
Means							
Daily Maximum	31.3	31.3	31.3	31.3	31.3	32.4	32.1
Daily Minimum	24.6	24.6	24.7	24.7	24.5	25.3	25.3
Absolute Extremes							
Maximum	34.7	34.2	34.2	34.1	34.4	35.1	36.0
Minimum	21.0	21.7	20.5	21.8	22.1	22.0	22.5
Bright Sunshine							
Daily Mean Hours	5.4	5.9	5.4	5.1	5.6	5.7	5.7

Source : Meteorological Service

2.2 MEAN RELATIVE HUMIDITY AND RAINFALL

	1988	1993	1994	1995	1996	1997	1998
Mean Relative Humidity ¹							
at 2.00 pm (Per Cent)	72	72	72	74	72	66	71
Rainfall							
Total (mm)	2,599	2,169	1,942	2,333	2,418	1,119	2,623
Maximum in a day (mm)	187	68	178	199	94	66	84
Number of rainy days	173	163	160	179	170	116	177

Source : Meteorological Service

- 1 The ratio of the actual amount of water vapour in a given volume of air to the amount that would be present were the air saturated at the same temperature, expressed in percentages.

2.3 AIR POLLUTION LEVELS

	1993	1994	1995	1996	1997	1998
Sulphur Dioxide (Mean)($\mu\text{g} / \text{m}^3$)						
Industrial	25	29	30	32	29	30
Urban	15	17	19	27	18	21
Sub-Urban	11	12	17	22	12	10
Nitrogen Dioxide (Mean)($\mu\text{g} / \text{m}^3$)						
Industrial	15	30	30	39	41	38
Urban	15	32	31	33	33	40
Sub-Urban	15	24	18	23	23	24
PM 10 (Mean)($\mu\text{g} / \text{m}^3$)						
Industrial	40	54	36	36	54	36
Urban	38	45	29	30	49	33
Sub-Urban	38	46	32	34	51	36
Carbon Monoxide (No of times max 8-hour value exceeded)						
Industrial	na	na	-	-	-	-
Urban	na	na	-	-	-	-
Sub-Urban	na	na	-	-	-	-
Ozone (No of times max 1-hour value exceeded)						
Industrial	-	-	-	-	-	-
Urban	-	-	-	-	-	-
Sub-Urban	-	1	-	-	-	-

Source : Ministry of the Environment

Notes : Standards for Air Quality

Sulphur Dioxide = $80 \mu\text{g}/\text{m}^3$ (annual mean), $122 \mu\text{g}/\text{m}^3$ (monthly mean)

Nitrogen Dioxide = $100 \mu\text{g}/\text{m}^3$ (annual mean), $153 \mu\text{g}/\text{m}^3$ (monthly mean)

PM 10 (Particulate Matter ≤ 10 microns) = $50 \mu\text{g}/\text{m}^3$ (annual mean), $76 \mu\text{g}/\text{m}^3$ (monthly mean)

Carbon Monoxide = $10 \text{ mg}/\text{m}^3$ (maximum 8-hour value)

Ozone = $235 \mu\text{g}/\text{m}^3$ (maximum 1-hour value)

All measurements of air quality are corrected to a reference temperature of 25°C and pressure of 760 mm of mercury.

2.4 LAND USE

	Square Kilometres						
	1988	1993	1994	1995	1996	1997	1998
Total	625.6	641.4	646.1	647.5	647.5	647.8	648.1
Built-up Area ¹	304.2	316.5	318.9	319.3	321.6	322.2	323.0
Farm Holding Area ²	20.4	6.9	7.8	9.3	10.8	10.8	10.4
Forest	28.6	28.6	28.6	28.6	28.6	28.6	28.6
Marsh & Tidal Waste	15.7	15.7	15.7	15.7	15.5	15.5	15.5
Others ³	256.7	273.8	275.1	274.6	271.0	270.7	270.6

Source : Survey Department

1 Include new industrial sites.

2 Refer to licensed farms excluding land occupied by pure rubber and coconut plantations.

3 Include inland water, open spaces, public gardens, cemeteries, non-built up areas in military establishments, quarries, rubber and coconut plantations.

3 DEMOGRAPHY

Population Census

Singapore's first census was taken in April 1871. After that, regular censuses were undertaken in ten-year intervals up to 1931. The Second World War delayed the next census till 1947. In the pre-war censuses, Singapore was included as part of the Straits Settlements and, later, part of Malaya. Separate censuses for Singapore were carried out since 1947. The 1990 Census was Singapore's third census since independence. The other two censuses were conducted in 1970 and 1980. In 1995, Singapore conducted her first mid-decade mini census.

Census data generally refer to all persons enumerated in Singapore at the time of the census except non-locally domiciled services personnel and their dependants, ships' crew and passengers in transit in Singapore waters and foreign visitors living in hotels. However, data for the 1990 Census published for general information refer only to Singapore residents.

Mid-Year Population Estimates

Singapore residents refer to citizens and those who have been granted permanent residence in Singapore. Total population comprises Singapore residents and foreigners (both working and non-working) staying in Singapore for at least one year.

Births and Deaths

The Registration of Births and Deaths Act (cap 267) specifies that a birth must be registered within 42 days of the date of birth. Births registered after 42 days from occurrence are classified as late registrations. A birth registration after one year from the date of birth can only be effected with the written authority of the Registrar-General of Births and Deaths. Under the same Act, a death must be

registered within 3 days of its occurrence. Still-births, which are classified separately from births and deaths, must be registered within 14 days of their occurrence.

Registration facilities for births and deaths are available at the Registry of Births and Deaths and at designated government hospitals. Deaths and still-births can also be registered at gazetted police stations/sub-stations/neighbourhood police posts. The registration system is comprehensive and the records of vital statistics are virtually complete.

Measures of natality and mortality include the crude birth and crude death rates. From 1981 onwards, these are defined as the number of live-births and deaths respectively of Singapore residents, per thousand mid-year resident population.

Marriages

Registration of marriages is compulsory in Singapore. Marriages other than Muslim marriages are registered under the Women's Charter, 1961. Notices of such marriages have to be lodged with the Registrar of Marriages regardless of the venue of solemnisation.

Registration of Muslim marriages in Singapore became compulsory from 1 July 1909 when the Mohammadan Marriage Ordinance, 1908 (Ordinance No.XXV of 1908) was enacted. This Ordinance was subsequently repealed and replaced by the Administration of Muslim Law Act, 1966.

Divorces

Pertinent information on Muslim divorces are compiled from records maintained by the Syariah Court while those on non-Muslim divorces are compiled from petitions submitted to the Supreme Court. Time-dependent variables, eg, the year of occurrence,

3 DEMOGRAPHY (cont'd)

age of divorcees, and duration of marriage are based on the date of registration for Muslim divorcees and date decree made absolute for non-Muslim divorcees.

Definitions

Rates on fertility and reproduction refer to residents only.

Age-specific fertility rate : It refers to the number of births by mothers of a specific age group during a given year, per thousand females in that age group.

Total fertility rate: It is the average number of children that would be born per female, if all females lived to the end of their childbearing years and bore children according to a given set of age-specific fertility rates. It is derived by aggregating the age-specific fertility rates of females in each of the reproductive ages for a specific year.

Gross reproduction rate: It gives the average number of daughters produced by each female during her whole reproductive period and is similarly computed as in the case of TFR, on the basis of female births only. This rate implicitly assumes that all females live to the end of their childbearing years.

Net reproduction rate: It is a refinement of the gross reproduction rate, in that it takes into account the mortality of

females from birth to the end of their reproductive years. It is the average number of female children that would replace one female if current fertility and mortality levels prevail. It is also the measure of replacement of population.

Age-specific marriage rate: It is defined as the number of persons within a specific age group marrying in a given year, out of every thousand unmarried persons in the same age group. From 1984 onwards, the rates refer to Singapore residents only.

Other References

Vital statistics on births and deaths are compiled and published monthly in the "Singapore Demographic Bulletin". The annual "Report on Registration of Births and Deaths" published by the Registrar-General of Births and Deaths also provides demographic and socio-economic characteristics of parents and characteristics of births, detailed causes of death, together with statistical tables and charts.

Annual data on marriages and divorces are available in the publication "Statistics on Marriages and Divorces". This publication analyses annual marriage trends and the socio-economic characteristics of grooms and brides, as well as provides insight into the nature of divorces and the socio-economic characteristics of divorcees.

3.1 POPULATION AND GROWTH RATE

Year	Total Population	Singapore Residents	Growth Rate	
			Total Population	Singapore Residents
	Thousand		Per Cent	
Census				
1901	227.6	na	na	na
1911	303.3	na	2.9	na
1921	418.3	na	3.3	na
1931	557.7	na	2.9	na
1947	938.2	na	3.3	na
1957	1,445.9	na	4.4	na
1970	2,074.5	2,013.6	2.8	na
1980	2,413.9	2,282.1	1.5	1.3
1990	3,016.4	2,705.1	2.3	1.7
Mid-Year Estimates				
1988	2,846.1	2,598.5	2.6	1.7
1993	3,259.4	2,873.8	2.6	2.0
1994	3,363.5	2,930.2	3.2	2.0
1995	3,467.5	2,986.5	3.1	1.9
1996	3,612.0	3,044.3	4.2	1.9
1997	3,736.7	3,103.5	3.5	1.9
1998	3,865.6	3,163.5	3.5	1.9

Note : Singapore residents refer to citizens and those who have been granted permanent residence in Singapore.

Total population comprises Singapore residents and foreigners staying in Singapore for at least one year.

3.2 VITAL RATES

Year	Rate of Natural Increase	Crude Birth Rate	Crude Death Rate	Infant Mortality Rate	Total Fertility Rate	Gross Re- production Rate
	Per 1,000 Population			Per 1,000 Live-births	Per 1,000 Females Aged 15-44 years	
1950	33.4	45.4	12.0	82.2	na	na
1955	36.2	44.3	8.1	49.5	na	na
1960	31.3	37.5	6.2	34.9	5,756	2,775
1965	24.1	29.5	5.4	26.3	4,659	2,273
1970	17.0	22.1	5.2	20.5	3,065	1,490
1975	12.6	17.7	5.1	13.9	2,073	1,002
1980	12.7	17.6	4.9	8.0	1,818	879
1988	15.0	19.8	4.9	5.5	1,956	945
1993	12.4	17.0	4.6	4.7	1,778	859
1994	11.7	16.4	4.7	4.1	1,749	846
1995	10.9	15.7	4.8	3.8	1,708	821
1996	10.7	15.3	4.7	3.6	1,696	813
1997	10.0	14.6	4.6	3.6	1,635	787
1998	8.6	13.2	4.6	3.8	1,500	727

Notes : Figures prior to 1980 refer to total population.

From 1980, figures refer to Singapore residents (citizens and permanent residents).

3.3

MID-YEAR ESTIMATES OF SINGAPORE RESIDENTS BY AGE GROUP AND SEX

Thousand

Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Males							
Total	1,316.6	1,449.9	1,476.3	1,502.9	1,531.1	1,559.4	1,587.9
0 - 4	106.2	127.7	126.6	127.3	125.9	125.8	124.3
5 - 9	104.7	108.7	115.5	119.0	124.9	130.2	132.3
10 - 14	103.9	106.9	107.2	108.3	108.6	108.1	111.2
15 - 19	113.9	105.2	103.4	103.4	104.6	105.2	107.7
20 - 24	127.7	118.2	119.2	118.7	116.3	113.9	109.1
25 - 29	146.5	137.0	132.2	128.9	127.8	128.8	130.9
30 - 34	141.5	152.4	152.4	151.5	150.9	149.5	148.2
35 - 39	117.1	145.9	149.8	153.6	156.7	157.6	158.9
40 - 44	81.9	120.3	125.8	131.0	137.4	143.9	148.9
45 - 49	66.7	83.0	91.6	103.6	112.5	116.0	121.2
50 - 54	53.4	65.9	66.3	63.3	63.7	72.8	82.0
55 - 59	47.3	51.3	54.2	56.9	60.5	62.8	63.4
60 - 64	37.4	43.6	44.5	46.0	46.7	46.7	47.9
65 - 69	27.5	33.1	34.6	36.2	37.2	37.9	38.8
70 - 74	19.3	22.7	23.6	24.3	25.4	26.5	27.7
75 & Over	21.6	28.0	29.4	30.9	32.0	33.7	35.4
Females							
Total	1,281.9	1,423.9	1,453.9	1,483.6	1,513.2	1,544.1	1,575.6
0 - 4	98.7	119.4	118.4	119.1	118.1	117.2	116.2
5 - 9	96.8	101.1	107.9	111.0	116.6	122.2	123.8
10 - 14	97.1	99.2	99.3	100.7	100.4	100.5	103.8
15 - 19	106.3	99.2	97.2	97.3	98.5	98.8	100.9
20 - 24	123.6	116.3	118.1	118.2	116.0	114.0	110.0
25 - 29	140.6	137.4	134.2	132.1	131.2	133.3	136.8
30 - 34	136.5	148.6	150.1	150.3	151.0	150.8	150.0
35 - 39	114.2	140.7	145.0	148.5	151.2	152.7	154.5
40 - 44	80.6	116.3	121.0	125.9	132.0	138.0	143.2
45 - 49	66.7	81.1	89.4	101.1	109.7	112.7	117.0
50 - 54	52.9	66.1	65.9	62.9	62.8	71.6	80.7
55 - 59	46.5	51.5	54.8	57.2	61.7	64.4	64.9
60 - 64	37.1	44.7	45.9	48.4	48.9	48.6	49.8
65 - 69	29.3	35.0	37.3	39.2	40.6	41.3	42.0
70 - 74	23.2	26.3	26.8	27.1	28.2	29.7	31.5
75 & Over	31.8	41.0	42.6	44.6	46.3	48.3	50.5

3.4 SINGAPORE RESIDENTS BY AGE GROUP, ETHNIC GROUP AND SEX, END JUNE 1998

									Thousand
Ethnic Group / Sex	Total	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39
Total	3,163.5	240.5	256.1	215.0	208.6	219.1	267.7	298.2	313.4
Males	1,587.9	124.3	132.3	111.2	107.7	109.1	130.9	148.2	158.9
Females	1,575.6	116.2	123.8	103.8	100.9	110.0	136.8	150.0	154.5
Chinese	2,435.6	168.8	180.5	152.2	157.6	174.2	210.1	225.4	240.6
Males	1,214.8	87.4	93.5	79.1	81.4	86.8	102.4	111.3	121.5
Females	1,220.8	81.4	87.0	73.1	76.2	87.4	107.7	114.1	119.1
Malays	444.9	45.0	48.8	41.7	33.4	28.2	33.7	44.2	44.7
Males	225.7	23.2	25.1	21.3	17.3	14.4	16.9	22.4	23.0
Females	219.2	21.8	23.7	20.4	16.1	13.8	16.8	21.8	21.7
Indians	239.7	20.8	21.3	17.7	15.2	14.7	20.9	24.7	24.2
Males	127.0	10.7	10.9	9.1	7.8	7.0	10.5	13.0	12.8
Females	112.7	10.1	10.4	8.6	7.4	7.7	10.4	11.7	11.4
Others	43.3	5.9	5.5	3.4	2.4	2.0	3.0	3.9	3.9
Males	20.4	3.0	2.8	1.7	1.2	0.9	1.1	1.5	1.6
Females	22.9	2.9	2.7	1.7	1.2	1.1	1.9	2.4	2.3

									Thousand
Ethnic Group / Sex	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 & Over
Total	292.1	238.2	162.7	128.3	97.7	80.8	59.2	39.3	46.6
Males	148.9	121.2	82.0	63.4	47.9	38.8	27.7	17.3	18.1
Females	143.2	117.0	80.7	64.9	49.8	42.0	31.5	22.0	28.5
Chinese	232.5	194.3	134.3	106.3	78.0	63.5	45.8	31.0	40.5
Males	118.3	99.1	67.6	52.4	38.3	29.3	19.7	12.2	14.5
Females	114.2	95.2	66.7	53.9	39.7	34.2	26.1	18.8	26.0
Malays	36.1	25.3	16.3	11.9	11.8	9.0	7.1	4.4	3.3
Males	18.5	12.5	8.0	5.5	5.6	4.2	3.7	2.4	1.7
Females	17.6	12.8	8.3	6.4	6.2	4.8	3.4	2.0	1.6
Indians	20.3	15.9	10.4	8.7	6.7	7.2	5.4	3.3	2.3
Males	10.6	8.2	5.4	4.8	3.4	4.8	3.9	2.4	1.7
Females	9.7	7.7	5.0	3.9	3.3	2.4	1.5	0.9	0.6
Others	3.2	2.7	1.7	1.4	1.2	1.1	0.9	0.6	0.5
Males	1.5	1.4	1.0	0.7	0.6	0.5	0.4	0.3	0.2
Females	1.7	1.3	0.7	0.7	0.6	0.6	0.5	0.3	0.3

Note : Figures refer to citizens and permanent residents.

3.5 AGE-SPECIFIC FERTILITY RATES

Per Thousand Resident Females

Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
15 - 19	7.3	8.3	7.4	6.5	6.8	6.8	7.6
20 - 24	65.0	50.9	47.5	47.1	44.7	41.7	39.4
25 - 29	147.5	133.2	132.7	129.0	125.9	119.1	106.5
30 - 34	118.9	111.4	111.7	110.0	111.1	109.4	98.7
35 - 39	44.9	44.5	43.6	42.2	43.7	42.7	40.9
40 - 44	7.4	7.3	6.9	6.6	7.1	7.2	6.9

Source : Population Planning Section, Ministry of Health

Note : The rates were computed based on resident live-births per 1,000 resident females.

Resident live-births refer to those with at least one parent who is a Singapore citizen or permanent resident.

3.6 LIVE-BIRTHS BY (a) BIRTH ORDER AND (b) PLACE OF OCCURRENCE

Number

	1988	1993	1994	1995	1996	1997	1998
Total	52,957	50,225	49,554	48,635	48,577	47,333	43,838
Males	27,332	25,948	25,541	25,295	25,306	24,553	22,612
Females	25,624	24,274	24,013	23,339	23,269	22,778	21,225
Birth Order							
1st	20,522	20,677	20,438	20,158	19,804	19,416	18,870
2nd	19,495	17,807	17,648	17,280	17,519	17,127	15,132
3rd	9,806	8,759	8,561	8,279	8,297	7,934	7,013
4th	2,036	2,279	2,223	2,212	2,291	2,184	2,132
5th	459	507	496	505	470	482	489
6th & over	229	192	185	199	195	189	201
Place of Occurrence							
Public Sector Hospitals	28,695	23,229	22,007	21,179	20,979	21,150	20,239
Private Sector Hospitals	23,908	26,814	27,396	27,296	27,449	26,028	23,463
Nursing Homes	119	20	-	-	-	-	-
Other Locations	235	162	151	160	149	155	136

Source : Registry of Births and Deaths

Note : Figures for males and females may not add up to the total due to unknown sex.

Data include birth order not stated.

Data for 1998 are based on date of registration.

3.7

MALE AND FEMALE AGE-SPECIFIC DEATH RATES

Per Thousand Residents

Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Males							
Total	5.3	5.0	5.2	5.4	5.2	5.0	5.0
Under 1 ¹	5.6	5.1	4.3	4.4	3.6	4.1	3.9
1 - 4	0.4	0.3	0.4	0.4	0.4	0.3	0.3
5 - 9	0.2	0.1	0.2	0.2	0.2	0.2	0.1
10 - 14	0.2	0.3	0.3	0.3	0.3	0.2	0.2
15 - 19	0.5	0.5	0.5	0.5	0.5	0.4	0.4
20 - 24	0.9	0.8	0.7	0.7	0.7	0.8	0.6
25 - 29	0.8	0.6	0.7	0.6	0.7	0.6	0.6
30 - 34	0.9	0.7	0.8	0.9	0.8	0.8	0.8
35 - 39	1.6	1.0	1.4	1.3	1.2	1.0	1.1
40 - 44	2.4	2.0	2.1	1.8	2.0	1.9	1.7
45 - 49	3.7	3.4	3.2	3.6	3.2	2.6	2.8
50 - 54	7.9	6.2	6.1	5.8	6.0	5.3	5.0
55 - 59	13.6	10.6	10.6	10.8	9.8	9.3	9.2
60 - 64	20.0	18.6	18.2	18.2	18.2	17.0	16.4
65 - 69	32.5	29.5	31.1	30.0	28.5	27.5	28.1
70 & Over	71.9	65.5	67.1	70.0	65.8	61.3	61.4
Females							
Total	4.5	4.3	4.2	4.3	4.2	4.1	4.2
Under 1 ¹	5.4	4.3	4.0	3.2	3.5	3.1	3.7
1 - 4	0.4	0.3	0.3	0.2	0.3	0.1	0.3
5 - 9	0.2	0.2	0.1	0.2	0.1	0.1	0.1
10 - 14	0.2	0.2	0.2	0.2	0.2	0.1	0.2
15 - 19	0.3	0.2	0.3	0.2	0.3	0.2	0.3
20 - 24	0.5	0.3	0.3	0.3	0.3	0.3	0.2
25 - 29	0.5	0.3	0.3	0.3	0.5	0.3	0.4
30 - 34	0.7	0.5	0.4	0.5	0.5	0.5	0.4
35 - 39	1.2	0.8	0.8	0.8	0.7	0.7	0.6
40 - 44	1.4	1.4	1.1	1.2	1.1	1.1	1.0
45 - 49	2.6	1.9	2.1	2.0	1.8	1.8	1.7
50 - 54	4.8	3.9	3.7	3.5	3.4	3.2	3.2
55 - 59	7.4	6.7	6.6	6.3	5.6	5.4	5.2
60 - 64	12.1	10.2	10.7	9.9	9.5	9.4	9.7
65 - 69	20.4	17.6	17.1	16.8	16.6	16.4	16.1
70 & Over	58.6	53.9	52.6	53.7	52.9	50.2	49.4

1 Infant mortality rate (deaths of resident infants under 1 year of age per thousand resident live-births).

3.8 DEATHS BY BROAD GROUP OF CAUSES

Causes of Death	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	13,690	14,461	14,946	15,569	15,590	15,305	15,656
Infective & Parasitic Diseases	430	398	366	369	358	318	355
of which : Tuberculosis	168	115	101	118	132	115	125
Neoplasms	3,233	3,560	3,785	3,921	4,034	4,178	4,084
of which: Cancer	3,194	3,531	3,756	3,898	3,985	4,128	4,043
Endocrine, Nutritional & Metabolic Diseases	525	309	374	327	403	366	395
of which : Diabetes	501	264	334	271	320	282	307
Diseases of the Blood & Blood-forming Organs	35	34	24	37	37	44	35
Diseases of the Nervous System & Sense Organs	133	93	71	89	89	95	109
Diseases of the Circulatory System	4,847	5,315	5,460	5,560	5,896	5,680	5,682
of which : Heart & Hypertensive Diseases	3,318	3,552	3,653	3,742	3,984	3,943	3,930
Cerebrovascular Disease	1,414	1,652	1,692	1,701	1,805	1,645	1,627
Diseases of the Respiratory System	2,110	2,588	2,564	2,912	2,534	2,385	2,555
of which : Pneumonia	1,039	1,596	1,670	2,028	1,693	1,553	1,761
Bronchitis	52	13	12	15	13	13	5
Diseases of the Digestive System	380	361	394	409	416	357	409
Diseases of the Genito-Urinary System	380	371	444	483	444	399	491
Congenital Anomalies	201	160	148	157	130	108	107
of which : Congenital Anomalies of Heart	98	94	90	89	74	68	52
Certain Causes of Perinatal Mortality	127	76	68	51	64	61	62
Accidents, Poisonings & Violence	958	1,066	1,122	1,113	1,040	1,187	821
of which :							
Motor Vehicle Accidents	242	274	265	233	237	283	201
Other Accidents	168	216	220	220	226	289	130
Suicides	367	296	347	401	271	346	303
Other Diseases & Causes ¹	331	130	126	141	145	127	551
of which : Senility	112	4	2	4	6	3	6

Source : Registry of Births and Deaths

Note : Deaths are classified according to the Ninth (1975) Revision of the International Classification of Diseases.

1 Figure for 1998 includes causes of death that are pending the Coroner's decision.

3.9 AGE AT FIRST MARRIAGE AND DIVORCE

	Years						
	1988	1993	1994	1995	1996	1997	1998
Mean Age at First Marriage ¹							
Grooms	28.3	29.3	29.4	29.4	29.5	29.4	29.6
Brides	25.6	26.3	26.3	26.3	26.5	26.5	26.5
Mean Age of Divorcees ²							
Males	36.4	37.1	38.3	39.0	39.3	39.3	39.5
Females	32.7	34.7	34.9	35.6	35.9	35.9	36.1

1 Marriages between spinsters and bachelors.

2 Include annulments of marriages.

3.10 AGE-SPECIFIC MARRIAGE RATES

Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Males (per thousand unmarried male residents)							
15 - 19	0.8	1.6	1.4	1.2	1.5	1.2	1.3
20 - 24	38.8	29.6	29.6	29.3	27.9	33.1	26.7
25 - 29	112.1	110.7	109.4	115.0	109.9	117.7	98.6
30 - 34	111.7	107.0	111.1	110.5	112.7	110.1	99.8
35 - 39	77.1	78.1	77.7	71.4	70.9	76.0	65.9
40 - 44	59.5	53.0	55.4	55.2	51.5	47.1	48.8
General Marriage Rate	56.3	56.0	55.2	55.5	53.5	57.1	49.5
Females (per thousand unmarried female residents)							
15 - 19	10.8	8.8	7.8	7.5	6.9	6.6	7.6
20 - 24	94.6	73.0	71.0	70.4	64.0	74.0	57.2
25 - 29	130.3	133.3	133.7	139.3	134.7	145.4	118.5
30 - 34	76.7	75.1	77.6	78.5	73.0	80.8	68.9
35 - 39	38.1	38.7	39.3	38.2	35.7	40.1	34.6
40 - 44	20.7	18.0	16.9	17.4	19.0	19.8	16.9
General Marriage Rate	67.1	59.7	58.2	58.2	54.7	61.0	49.9

3.11 GROOMS BY AGE GROUP

Age Group (Years)	Number						
	1988	1993	1994	1995	1996	1997	1998
Women's Charter							
Total	19,782	20,692	20,243	20,553	19,935	21,300	18,971
Under 20	58	89	79	61	71	55	64
20 - 24	3,631	2,635	2,639	2,626	2,443	2,868	2,237
25 - 29	9,306	9,047	8,533	8,833	8,417	9,366	8,281
30 - 34	4,701	5,496	5,311	5,318	5,155	5,045	4,452
35 - 39	1,357	2,118	2,232	2,196	2,222	2,303	2,134
40 - 44	403	740	854	902	936	952	1,002
45 - 49	162	279	324	349	393	415	420
50 & Over	164	288	271	268	298	296	381
Muslim Law Act							
Total	4,801	4,606	4,411	4,412	4,171	4,367	4,135
Under 20	39	84	73	68	83	72	72
20 - 24	1,254	854	890	878	842	858	741
25 - 29	2,209	2,010	1,806	1,743	1,606	1,612	1,532
30 - 34	731	929	868	903	799	884	869
35 - 39	256	362	382	391	387	451	424
40 - 44	136	151	168	206	198	216	235
45 - 49	60	76	81	96	113	113	108
50 & Over	116	140	143	127	143	161	154

Source : Registry of Marriages

Registry of Muslim Marriages

Note : Data on marriages registered under the Women's Charter exclude marriages previously solemnized outside Singapore or under religious and customary rites.

3.12 BRIDES BY AGE GROUP

							Number
Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Women's Charter							
Total	19,782	20,692	20,243	20,553	19,935	21,300	18,971
Under 20	802	613	519	493	475	425	514
20 - 24	8,341	7,363	7,257	7,254	6,564	7,174	5,847
25 - 29	7,520	8,365	8,218	8,427	8,367	9,093	8,335
30 - 34	2,231	2,829	2,709	2,811	2,874	2,857	2,615
35 - 39	618	997	1,018	1,018	1,058	1,076	1,000
40 - 44	185	337	336	351	391	435	402
45 - 49	51	121	124	134	132	154	164
50 & Over	34	67	62	65	74	86	94
Muslim Law Act							
Total	4,801	4,606	4,411	4,412	4,171	4,367	4,135
Under 20	449	455	402	420	386	359	421
20 - 24	2,348	1,843	1,815	1,805	1,678	1,676	1,519
25 - 29	1,279	1,356	1,175	1,164	1,090	1,188	1,118
30 - 34	376	497	547	492	489	539	490
35 - 39	185	241	251	289	248	282	295
40 - 44	75	111	118	134	146	154	153
45 - 49	43	65	58	67	86	102	92
50 & Over	46	38	45	41	48	67	47

Source : Registry of Marriages
 Registry of Muslim Marriages
 Note : Data on marriages registered under the Women's Charter exclude marriages previously solemnized outside Singapore or under religious and customary rites.

3.13 MARRIAGES REGISTERED BY ETHNIC GROUP OF COUPLE

Ethnic Group	Number						
	1988	1993	1994	1995	1996	1997	1998
Women's Charter							
Total	19,782	20,692	20,243	20,553	19,935	21,300	18,971
Chinese	17,750	18,290	17,681	17,972	17,242	18,760	16,078
Indians	1,088	1,095	1,044	1,020	1,087	946	999
Others	88	109	144	170	198	200	243
Inter-ethnic	856	1,198	1,374	1,391	1,408	1,394	1,651
Muslim Law Act							
Total	4,801	4,606	4,411	4,412	4,171	4,367	4,135
Malays	3,787	3,487	3,381	3,270	3,033	3,197	3,021
Indians	215	266	222	256	248	264	250
Others	12	20	13	27	26	10	19
Inter-ethnic	787	833	795	859	864	896	845

Source : Registry of Marriages

Registry of Muslim Marriages

Note : See note to Table 3.12.

3.14 AGE-SPECIFIC DIVORCE RATES

Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Males (per thousand married resident males)							
20 - 24	16.1	12.8	17.1	15.3	16.1	21.2	27.9
25 - 29	12.8	14.3	12.1	12.3	12.6	14.2	18.8
30 - 34	8.1	10.2	9.4	9.9	10.0	11.2	12.0
35 - 39	6.6	8.0	7.2	8.5	8.8	8.8	10.1
40 - 44	4.9	6.2	5.7	6.6	7.2	6.8	7.7
45 - 49	3.5	4.6	4.7	5.6	5.8	5.6	6.2
50 & Over	1.1	1.9	1.7	2.0	2.3	2.5	3.1
General Divorce Rate	5.2	6.1	5.6	6.2	6.5	6.7	7.5
Females (per thousand married resident females)							
20 - 24	18.0	17.8	16.3	15.8	17.0	20.1	28.7
25 - 29	11.1	11.8	10.6	11.5	12.1	14.3	15.0
30 - 34	6.5	9.3	8.0	8.8	9.5	9.5	11.2
35 - 39	5.3	6.8	6.3	7.6	7.7	7.6	8.5
40 - 44	3.3	4.9	5.1	5.7	6.5	5.8	6.8
45 - 49	2.0	3.6	3.2	4.1	4.8	4.6	5.8
50 & Over	0.8	1.2	1.1	1.4	1.4	1.9	2.1
General Divorce Rate	5.2	6.2	5.7	6.3	6.7	6.7	7.7

Note : Figures include annulments of marriages.

3.15 MALE DIVORCEES BY AGE GROUP

							Number
Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Women's Charter							
Total ¹	2,023	2,742	2,690	3,315	3,546	3,676	4,186
Under 20	-	-	-	-	-	-	-
20 - 24	41	20	28	33	28	32	43
25 - 29	370	368	317	367	363	385	487
30 - 34	541	656	621	703	724	776	833
35 - 39	473	639	615	774	812	771	866
40 - 44	271	486	476	573	649	617	696
45 - 49	152	264	310	410	468	449	515
50 & Over	109	263	265	326	372	474	573
Muslim Law Act							
Total	893	1,224	1,082	983	1,088	1,212	1,465
Under 20	2	4	6	2	2	5	-
20 - 24	52	42	51	32	47	63	57
25 - 29	241	224	192	134	152	169	203
30 - 34	215	308	305	250	270	303	326
35 - 39	153	281	223	213	239	285	342
40 - 44	83	162	133	149	165	170	240
45 - 49	59	77	69	92	94	105	121
50 & Over	88	126	103	111	119	112	176

Source : Supreme Court
Syariah Court

Note : Figures for divorces under Women's Charter include annulments of marriages.

1 Includes age not stated.

3.16 FEMALE DIVORCEES BY AGE GROUP

Age Group (Years)								Number
	1988	1993	1994	1995	1996	1997	1998	
Women's Charter								
Total ¹	2,023	2,742	2,690	3,315	3,546	3,676	4,186	
Under 20	2	-	3	-	1	1	2	
20 - 24	181	145	152	182	163	181	223	
25 - 29	608	612	569	677	691	749	805	
30 - 34	501	743	648	755	813	803	936	
35 - 39	371	552	565	703	713	694	756	
40 - 44	166	349	389	446	529	493	580	
45 - 49	73	170	189	248	333	320	400	
50 & Over	55	125	117	174	171	265	312	
Muslim Law Act								
Total	893	1,224	1,082	983	1,088	1,212	1,465	
Under 20	14	17	25	13	16	19	8	
20 - 24	185	153	151	107	133	139	169	
25 - 29	262	282	238	178	199	286	292	
30 - 34	169	299	272	245	250	270	332	
35 - 39	121	218	176	190	200	212	278	
40 - 44	59	123	109	118	155	137	189	
45 - 49	36	72	51	75	81	81	118	
50 & Over	47	60	60	57	54	68	79	

Source : Supreme Court
Syariah Court
Note : Figures for divorces under Women's Charter include annulments of marriages.
1 Includes age not stated.

3.17 DIVORCES BY ETHNIC GROUP OF COUPLE

Ethnic Group	Number						
	1988	1993	1994	1995	1996	1997	1998
Women's Charter							
Total	2,023	2,742	2,690	3,315	3,546	3,676	4,186
Chinese	1,792	2,412	2,322	2,849	2,980	3,176	3,568
Indians	122	176	209	258	315	256	339
Others	16	33	22	21	66	19	28
Inter-ethnic	93	121	137	187	185	225	251
Muslim Law Act							
Total	893	1,224	1,082	983	1,088	1,212	1,465
Malays	714	996	912	803	933	1,015	1,141
Indians	31	42	31	39	24	43	58
Others	9	6	1	5	4	8	20
Inter-ethnic	139	180	138	136	127	146	246

Source : Supreme Court
 Syariah Court
 Note : Figures for divorces under the Women's Charter include annulments of marriage.

LABOUR AND PRODUCTIVITY

4 LABOUR AND PRODUCTIVITY

Labour Force

Labour force data are based on annual labour force surveys. The data refer to persons aged fifteen years and over. The reference period refers to the full calendar week preceding the date of the interview.

Definitions

Employed Persons : Refer to those who, during the reference week (i) worked for one hour or more either for pay, profit or for family gains or (ii) had a job or business but were temporarily absent because of illness, injury, mechanical breakdown, labour-management dispute or other reasons.

Unemployed Persons : Refer to those who did not work during the reference period but were available for work and were looking for a job with pay. Persons in the process of starting their own business or taking up a new job after the reference period were also considered as unemployed.

Economically Active Persons : Refer to those who were either employed or unemployed during the reference week.

Economically Inactive Persons : Refer to those who were not working, did not have a job to return to and were not looking for a job during the reference period.

Age-Sex Specific Labour Force Participation Rate : Refers to the economically active population as a percentage of the total population in the specific age-sex groups.

Unemployment Rate : Refers to unemployed persons as a percentage of the total economically active population.

Labour Productivity : Refers to the output per worker in terms of value added at 1990 prices.

Monthly Earnings and Hours Worked

Statistics on average monthly earnings of workers are compiled based on the payroll of CPF contributors. Statistics on weekly hours worked are compiled from various establishment surveys conducted by the Ministry of Manpower. Prior to 1988, the coverage included public and private sector establishments with at least 10 employees. From 1988, only private sector establishments with at least 25 employees are included. The data for the two periods are thus not strictly comparable.

Definitions

Monthly Earnings : Refers to all remuneration received before deduction of the employee's CPF contributions and personal income tax. It includes annual wage supplement and variable payments/bonuses.

Weekly Hours : Refer to the total number of paid hours worked during a week. It is the sum of standard hours and paid overtime hours worked.

Employment Service

The Employment Service Department of the Ministry of Manpower provides free service to Singapore citizens and permanent residents seeking employment to look for suitable jobs and assists employers to recruit workers. Registration for employment assistance by job seekers and notification of job vacancies by employers are voluntary.

Definitions

A registrant refers to an unemployed job seeker who is registered for employment assistance at the Department. Each registration is valid for 3 months. If a registrant wants

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further assistance after the period, he has to renew his registration.

A new registrant refers to an unemployed registrant seeking employment assistance the first time or an ex-registrant who is re-registered for employment assistance after a break between his previous and current registration.

Statistics on the number of registrants and the number of vacancies notified and filled are compiled from administrative records.

Central Provident Fund

The Central Provident Fund (CPF) was set up in 1955 to provide financial security for workers in their old age. Over the years, it has evolved into a comprehensive social security scheme, which aims at catering to not only a member's old age, but also his home ownership and health care needs.

Both the worker and his employer contribute to the worker's savings with the CPF. Different contribution rates apply to workers in different age groups. From 1 January 1999, the CPF contribution rates (as a percentage of wages) are as follows :

Age	Employer	Employee	Total
55 years and below	10%	20.0%	30%
Above 55 years to 60 years	4%	12.5%	16.5%
Above 60 years to 65 years	2%	7.5%	9.5%
Above 65 years	2%	5.0%	7%

Each member has three accounts: the Ordinary, Medisave and Special Accounts. CPF savings can be used under the various CPF schemes. Savings in the Ordinary Account can be used for housing, approved investments, insurance, education and transfers to top up parents' Retirement Accounts. Medisave

Account savings can be used for hospitalisation expenses and medical insurance, while savings in the Special Account are reserved for old age and contingency purposes.

Savings in the CPF earn a fair rate of interest and are tax-exempt. Since March 1986, the CPF Board has been paying market-related interest rate on members' savings and the rate is adjusted every six months. Savings in the Special and Retirement Accounts earn additional interest of 1.5 percentage points above the normal CPF interest rate.

Members can withdraw their CPF savings when they reach 55 years of age after setting aside a minimum sum in their Retirement Account. This is to ensure that they have a minimum regular income to meet their basic needs during retirement.

Singapore Productivity and Standards Board

The Singapore Productivity and Standards Board (PSB) was established in April 1996. Its mission is to raise productivity so as to enhance Singapore's competitiveness and economic growth for a better quality of life for our people.

PSB focuses on six key thrusts to support its mission. They are :

Productivity Promotion: "Innovation and Quality" has been adopted as the foundation theme of PSB's annual productivity campaign from 1995 to 2000, in support of Singapore's innovation-driven stage of development.

Manpower Development: The major initiatives include the CREST programme to equip the workforce with critical enabling skills and the People Developer Standard to provide a national standard on human resource development.

4 LABOUR AND PRODUCTIVITY (cont'd)

Technology Application: Through its specialised laboratories, scientists and technologists, and technology networking and resource programmes, PSB helps companies exploit new technologies for higher productivity, and facilitates the application of critical technologies in industry.

Industry Development: A two-pronged approach - broad-based assistance and focused assistance - is adopted to raise the productivity of SMEs. PSB actively helps the domestic sectors to upgrade by encouraging businesses to join franchises or economic groupings and developing industry-wide applications and infrastructures. PSB also facilitates the development of world-class organisations through various schemes and programmes such as the Singapore Quality Award and the Singapore Quality Class scheme.

Standards and Quality Development: PSB develops and promotes the widespread use of Singapore Standards and conformity assessment infrastructure that are aligned to international norms. In addition, PSB establishes mutual recognition agreements with Singapore's key trading nations and companies on the acceptance of Singapore's products, systems and measurement standards.

Incentives Management : PSB administers and manages various incentive schemes to help local enterprises upgrade their operations, acquire new capabilities and provide better quality goods and services. The two major schemes to help companies upgrade are the Local Enterprise Finance Scheme and the Local Enterprise Technical Assistance Scheme, which provide low fixed interest rate loans and grants to companies. PSB also administers the Skills Development Fund which provides grants to help companies defray the cost of training their workers.

Trade Unions

Data on trade unions and membership are compiled from returns submitted to the Registrar of Trade Unions and cover both employees' and employers' unions.

Trade Disputes

Data on trade disputes relate only to cases referred to the Labour Relations Division of the Ministry of Manpower.

A trade dispute refers to any dispute between/among workers and employers regarding employment, non-employment, the terms of employment or the conditions of work.

Industrial Stoppages

Data on industrial stoppages refer to cases reported to and handled by the Labour Relations Division of the Ministry of Manpower and include both strikes and lockouts.

Other References

Similar data are in the "Singapore Yearbook of Labour Statistics" published by the Manpower Research and Statistics Department of the Ministry of Manpower.

Detailed statistics on the labour force are published in the "Report on the Labour Force Survey of Singapore".

4.1 LABOUR FORCE

	1988	1993	1994	1995	1996	1997	1998
Labour Force ('000)	1,377.7	1,635.7	1,693.1	1,749.3	1,801.9	1,876.0	1,931.8
Males	846.2	977.5	1,012.0	1,072.4	1,054.6	1,107.8	1,125.1
Females	531.5	658.2	681.0	676.9	747.4	768.2	806.7
Employed ('000)	1,331.6	1,592.0	1,649.3	1,702.1	1,748.1	1,830.5	1,869.7
Males	813.9	952.3	987.1	1,044.0	1,023.6	1,081.0	1,089.6
Females	517.7	639.7	662.2	658.1	724.5	749.4	780.1
Unemployed ('000)	46.1	43.7	43.8	47.2	53.8	45.5	62.1
Males	32.3	25.2	24.9	28.4	31.0	26.8	35.5
Females	13.8	18.5	18.9	18.8	22.8	18.7	26.6
Labour Force Participation Rate (%)	62.9	64.5	64.9	64.4	64.6	64.2	63.9
Males	78.5	79.1	79.6	78.4	78.7	78.3	77.5
Females	47.8	50.6	50.9	50.1	51.5	51.1	51.3
Unemployment Rate ¹ (%)	3.3	2.7	2.6	2.7	3.0	2.4	3.2

Source : Ministry of Manpower (Other than 1995)

Note : Refers to persons aged 15 years and over as at June of the respective years.

¹ Non-seasonally adjusted.

4.2 AGE-SPECIFIC LABOUR FORCE PARTICIPATION RATES

	Per Cent						
Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Total	62.9	64.5	64.9	64.4	64.6	64.2	63.9
15 - 19	26.2	25.3	23.3	19.9	20.1	16.8	14.7
20 - 24	82.7	80.2	79.0	76.9	76.1	73.5	71.5
25 - 29	85.1	86.5	87.5	86.6	88.1	88.2	87.9
30 - 34	77.8	80.5	80.6	80.3	82.1	82.5	82.9
35 - 39	74.1	77.5	78.2	77.9	79.0	78.3	80.0
40 - 44	72.2	76.3	76.5	76.6	77.4	77.8	78.6
45 - 49	68.5	73.0	73.6	74.3	75.3	76.0	76.3
50 - 54	58.3	63.1	64.0	65.1	67.5	68.8	68.6
55 - 59	40.5	47.0	49.5	49.7	52.6	50.9	53.0
60 - 64	29.5	30.6	30.6	28.9	31.3	32.4	30.7
65 - 69	18.8	19.0	20.5	17.9	20.5	20.6	18.2
70 - 74	10.6	11.9	12.6	10.1	11.5	9.8	10.3
75 & Over	5.4	4.5	5.3	3.6	4.5	4.0	2.9

Source : Ministry of Manpower (Other than 1995)

Note : See note to Table 4.1.

4.3 AGE-SPECIFIC MALE LABOUR FORCE PARTICIPATION RATES

Age Group (Years)	Per Cent						
	1988	1993	1994	1995	1996	1997	1998
Total	78.5	79.1	79.6	78.4	78.7	78.3	77.5
15 - 19	25.2	25.1	23.6	20.4	21.7	17.1	15.8
20 - 24	84.6	81.0	79.0	76.3	74.3	72.1	69.8
25 - 29	96.7	96.0	96.2	94.6	96.4	94.9	94.5
30 - 34	98.1	98.4	98.2	97.0	98.2	98.5	98.2
35 - 39	98.7	98.4	98.7	97.6	98.2	98.2	98.7
40 - 44	98.3	98.1	98.8	97.5	98.2	97.9	98.2
45 - 49	96.0	96.6	97.1	96.3	96.8	96.9	97.2
50 - 54	88.9	90.0	91.1	90.6	91.4	92.7	91.7
55 - 59	65.1	71.9	74.5	73.7	77.8	76.2	76.6
60 - 64	47.3	50.9	48.9	46.4	48.6	49.9	48.9
65 - 69	30.6	33.1	34.4	29.9	33.5	34.3	29.6
70 - 74	18.6	20.6	21.7	16.7	18.9	15.8	18.5
75 & Over	10.5	8.2	11.1	6.5	8.9	7.8	5.3

Source : Ministry of Manpower (Other than 1995)

Note : See note to Table 4.1.

4.4 AGE-SPECIFIC FEMALE LABOUR FORCE PARTICIPATION RATES

Age Group (Years)	Per Cent						
	1988	1993	1994	1995	1996	1997	1998
Total	47.8	50.6	50.9	50.1	51.5	51.1	51.3
15 - 19	27.2	25.6	23.0	19.3	18.5	16.4	13.6
20 - 24	80.9	79.4	79.0	77.4	77.6	74.9	73.1
25 - 29	73.8	77.6	79.4	78.9	81.4	82.4	82.4
30 - 34	58.4	64.3	64.5	63.7	68.0	67.9	69.7
35 - 39	50.6	57.7	58.3	57.7	60.5	59.1	62.0
40 - 44	46.6	54.6	54.4	53.8	56.9	57.9	59.6
45 - 49	39.3	49.3	49.7	50.8	53.9	54.9	55.6
50 - 54	28.8	36.8	38.1	37.1	43.7	44.7	46.0
55 - 59	17.4	23.9	26.1	25.2	28.5	27.1	30.0
60 - 64	11.9	10.9	12.8	11.6	14.9	15.5	13.9
65 - 69	8.1	6.4	8.1	6.8	8.9	8.7	8.0
70 - 74	3.6	3.4	4.8	4.1	5.3	5.0	3.6
75 & Over	1.9	1.9	1.4	1.7	1.6	1.6	1.4

Source : Ministry of Manpower (Other than 1995)

Note : See note to Table 4.1.

4.5 EMPLOYED PERSONS AGED 15 YEARS AND OVER BY OCCUPATIONAL STATUS

Occupational Status	Thousand						
	1988	1993	1994	1995	1996	1997	1998
Total	1,331.6	1,592.0	1,649.3	1,702.1	1,748.1	1,830.5	1,869.7
Employers	65.6	94.2	95.5	85.1	98.4	99.5	91.5
Own Account Workers	105.8	107.5	111.8	91.6	137.3	124.3	143.9
Employees	1,136.9	1,376.1	1,424.0	1,505.6	1,491.6	1,588.1	1,614.7
Contributing Family Workers	23.3	14.3	18.0	19.9	20.9	18.6	19.6

Source : Ministry of Manpower (Other than 1995)

Note : See note to Table 4.1.

4.6 EMPLOYED PERSONS AGED 15 YEARS AND OVER BY OCCUPATION

Occupation	Thousand						
	1988	1993	1994	1995	1996	1997	1998
Total	1,331.6	1,592.0	1,649.3	1,702.1	1,748.1	1,830.5	1,869.7
Legislators, Senior Officials and Managers	104.9	167.0	178.8	218.0	215.3	230.2	239.1
Professionals	61.7	97.0	106.4	124.7	128.6	164.1	172.0
Technicians and Associate Professionals	153.0	224.4	250.0	269.1	307.5	319.7	332.4
Clerical Workers	186.5	233.4	243.3	220.0	263.3	277.4	278.8
Service Workers, Shop and Market Sales Workers	201.0	215.6	221.1	210.0	230.2	229.5	236.3
Agricultural and Fishery Workers	9.6	2.3	2.9	1.4	1.7	2.6	1.5
Production Craftsmen, Plant and Machine Operators, Cleaners and Labourers	554.1	589.9	583.1	588.2	541.4	546.3	547.6
Others	60.9	62.4	63.7	70.7	60.1	60.7	62.1

Source : Ministry of Manpower (Other than 1995)

Notes : Data are classified according to the Singapore Standard Occupational Classification, 1990.

See note to Table 4.1.

4.7 EMPLOYED PERSONS AGED 15 YEARS AND OVER BY INDUSTRY

Industry	Thousand						
	1988	1993	1994	1995	1996	1997	1998
Total	1,331.6	1,592.0	1,649.3	1,702.1	1,748.1	1,830.5	1,869.7
Manufacturing	379.1	429.5	422.5	412.7	406.3	414.1	404.4
Construction	89.6	102.1	108.8	113.9	115.0	126.1	131.3
Commerce	304.9	363.6	376.9	347.8	405.9	398.2	400.1
Transport, Storage & Communications	129.2	166.8	174.7	182.8	195.3	210.0	206.4
Financial, Insurance, Real Estate & Business Services	127.5	173.4	198.6	248.2	246.0	273.5	292.8
Community, Social & Personal Services	284.3	344.1	353.6	375.8	367.7	390.7	418.0
Others ¹	17.0	12.5	14.1	20.9	11.9	17.9	16.8

Source : Ministry of Manpower (Other than 1995)

Note : Data prior to 1998 are classified according to the Singapore Standard Industrial Classification, 1990. From 1998 onwards, data are classified according to the Singapore Standard Industrial Classification, 1996. They are not strictly comparable.

See note to table 4.1.

1 Includes Agriculture, Fishing, Mining & Quarrying, Utilities and Activities Not Adequately Defined.

4.8 EMPLOYED PERSONS AGED 15 YEARS AND OVER BY OCCUPATIONAL STATUS AND GROSS MONTHLY INCOME, 1998

Income (\$)	Thousand						
	Total			Employees		Self-employed ¹	
	Persons	Males	Females	Males	Females	Males	Females
Total	1,869.7	1,089.6	780.1	892.7	722.0	196.9	58.1
Below 400	133.5	46.4	87.1	43.6	76.4	2.8	10.7
400 - 999	259.5	108.5	151.0	93.8	138.1	14.8	12.8
1,000 - 1,499	343.3	201.0	142.3	167.4	133.1	33.6	9.1
1,500 - 1,999	293.0	181.6	111.4	150.1	105.8	31.5	5.6
2,000 - 2,999	366.6	221.5	145.1	176.5	137.5	45.0	7.6
3,000 - 3,999	194.8	123.2	71.6	96.5	66.4	26.7	5.2
4,000 - 4,999	83.6	57.2	26.4	46.3	24.0	10.8	2.4
5,000 and Over	195.4	150.2	45.2	118.5	40.8	31.7	4.5

Source : Ministry of Manpower

1 Includes contributing family workers.

4.9

EMPLOYED PERSONS AGED 15 YEARS AND OVER BY INDUSTRY AND OCCUPATION, 1998

Thousand

Occupation	Total	Manufacturing	Construction	Wholesale & Retail Trade	Hotels & Restaurants
Total	1,869.7	404.4	131.3	281.2	118.9
Legislators, Senior Officials & Managers	239.1	49.1	23.9	76.7	8.9
Professionals	172.0	41.3	10.9	7.4	0.8
Technicians & Associate Professionals	332.4	67.4	12.8	27.8	3.4
Clerical Workers	278.8	47.6	10.7	50.8	9.7
Service Workers, Shop & Market Sales Workers	236.3	5.2	0.7	91.1	79.6
Production Craftsmen, Plant & Machine Operators, Cleaners & Labourers	547.5	193.8	72.2	27.4	16.5
Others ²	63.7	-	-	-	-

Occupation	Transport, Storage & Communications	Financial Intermediation	Real Estate, Renting & Business Activities	Community, Social & Personal Services	Others ¹
Total	206.4	108.5	184.3	418.0	16.8
Legislators, Senior Officials & Managers	19.1	17.1	29.0	13.5	1.7
Professionals	8.2	8.9	37.6	55.4	1.6
Technicians & Associate Professionals	32.3	45.2	47.7	91.5	4.4
Clerical Workers	43.9	34.3	33.3	46.2	2.4
Service Workers, Shop & Market Sales Workers	12.5	0.7	12.2	33.8	0.4
Production Craftsmen, Plant & Machine Operators, Cleaners & Labourers	90.4	2.2	24.7	115.5	4.8
Others ²	-	-	-	62.0	1.6

Source : Ministry of Manpower

Note : The industries and occupations are classified according to the Singapore Standard Industrial Classification 1996 and Singapore Standard Occupational Classification 1990 respectively.

1 Includes Agriculture, Fishing, Mining & Quarrying, Utilities and Activities Not Adequately Defined.

2 Includes Agricultural & Fishery Workers and Workers Not Classifiable by Occupation.

4.10 GOVERNMENT EMPLOYEES BY DIVISIONAL STATUS

							Number
Divisional Status	1988	1993	1994	1995	1996	1997	1998
Total	68,336	59,689	59,537	60,023	62,185	62,853	65,742
Division I	11,518	13,751	15,998	16,952	19,509	21,208	23,395
Division II	22,766	19,876	18,416	18,249	18,906	19,604	19,622
Division III	20,901	18,688	18,041	17,941	17,128	15,571	16,242
Division IV	13,151	7,374	7,082	6,881	6,642	6,470	6,483

Source : Public Service Commission

Public Service Division, Prime Minister's Office (wef 1995)

Note : Figures exclude daily-rated employees.

4.11 CENTRAL PROVIDENT FUND MEMBERS BY AGE GROUP (End of Period)

							Thousand
Age Group (Years)	1988	1993	1994	1995	1996	1997	1998
Total	2,063.4	2,456.4	2,521.8	2,683.5	2,741.8	2,782.0	2,803.4
Up to 20	95.8	108.5	105.7	105.1	99.2	100.9	94.3
> 20 - 25	290.2	237.8	235.7	238.0	229.9	218.6	204.6
> 25 - 30	395.3	345.9	327.0	315.7	299.7	291.2	285.6
> 30 - 35	370.0	410.3	413.3	413.5	404.3	389.3	370.1
> 35 - 40	297.2	377.3	389.2	404.2	411.6	417.4	422.4
> 40 - 45	190.6	304.7	322.6	343.5	360.4	373.7	384.0
> 45 - 50	135.8	198.8	226.0	263.3	280.7	294.6	310.8
> 50 - 55	99.8	141.2	142.0	144.7	156.0	179.8	199.2
Over 55	157.2	301.5	330.0	425.5	470.1	486.8	503.0
Not specified	31.5	30.4	30.3	30.0	29.9	29.7	29.6

Source : Central Provident Fund Board

Note : Data include self-employed who had made CPF contributions.

4.12 CENTRAL PROVIDENT FUND CONTRIBUTORS BY AGE GROUP (End of Period)

Age Group (Years)	Thousand						
	1988	1993	1994	1995	1996	1997	1998
Total	963.8	1,107.1	1,138.9	1,174.8	1,193.9	1,224.2	1,198.2
Up to 20	40.2	40.0	37.3	35.9	33.1	35.5	26.5
> 20 - 25	159.3	136.5	137.1	136.1	129.8	123.1	110.4
> 25 - 30	208.8	204.0	201.6	202.0	198.7	200.5	198.2
> 30 - 35	178.3	199.7	203.5	207.1	207.0	206.0	199.2
> 35 - 40	135.3	175.5	181.8	187.9	191.2	194.0	190.7
> 40 - 45	89.3	137.5	144.4	152.4	160.4	168.9	169.6
> 45 - 50	59.8	89.0	101.3	115.6	123.5	130.0	131.3
> 50 - 55	44.0	56.9	57.6	57.2	63.2	74.5	81.2
> 55 - 60	25.0	35.7	39.4	42.5	46.0	47.6	46.4
Over 60	21.5	31.8	34.4	37.8	40.7	43.9	44.6
Not specified	2.3	0.5	0.5	0.3	0.3	0.2	0.1

Source : Central Provident Fund Board

Note : Data from 1992 exclude self-employed who had made CPF contributions.

4.13 CENTRAL PROVIDENT FUND CONTRIBUTORS BY WAGE LEVEL (End of Period)

Monthly Wage Level (\$)	Thousand						
	1988	1993	1994	1995	1996	1997	1998
Total	963.8	1,107.1	1,138.9	1,174.8	1,193.9	1,224.2	1,198.2
Up to 200	19.3	16.5	15.7	14.5	14.0	14.2	12.4
200 - 399	83.3	45.0	40.5	37.0	35.6	34.8	32.9
400 - 599	147.9	57.9	50.8	47.9	47.4	48.4	47.5
600 - 799	172.0	89.4	71.6	62.5	58.0	53.1	51.0
800 - 999	126.7	121.3	105.4	89.7	75.0	65.1	61.1
1,000 - 1,499	186.9	270.5	268.8	260.9	245.8	228.3	219.0
1,500 - 1,999	89.9	184.0	199.0	214.1	213.3	214.8	209.0
2,000 - 2,499	47.9	104.6	124.1	140.4	152.0	160.0	157.1
2,500 - 2,999	26.8	60.8	73.2	85.3	96.0	107.1	108.7
3,000 - 3,499	18.9	41.2	49.4	57.7	65.3	75.9	75.0
3,500 - 3,999	11.5	28.4	34.0	38.4	40.0	46.8	47.0
4,000 - 4,499	7.8	17.9	22.6	27.9	32.6	41.7	37.5
4,500 - 4,999	5.2	11.8	14.2	16.4	19.6	24.4	28.5
5,000 - 5,499	4.4	12.8	14.5	16.5	21.3	20.7	21.6
5,500 & Over	13.6	39.7	49.6	58.8	71.8	81.7	87.9
Not specified	1.6	5.1	5.2	6.8	6.2	7.2	2.1

Source : Central Provident Fund Board

Note : See note to Table 4.12.

4.14

CENTRAL PROVIDENT FUND CONTRIBUTORS BY INDUSTRY (End of Period)

Industry							Thousand
	1988	1993	1994	1995	1996	1997	1998
Total	963.8	1,107.1	1,138.9	1,174.8	1,193.9	1,224.2	1,198.2
Agriculture & Fishing	2.3	2.7	2.6	2.5	2.6	2.9	3.0
Quarrying	0.6	0.4	0.4	0.4	0.4	0.4	0.4
Manufacturing	297.6	294.4	296.9	294.5	280.4	275.1	255.8
Utilities	7.0	6.6	6.6	6.7	6.7	6.6	6.9
Construction	41.3	53.9	58.6	66.3	76.0	81.3	78.7
Commerce	215.0	274.5	280.0	289.0	291.5	297.1	283.7
Transport & Communications	98.0	109.3	111.3	113.9	115.6	116.8	114.8
Financial & Business Services	117.4	174.1	186.8	200.4	211.3	225.5	230.1
Other Services	184.5	191.1	195.5	201.0	209.0	218.4	224.7
Activities Not Adequately Defined	0.1	0.1	0.2	0.1	0.4	0.1	0.1

Source : Central Provident Fund

Note : Data from 1992 exclude self-employed who had made CPF contributions.

4.15

EMPLOYMENT SERVICE

							Number
	1988	1993	1994	1995	1996	1997	1998
Number on 'Live' Register ¹	3,389	975	1,004	1,345	2,746	2,352	7,776
New Registrants ²	9,191	2,373	2,378	2,660	4,230	4,777	19,784
Males	6,177	1,569	1,549	1,550	2,068	2,336	10,335
Females	3,014	804	829	1,110	2,162	2,441	9,449
Vacancies Filled	2,344	764	745	530	675	628	1,038
Males	1,509	483	471	324	377	345	498
Females	835	281	274	206	298	283	540

Source : Ministry of Manpower

1 Figures are for end of period.

2 Job registrants can renew their registration after the 3-month validity period.

4.16

CHANGES IN LABOUR PRODUCTIVITY BY INDUSTRY

	Per Cent						
Industry	1988	1993	1994	1995	1996	1997	1998
Total	5.0	9.1	6.4	3.3	1.2	1.8	-1.3
Total excluding Construction	5.0	10.6	6.8	4.2	2.6	3.4	-0.7
Manufacturing	2.0	11.7	11.3	6.5	3.0	5.5	1.5
Construction	2.2	-5.3	4.6	-3.8	-2.9	-4.3	-3.4
Commerce	10.8	16.5	8.3	5.9	3.5	2.7	-3.9
Transport & Communications	6.4	5.9	8.6	6.5	3.8	5.0	3.7
Financial & Business Services	2.9	8.1	2.4	-1.4	0.2	2.4	-3.0

Source : Singapore Department of Statistics and Ministry of Manpower

4.17

AVERAGE MONTHLY EARNINGS BY INDUSTRY

	Dollars						
Industry	1988	1993	1994	1995	1996	1997	1998
Total	1,273	1,918	2,086	2,219	2,347	2,480	2,549
Manufacturing	1,116	1,818	1,995	2,157	2,320	2,487	2,553
Construction	1,005	1,713	1,865	1,941	1,971	1,991	2,070
Commerce	1,049	1,631	1,763	1,889	1,994	2,088	2,127
Transport, Storage & Communications	1,373	1,973	2,133	2,261	2,425	2,581	2,673
Financial & Business Services	1,686	2,374	2,533	2,691	2,828	3,004	3,056
Community & Personal Services	1,517	2,084	2,286	2,369	2,472	2,576	2,664

Source : Ministry of Manpower

Central Provident Fund Board

Note : Average monthly earnings are computed using data obtained from the CPF Board. They include bonuses, if any, but exclude employers' CPF contributions.

4.18 AVERAGE WEEKLY HOURS WORKED BY INDUSTRY

Industry	Hours						
	1988	1993	1994	1995	1996	1997	1998
Total	45.6	46.9	47.0	47.1	47.3	47.4	46.7
Manufacturing	47.4	49.2	49.3	49.3	49.4	49.5	48.4
Construction	48.2	50.6	51.0	51.4	51.8	51.7	51.4
Commerce	41.7	42.8	42.9	43.1	43.3	43.3	42.7
Transport & Communications	45.6	46.8	46.7	47.3	47.3	46.9	46.4
Financial & Business Services	44.2	44.2	43.9	43.8	43.9	43.9	43.9
Community & Personal Services	41.7	41.7	41.7	42.0	41.9	42.2	41.9
Others ¹	46.4	45.0	45.0	45.5	45.6	47.6	50.6

Source : Ministry of Manpower

Note : The data refer to private sector establishments with at least 25 employees as at September.

1 Include Agriculture & Fishing and Mining & Quarrying.

4.19 AVERAGE MONTHLY RECRUITMENT RATE BY INDUSTRY AND OCCUPATIONAL GROUP

	Per Cent						
	1988	1993	1994	1995	1996	1997	1998
Total	4.7	3.6	3.5	3.6	3.2	3.2	2.3
Industry							
Manufacturing	5.0	3.4	3.5	3.3	2.9	2.9	1.9
Construction	2.9	3.8	2.6	3.3	2.9	3.1	2.4
Commerce	6.5	5.6	5.2	5.3	4.5	4.5	3.1
Transport, Storage & Communications	2.5	2.1	2.3	2.4	2.4	2.2	1.7
Financial, Insurance, Real Estate & Business Services	3.5	3.4	3.5	3.3	3.3	3.4	2.5
Community, Social & Personal Services	5.7	3.3	3.2	3.1	3.1	3.2	2.4
Occupational Group							
Professional, Technical, Administrative, Managerial, Executive & Related Employees	2.4	2.1	2.5	2.4	2.5	2.5	1.8
Clerical, Sales, Service & Related Employees	5.6	4.7	4.6	4.5	4.0	4.0	2.9
Production, Transport & All Other Employees	5.0	3.7	3.4	3.6	3.1	3.1	2.3

Source : Ministry of Manpower

4.20

AVERAGE MONTHLY RESIGNATION RATE BY INDUSTRY AND OCCUPATIONAL GROUP

								Per Cent
	1988	1993	1994	1995	1996	1997	1998	
Total	3.9	3.2	3.1	3.0	2.8	2.7	2.1	
Industry								
Manufacturing	4.0	3.1	3.1	3.0	2.8	2.5	1.9	
Construction	2.8	2.5	2.1	2.3	2.1	2.3	2.1	
Commerce	5.5	5.0	4.8	4.7	4.1	4.2	3.0	
Transport, Storage & Communications	1.8	1.6	1.8	1.9	1.8	1.7	1.4	
Financial, Insurance, Real Estate & Business Services	2.7	2.7	2.8	2.7	2.7	2.7	2.1	
Community, Social & Personal Services	4.8	2.7	2.7	2.6	2.5	2.5	2.0	
Occupational Group								
Professional, Technical, Administrative, Managerial, Executive & Related Employees	1.5	1.6	1.8	1.8	1.8	1.9	1.4	
Clerical, Sales, Service & Related Employees	4.6	4.2	4.1	4.0	3.7	3.7	2.9	
Production, Transport & All Other Employees	4.2	3.3	3.1	3.1	2.8	2.7	2.0	

Source : Ministry of Manpower

4.21 PARTICIPANTS IN TRAINING COURSES CONDUCTED BY SINGAPORE PRODUCTIVITY AND STANDARDS BOARD

	Number						
Industry	1988	1993	1994	1995	1996	1997	1998
Total	13,175	32,275	29,380	33,969	40,940	44,841	40,503
Executive Development Programmes	2,834	5,338	3,406	3,973	3,205	3,970	4,254
Productivity Improvement Programmes ¹	4,239	5,085	1,984	2,695	3,306	9,574	9,902
Quality Circles (QC) ²	3,705	6,640	2,924	3,100	5,754	4,426	5,195
Total Quality Programmes (TQP)	-	2,934	5,467	5,569	4,341	3,335	2,933
Productivity-Related Management Seminars/Conferences/Talks	2,397	2,033	11,133	11,230	16,934	17,382	13,597
FAST FORWARD Courses	-	8,032	2,378	4,216	4,242	3,878	3,395
On-the-Job Training Courses(OJT) ³	-	2,213	2,088	3,186	3,158	2,276	1,227

Source : Singapore Productivity and Standards Board

1 From 1997, figures include WIN programme which came under the Institute of Productivity Training in October 1996.

2 Prior to 1992, figures include Labour Management Relations.

3 Figures exclude workers who have been trained through their companies' in-house OJT courses.

With effect from November 1997, Retail Promotion Centre has taken over the delivery of OJT courses for service companies.

4.22 QUALITY CIRCLES (End of Period)

							Number
Industry	1988	1993	1994	1995	1996	1997	1998
Registered Quality Circles	7,493	14,264	16,092	17,723	19,241	19,651	20,566
Organisations (Companies, Government Bodies & Statutory Boards)	186	304	366	377	387	389	400
Membership	53,935	104,996	117,363	129,434	140,760	144,030	171,818

Source : Singapore Productivity and Standards Board

4.23

SKILLS DEVELOPMENT FUND GRANTS AND TRAINING PLACES COMMITTED BY TYPE OF TRAINING



Type of Training	1987	1992	1993	1994	1995	1996	1997
Grants Committed (Thousand Dollars)							
Total	36,961	59,944	89,336	62,081	61,935	67,767	82,820
Productivity & Quality-related Skills	5,205	6,903	7,994	12,525	10,231	12,567	10,277
Computer-related Skills	2,356	6,867	9,311	10,040	10,354	12,089	10,884
Technical Production & Engineering Skills	8,858	7,745	8,711	7,039	6,528	9,617	12,394
Technical Service Skills	7,972	18,332	24,920	15,971	14,046	15,524	21,884
Management & Supervisory Skills	5,609	8,270	15,904	11,215	9,816	12,718	13,267
Trade & Craft Skills	6,159	11,250	21,492	4,654	10,299	4,393	13,049
Others	801	578	1,003	637	660	858	1,066
Training Places (Number)							
Total	151,509	381,716	506,010	493,338	461,651	483,286	502,686
Productivity & Quality-related Skills	39,036	70,946	75,678	96,099	99,379	112,904	96,381
Computer-related Skills	14,766	56,650	98,661	88,952	97,739	104,636	99,051
Technical Production & Engineering Skills	25,096	76,696	100,104	99,984	64,529	94,796	93,233
Technical Service Skills	33,484	105,240	134,577	126,834	114,613	92,889	128,346
Management & Supervisory Skills	29,359	57,646	80,045	67,946	72,412	68,570	69,631
Trade & Craft Skills	3,483	5,393	12,682	5,659	5,995	2,219	8,359
Others	6,285	9,145	4,263	7,864	6,984	7,272	7,685

Source : Singapore Productivity and Standards Board

Note : The period refers to financial year beginning on 1 April and ending on 31 March the following year.

Figures exclude BEST, WISE and Vocational Training Scheme (VTS).

4.24 TRADE UNIONS AND MEMBERSHIP

(End of Period)

Industry							Number
	1988	1993	1994	1995	1996	1997	1998
Employee Class							
Unions	83	82	82	81	83	82	80
Members	210,918	235,723	232,927	235,157	255,020	260,130	272,769
Employer Class							
Unions	5	3	3	3	3	3	3
Members	1,203	1,045	1,088	1,225	1,377	1,522	1,780

Source : Ministry of Manpower

4.25 LABOUR RELATIONS

							Number
	1988	1993	1994	1995	1996	1997	1998
Trade Disputes	366	370	333	305	309	253	291
Claims Registered ¹	366	370	333	305	309	253	291
Wages	257	256	207	174	190	157	144
Others	109	114	126	131	119	96	147
Cases Referred to IAC ²	50	13	15	11	14	14	19
IAC Awards	22	9	10	9	11	12	10
Industrial Stoppages	-	-	-	-	-	-	-

Source : Ministry of Manpower

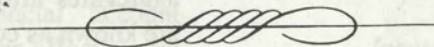
1 Refer to main cause of individual disputes referred to the Conciliation Section.

"Wages" include Wage Increase and Conditions of Service.

"Others" include Retrenchment Benefits, Bonus or Gratuity and other Industrial Matters (eg Sales Commission, Shift Allowances, etc).

2 IAC = Industrial Arbitration Court.

NATIONAL INCOME AND BALANCE OF PAYMENTS



5 NATIONAL INCOME AND BALANCE OF PAYMENTS

National Income Estimates

The output, expenditure and income approaches are adopted for compiling national income aggregates of Singapore. The concepts, definitions and methodology given in the United Nations' publication, "A System of National Accounts, 1968" are closely followed.

The development of the Singapore economy depends heavily on foreign capital, foreign technology and foreign workers. Consequently a large share of the compensation of employees and of the operating surplus, as recorded in national accounts, accrue to foreigners and foreign enterprises.

The per capita GNP as conventionally defined on a residential basis is therefore not a true reflection of the income of Singaporeans. Hence, a series on indigenous per capita GNP which excludes the foreigners' contribution is compiled.

This involves the calculation of income accruing to foreign workers and foreign enterprises which are residents of Singapore and the exclusion of this amount from the GNP.

Definitions

Gross National Product (GNP) : It refers to the aggregate value of output produced by productive factors owned by Singapore residents irrespective of whether they are located within Singapore's domestic territory or abroad.

Indigenous GNP : It refers to the aggregate value of output accrued to Singaporeans.

Gross Domestic Product (GDP): It refers to the aggregate value of output produced within the domestic territory of Singapore.

Expenditure on GDP: It refers to the sum of private consumption expenditure of households including non-profit institutions, government consumption expenditure, gross capital formation and net exports.

Income components of GDP: It refers to the sum of incomes receivable by each institutional sector from the domestic production of goods and services which includes compensation of employees, gross operating surplus and taxes (less subsidies, if any) on production and on imports.

GDP at Constant Prices : In order to compare the real value of output/expenditure over time, it is necessary to remove the effect of price changes. This is achieved by selecting the price structure of 1990 as the base according to which the goods and services in other years are revalued. The resulting aggregates after adjustment for price changes are known as constant-price estimates.

GDP Deflators : They are the aggregate price indices of the GDP of the economy. They measure implicitly the price level of the current GDP relative to the base year 1990 which is set at 100. The deflators are derived as the ratio of current price estimates to the corresponding constant price estimates.

Valuation of GDP Estimates: GNP, GDP, expenditure on GDP and income components of GDP are valued at market prices, that is, they are valued at the actual transacted prices and include customs and excise duties and other indirect taxes levied less subsidies.

With the availability of more comprehensive and up-to-date information, the estimates have been revised, especially for the last two years.

5 NATIONAL INCOME AND BALANCE OF PAYMENTS (cont'd)

Balance of Payments Estimates

The balance of payments is a systematic record of all economic transactions between residents of an economy and residents of the rest of the world in a given period. It is very useful for assessing the external performance of an economy and for formulating policies connected with it.

The transactions recorded in the balance of payments fall into the following three broad categories:

- a) The current account which consists of transactions relating to Singapore's current national income and expenditure. These include exports and imports of goods and services, income receipts and payments as well as current transfers.
- b) The capital and financial account which covers transactions affecting the foreign financial assets and liabilities of Singapore. Hence it records transactions that affect the national income in future periods.
- c) Official reserves which shows the changes in Singapore's foreign reserves holdings. It consists of Singapore's official holdings of monetary gold and foreign exchange assets, as well as Singapore's special drawing rights and reserve position in the International Monetary Fund.

The compilation of Singapore's balance of payments estimates is based on the principles recommended by the International Monetary Fund's "Balance of Payments Manual". The structure and classification of Singapore's balance of payments accounts follows the fifth edition of the manual.

Studies to improve the balance of payments estimates are an on-going process and the estimates are revised as and when appropriate.

Sources of Data

The balance of payments estimates are compiled mainly from trade and shipping statistics, regular surveys of companies and administrative records of government departments and statutory authorities.

Definitions

Goods balance: It refers to the difference between total exports and total imports of goods on an f.o.b. basis.

Services balance: It refers to the difference between total exports and total imports of services.

Income balance: It refers to the difference between factor income accrued to Singapore residents from abroad and factor income accrued to non-Singapore residents.

Current account balance: It refers to the balance of transactions in goods, services, income and current transfers. It shows the net change in financial assets arising from Singapore's real transactions.

Capital and financial account balance: It refers to the balance of transactions in the capital and financial account. It reflects the net changes in Singapore's foreign financial assets and liabilities.

Overall balance: This is the overall balance of the current, capital and financial accounts. It is the balance of all of Singapore's transactions with non-residents and is financed by official reserves.

Foreign Investment

Data on foreign equity investment in Singapore are compiled from the balance sheets of all companies in Singapore which have part of their paid-up capital held by foreign residents.

Data on Singapore's overseas investment are gathered from the Survey of Singapore's Investment Abroad.

Definitions

Equity Capital: For incorporated companies, it refers to the amount of paid-up capital held by investors and the proportionate amount of reserves accrued to them. For branches of banks it is approximately equal to their "net fixed assets". For branches of other companies, it refers to the "net amount owed to their head offices".

Direct Investment: An investment is considered a direct investment when investors have effective influence over the policies and business operations of the companies they

invested in. Ownership of 10 per cent or more of the total paid-up shares is regarded as possession of effective influence.

Portfolio Investment: An investment is considered a portfolio investment when investors do not have effective influence over the policies and business operations of the companies they invested in.

Other References

The "Singapore System of National Accounts, 1995", published by the Singapore Department of Statistics, contains the detailed methodology used to compile Singapore's national accounts and has data series from 1960 to 1995. Significant changes in treatment and classification of the balance of payments are described in the occasional paper "Implementation of IMF Balance of Payments Manual, 5th Edition in Singapore's Balance of Payments". Analyses on the national output and balance of payments of Singapore may be found in the "Economic Survey of Singapore" published by the Ministry of Trade & Industry annually.

5.1 INDIGENOUS GROSS NATIONAL PRODUCT

(At Current Market Prices)

	1988	1993	1994	1995	1996	1997	1998
Million Dollars							
Total Gross Domestic Product	50,714.2	92,905.4	106,489.7	118,490.5	128,973.5	141,261.9	141,216.2
Share of Resident Foreigners & Resident Foreign Companies in GDP	15,976.8	29,252.7	32,232.0	38,715.5	42,926.2	47,971.8	50,231.3
Indigenous GDP	34,737.4	63,652.7	74,257.7	79,775.0	86,047.3	93,290.1	90,984.9
Factor Receipts of Singaporeans from Rest of the World	6,038.8	10,485.2	12,021.0	14,244.9	15,959.4	18,415.0	19,321.4
Indigenous GNP	40,776.3	74,137.8	86,278.7	94,020.0	102,006.7	111,705.1	110,306.3
Per Capita Indigenous GNP (\$)	15,692.2	25,797.8	29,444.6	31,481.7	33,507.4	35,993.3	34,868.4
Percentage Change Over Previous Year							
Total Gross Domestic Product	18.0	16.6	14.6	11.3	8.8	9.5	-
Share of Resident Foreigners & Resident Foreign Companies in GDP	29.9	24.8	10.2	20.1	10.9	11.8	4.7
Indigenous GDP	13.3	13.2	16.7	7.4	7.9	8.4	-2.5
Factor Receipts of Singaporeans from Rest of the World	31.0	-3.2	14.6	18.5	12.0	15.4	4.9
Indigenous GNP	15.6	10.5	16.4	9.0	8.5	9.5	-1.3
Per Capita Indigenous GNP (\$)	13.6	8.4	14.1	6.9	6.4	7.4	-3.1

5.2 OUTPUT, SAVING AND INVESTMENT

(At Current Market Prices)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Gross National Product (GNP)							
GNP at Market Prices	51,494.8	93,220.1	108,873.5	121,734.1	133,348.3	147,210.4	147,548.0
Gross Domestic Product (GDP) at Factor Cost	46,873.7	83,544.7	94,676.7	105,699.2	115,484.0	126,541.2	129,066.9
Taxes on Production & on Imports ¹	3,840.5	9,360.7	11,813.0	12,791.3	13,489.5	14,720.7	12,149.3
Net Factor Income from Abroad	780.6	314.7	2,383.8	3,243.6	4,374.8	5,948.5	6,331.8
Generation of Gross National Saving							
Gross National Saving	21,228.6	42,062.4	53,114.3	61,328.7	68,235.4	76,944.2	76,834.4
Gross Domestic Saving	20,939.6	42,613.7	51,740.3	59,340.5	65,373.2	72,757.8	72,473.1
GDP at Market Prices Less : Private & Government Consumption Expenditure	50,714.2	92,905.4	106,489.7	118,490.5	128,973.5	141,261.9	141,216.2
	-29,726.6	-50,913.9	-56,097.9	-59,785.9	-65,330.0	-70,093.8	-70,716.4
Statistical Discrepancy	-48.0	622.2	1,348.5	635.9	1,729.7	1,589.7	1,973.3
Net Factor Income from Abroad	780.6	314.7	2,383.8	3,243.6	4,374.8	5,948.5	6,331.8
Net Current Transfers from Abroad	-491.6	-866.0	-1,009.8	-1,255.4	-1,512.6	-1,762.1	-1,970.5
Finance of Gross Capital Formation							
Gross Capital Formation	17,329.8	35,258.2	35,701.8	40,867.2	47,777.3	54,624.2	47,355.7
Gross National Saving	21,228.6	42,062.4	53,114.3	61,328.7	68,235.4	76,944.2	76,834.4
Net Capital Transfers from Abroad	-110.6	-115.3	-128.5	-101.0	-195.6	-257.1	-377.9
Net Borrowing from/Lending (-) to Abroad	-3,788.2	-6,688.9	-17,284.0	-20,360.5	-20,262.5	-22,062.9	-29,100.8

1 Previously referred to as Indirect Taxes

5.3 GROSS DOMESTIC PRODUCT BY INDUSTRY

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
At Current Market Prices							
Total	50,714.2	92,905.4	106,489.7	118,490.5	128,973.5	141,261.9	141,216.2
Agriculture & Fishing	203.5	156.8	171.7	199.9	228.6	214.1	189.3
Quarrying	42.4	28.6	44.6	28.1	43.1	40.8	24.3
Manufacturing	14,644.2	23,215.6	25,689.0	29,319.4	30,770.9	32,658.6	32,710.5
Utilities	1,155.5	1,571.1	1,713.6	1,956.9	2,372.5	2,741.8	2,921.4
Construction	2,996.7	6,772.4	7,943.6	8,986.7	11,449.4	13,340.1	14,084.9
Commerce	9,027.9	17,944.4	21,271.6	23,657.0	24,791.9	26,621.9	24,841.5
Transport & Communications	6,899.3	11,520.4	13,055.3	14,290.9	14,847.9	15,778.1	15,689.9
Financial & Business Services	12,456.3	26,652.7	32,214.8	35,058.4	37,283.0	42,637.1	43,689.7
Other Services	5,632.0	10,056.6	11,669.6	12,683.7	14,123.5	15,190.1	15,495.9
Less : Imputed Bank Service Charge	2,939.9	5,866.6	8,049.0	8,442.4	7,697.8	8,713.6	9,155.6
Add : Taxes and Duties on Imports	596.3	853.4	764.9	751.9	760.5	752.9	724.4
At 1990 Market Prices							
Total	55,587.9	85,244.6	94,777.8	102,782.4	110,510.2	119,337.7	121,111.5
Agriculture & Fishing	204.7	161.7	170.9	184.5	195.5	184.2	173.7
Quarrying	81.2	43.4	39.7	27.1	25.0	20.9	16.2
Manufacturing	15,026.7	21,355.9	24,087.5	26,504.8	27,310.0	28,540.5	28,397.7
Utilities	1,051.5	1,504.3	1,638.9	1,741.0	1,868.6	2,069.8	2,170.9
Construction	3,435.6	6,016.9	6,990.9	7,585.5	9,244.8	10,629.2	11,040.0
Commerce	10,438.6	17,080.4	19,154.0	20,845.5	22,194.6	23,454.7	22,519.6
Transport & Communications	7,285.1	10,951.1	12,117.3	13,455.6	14,606.2	15,953.4	16,828.0
Financial & Business Services	14,514.0	23,506.7	25,847.6	27,596.7	29,898.8	33,285.0	34,326.1
Other Services	6,325.6	9,333.4	10,103.5	10,739.3	11,684.1	12,530.3	13,060.2
Less : Imputed Bank Service Charge	3,371.0	5,505.7	6,073.2	6,567.0	7,189.5	8,024.2	8,127.2
Add : Taxes and Duties on Imports	591.1	796.5	700.7	669.4	672.1	693.9	706.3

Note : Prior to 1990, the aggregates may not equal the sum of their components.

5.4 EXPENDITURE ON GROSS DOMESTIC PRODUCT

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
At Current Market Prices							
Total	50,714.2	92,905.4	106,489.7	118,490.5	128,973.5	141,261.9	141,216.2
Private Consumption Expenditure	24,389.7	42,190.7	47,090.3	49,661.9	53,122.5	56,698.8	56,636.6
Government Consumption Expenditure	5,336.9	8,723.2	9,007.6	10,124.0	12,207.5	13,395.0	14,079.8
Gross Fixed Capital Formation	15,666.6	32,753.4	36,201.5	39,973.3	49,548.5	54,382.1	52,260.2
Increase in Stocks	1,663.2	2,504.8	-499.7	893.9	-1,771.2	242.1	-4,904.5
Net Exports of Goods & Services	3,609.8	7,355.5	16,038.5	18,473.3	17,595.9	18,133.6	25,117.4
Statistical Discrepancy	48.0	-622.2	-1,348.5	-635.9	-1,729.7	-1,589.7	-1,973.3
At 1990 Market Prices							
Total	55,587.9	85,244.6	94,777.8	102,782.4	110,510.2	119,337.7	121,111.5
Private Consumption Expenditure	26,353.3	38,684.6	41,521.7	43,583.2	46,269.5	48,977.8	49,601.6
Government Consumption Expenditure	5,780.9	8,415.1	8,272.3	9,287.5	11,057.3	12,079.8	13,090.2
Gross Fixed Capital Formation	16,899.9	30,159.3	33,069.5	36,771.4	45,328.0	49,964.4	47,597.6
Increase in Stocks	1,356.3	2,163.5	-335.7	678.1	-1,415.6	119.7	-3,857.3
Net Exports of Goods & Services	4,911.9	6,630.0	12,830.3	13,032.8	10,958.9	10,040.1	16,583.7
Statistical Discrepancy	285.6	-807.9	-580.3	-570.6	-1,687.9	-1,844.1	-1,904.3

Note : Prior to 1990, the aggregates may not equal the sum of their components.

5.5 PRIVATE CONSUMPTION EXPENDITURE

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
At Current Market Prices							
Total	24,389.7	42,190.7	47,090.3	49,661.9	53,122.5	56,698.8	56,636.6
Food & Beverages	5,775.1	7,549.2	7,664.9	7,815.9	8,210.8	8,454.9	8,082.5
Clothing & Footwear	2,067.6	2,863.8	2,950.9	2,939.7	2,991.7	3,010.7	2,448.7
Rent & Utilities	3,521.4	6,025.4	6,428.3	6,860.2	7,362.0	7,930.2	8,610.5
Furniture & Household Equipment	2,373.7	3,720.9	3,996.5	4,194.9	4,562.7	4,843.8	4,537.7
Medical Services	1,139.3	2,027.2	2,252.5	2,461.4	2,761.2	2,976.0	3,188.1
Transport & Communications	4,201.2	8,875.3	10,274.6	10,622.4	10,424.0	10,533.7	9,656.1
Recreation & Education	4,068.8	7,599.6	8,256.0	8,549.5	8,731.6	8,871.7	8,465.1
Other Goods & Services	5,254.0	9,919.0	11,016.8	11,588.6	12,267.3	12,935.3	12,682.0
Add : Residents' Expenditure Abroad	1,521.3	4,094.8	4,756.4	5,725.9	6,488.5	6,713.1	6,773.9
Less : Non-residents' Expenditure							
Locally	5,532.7	10,484.5	10,506.6	11,096.6	10,677.3	9,570.6	7,808.0
At 1990 Market Prices							
Total	26,353.3	38,684.6	41,521.7	43,583.2	46,269.5	48,977.8	49,601.6
Food & Beverages	6,061.6	7,239.2	7,166.3	7,203.4	7,510.5	7,610.2	7,270.1
Clothing & Footwear	2,114.8	2,748.4	2,765.6	2,714.9	2,751.6	2,755.7	2,299.0
Rent & Utilities	4,024.1	5,234.2	5,594.0	5,916.4	6,251.0	6,667.2	7,170.6
Furniture & Household Equipment	2,504.0	3,560.2	3,749.3	3,878.9	4,214.1	4,458.3	4,149.8
Medical Services	1,255.3	1,721.2	1,767.6	1,836.6	2,030.1	2,110.9	2,160.9
Transport & Communications	4,619.2	7,567.1	7,947.4	8,138.3	8,063.0	7,928.6	7,776.0
Recreation & Education	4,350.9	7,209.5	7,537.0	7,618.8	7,747.4	7,825.9	7,419.8
Other Goods & Services	5,800.7	9,390.3	10,071.9	10,700.6	11,323.0	12,004.5	11,817.8
Add : Residents' Expenditure Abroad	1,611.6	3,932.4	4,638.3	5,559.0	6,089.2	6,311.5	6,641.4
Less : Non-residents' Expenditure							
Locally	6,033.7	9,917.9	9,715.7	9,983.7	9,710.4	8,695.0	7,103.8

Note : Prior to 1990, the aggregates may not equal the sum of their components.

5.6 GROSS FIXED CAPITAL FORMATION

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
At Current Market Prices							
Total	15,666.6	32,753.4	36,201.5	39,973.3	49,548.5	54,382.1	52,260.2
Construction & Works	6,422.1	15,439.5	18,681.2	20,989.1	26,806.0	31,163.2	30,463.3
Residential Buildings	2,955.5	7,156.5	8,767.2	10,315.6	14,101.2	16,581.3	16,332.2
Non-residential Buildings	2,054.4	6,556.7	7,757.8	8,537.4	10,024.7	11,082.3	10,373.8
Other Construction & Works	1,412.2	1,726.3	2,156.2	2,136.1	2,680.1	3,499.6	3,757.3
Transport Equipment	2,096.8	5,817.9	4,842.0	5,856.7	7,800.3	7,535.0	6,989.2
Machinery & Equipment	7,147.7	11,496.0	12,678.3	13,127.5	14,942.2	15,683.9	14,807.7
At 1990 Market Prices							
Total	16,899.9	30,159.3	33,069.5	36,771.4	45,328.0	49,964.4	47,597.6
Construction & Works	7,844.2	13,673.9	15,968.2	17,754.6	21,713.4	24,924.3	25,092.4
Residential Buildings	3,784.3	6,194.6	7,183.7	8,372.7	10,860.6	12,736.9	13,231.7
Non-residential Buildings	2,435.4	5,928.3	6,865.6	7,456.2	8,493.3	9,202.8	8,688.7
Other Construction & Works	1,630.3	1,551.0	1,918.9	1,925.7	2,359.5	2,984.6	3,172.0
Transport Equipment	2,098.9	5,280.2	4,561.5	5,870.6	8,186.5	7,837.1	6,918.0
Machinery & Equipment	7,058.4	11,205.2	12,539.8	13,146.2	15,428.1	17,203.0	15,587.2

Note : Prior to 1990, the aggregates may not equal the sum of their components.

5.7 GROSS DOMESTIC PRODUCT DEFLATORS BY INDUSTRY

(1990=100)

Industry	1988	1993	1994	1995	1996	1997	1998
Total	91.2	109.0	112.4	115.3	116.7	118.4	116.6
Agriculture & Fishing	99.4	97.0	100.5	108.3	116.9	116.2	109.0
Quarrying	52.2	65.9	112.3	103.7	172.4	195.2	150.0
Manufacturing	97.5	108.7	106.6	110.6	112.7	114.4	115.2
Utilities	109.9	104.4	104.6	112.4	127.0	132.5	134.6
Construction	87.2	112.6	113.6	118.5	123.8	125.5	127.6
Commerce	86.5	105.1	111.1	113.5	111.7	113.5	110.3
Transport & Communications	94.7	105.2	107.7	106.2	101.7	98.9	93.2
Financial & Business Services	85.8	113.4	124.6	127.0	124.7	128.1	127.3
Other Services	89.0	107.7	115.5	118.1	120.9	121.2	118.6

Note : Refer to gross domestic product at market prices.

5.8 DEFLATORS OF EXPENDITURE ON GROSS DOMESTIC PRODUCT

(1990=100)

	1988	1993	1994	1995	1996	1997	1998
Total	91.2	109.0	112.4	115.3	116.7	118.4	116.6
Private Consumption Expenditure	92.5	109.1	113.4	113.9	114.8	115.8	114.2
Government Consumption Expenditure	92.3	103.7	108.9	109.0	110.4	110.9	107.6
Gross Fixed Capital Formation	92.7	108.6	109.5	108.7	109.3	108.8	109.8
Exports of Goods & Services	93.8	92.9	92.0	91.5	90.0	88.8	88.7
Imports of Goods & Services	94.8	92.2	89.9	88.6	86.8	85.4	84.4

5.9

INCOME COMPONENTS OF GROSS DOMESTIC PRODUCT

(At Current Market Prices)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Total	50,714.2	92,905.4	106,489.7	118,490.5	128,973.5	141,261.9	141,216.2
Compensation of Employees	20,946.8	40,009.8	45,712.4	50,641.1	55,585.8	60,838.2	62,764.6
Gross Operating Surplus	25,455.5	44,440.5	50,422.2	55,871.9	61,271.0	65,930.1	66,647.6
of Financial Corporations	3,387.6	7,536.1	9,764.2	9,392.3	9,823.5	10,567.2	10,838.2
of Non-financial Corporations	19,188.9	32,440.8	37,513.5	43,148.2	46,348.6	50,125.5	50,522.2
of Others ¹	5,818.9	10,330.2	11,193.5	11,773.8	12,796.7	13,951.0	14,442.8
Less : Imputed Bank Service Charge	2,939.9	5,866.6	8,049.0	8,442.4	7,697.8	8,713.6	9,155.6
Taxes on Production & on Imports	3,840.5	9,360.7	11,813.0	12,791.3	13,489.5	14,720.7	12,149.3
Statistical Discrepancy	471.4	-905.6	-1,457.9	-813.8	-1,372.8	-227.1	-345.3

1 Refers to unincorporated enterprises and non-profit institutions.

5.10 BALANCE OF PAYMENTS

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
A Current Account Balance	3,898.8	6,804.2	17,412.5	20,461.5	20,458.1	22,320.0	29,478.7
Goods Balance	56.3	-4,401.4	2,068.7	1,384.2	3,136.4	1,660.1	24,564.6
Exports of Goods	81,912.0	125,802.2	149,565.8	167,896.5	177,679.6	186,708.1	184,731.1
Imports of Goods	81,855.7	130,203.6	147,497.1	166,512.3	174,543.2	185,048.0	160,166.5
Services Balance	3,553.5	11,756.9	13,969.8	17,089.1	14,459.5	16,473.5	552.8
Exports of Services	15,219.6	30,049.2	35,198.3	42,262.4	42,240.0	45,274.9	30,672.1
Transportation	3,202.2	5,127.7	6,174.4	7,265.1	7,322.3	7,658.7	7,448.9
Travel	5,377.5	10,334.5	10,357.9	10,976.6	10,551.7	9,444.9	7,682.4
Insurance	198.2	423.0	503.8	502.4	559.7	661.2	699.0
Government	192.9	161.1	159.9	131.8	137.9	137.9	139.8
Others	6,248.8	14,002.9	18,002.3	23,386.5	23,668.4	27,372.2	14,702.0
Imports of Services	11,666.1	18,292.3	21,228.5	25,173.3	27,780.5	28,801.4	30,119.3
Transportation	5,012.6	6,486.8	7,327.7	8,401.4	8,860.7	9,380.3	10,009.8
Travel	1,871.7	5,081.4	5,908.0	7,121.4	8,071.3	8,351.5	8,426.6
Insurance	1,120.2	1,022.0	1,177.6	1,380.3	1,414.5	1,484.4	1,226.6
Government	129.8	168.6	150.2	167.6	137.2	166.1	187.9
Others	3,531.8	5,533.5	6,665.0	8,102.6	9,296.8	9,419.1	10,268.4
Income Balance	780.6	314.7	2,383.8	3,243.6	4,374.8	5,948.5	6,331.8
Income Receipts	7,813.2	13,047.5	14,943.4	18,025.2	20,016.8	22,649.1	22,954.8
Income Payments	7,032.6	12,732.8	12,559.6	14,781.6	15,642.0	16,700.6	16,623.0
Current Transfers (Net)	-491.6	-866.0	-1,009.8	-1,255.4	-1,512.6	-1,762.1	-1,970.5
General Government	-181.9	-181.3	-203.4	-313.6	-332.0	-374.9	-375.3
Other Sectors	-309.7	-684.7	-806.4	-941.8	-1,180.6	-1,387.2	-1,595.2
B Capital and Financial Account Balance	1,877.0	-2,073.6	-13,632.6	-6,810.7	-4,560.0	-5,975.7	-29,902.3
Capital Account (Net)	-110.6	-115.3	-128.5	-101.0	-195.6	-257.1	-377.9
Financial Account (Net)	1,987.6	-1,958.3	-13,504.1	-6,709.7	-4,364.4	-5,718.6	-29,524.4
Direct Investment	7,118.5	4,095.1	6,068.7	1,310.9	2,269.3	7,406.1	6,878.6
Portfolio Investment	-589.6	-8,023.9	-11,801.3	-10,430.2	-14,498.7	-17,021.8	-12,523.0
Other Investment	-4,541.3	1,970.5	-7,771.5	2,409.6	7,865.0	3,897.1	-23,880.0
Assets	-5,208.8	-11,478.6	-16,800.4	-14,572.3	-14,478.9	-49,691.9	2,667.9
Banks	-5,071.4	1,242.0	-6,554.5	1,635.1	-4,981.3	-18,384.6	3,711.2
Other Sectors	-137.4	-12,720.6	-10,245.9	-16,207.4	-9,497.6	-31,307.3	-1,043.3
Liabilities	667.5	13,449.1	9,028.9	16,981.9	22,343.9	53,589.0	-26,547.9
Banks	3,076.1	3,149.4	8,261.8	6,268.8	11,324.9	27,746.2	-21,400.5
Other Sectors	-2,408.6	10,299.7	767.1	10,713.1	11,019.0	25,842.8	-5,147.4
C Net Errors and Omissions	-2,432.2	7,423.1	3,521.8	-1,476.9	-5,491.5	-4,488.6	5,404.2
D Overall Balance (A+B+C)	3,343.6	12,153.7	7,301.7	12,173.9	10,406.6	11,855.7	4,980.6
E Official Reserves (Net)¹	-3,343.6	-12,153.7	-7,301.7	-12,173.9	-10,406.6	-11,855.7	-4,980.6
Special Drawing Rights	-8.2	-11.9	-9.7	-15.5	-9.4	-38.3	-111.8
Reserve Position in the Fund	12.2	-14.8	-20.3	-48.8	1.5	-135.5	-50.2
Foreign Exchange Assets	-3,347.6	-12,127.0	-7,271.7	-12,109.6	-10,398.7	-11,681.9	-4,818.6

1 Increase in assets is indicated by a minus (-) sign.

5.11 STOCK OF FOREIGN EQUITY INVESTMENT IN SINGAPORE BY INDUSTRY

(End of Period)

Million Dollars							
Industry	1986	1991	1992	1993	1994	1995	1996
Total (I+II)	28,584.1	62,910.5	65,351.0	73,285.2	86,811.7	99,215.7	117,104.5
(I) Direct Equity Investment	24,702.8	54,563.2	56,660.9	62,766.9	74,605.2	84,267.0	96,484.8
Agriculture & Fishing	26.7	82.6	136.6	36.6	34.5	34.3	46.1
Mining & Quarrying	-50.7	-39.7	-6.4	-1.4	2.1	-2.3	-12.7
Manufacturing	12,194.3	20,658.7	20,034.0	22,418.3	27,143.1	30,626.4	33,067.2
Construction	283.1	749.8	607.7	479.0	611.5	969.0	1,010.5
Commerce	2,777.6	8,561.5	7,933.8	9,113.2	11,461.0	11,697.2	12,808.7
Transport & Storage	-23.0	1,372.4	1,531.6	1,971.5	2,534.8	2,654.5	3,113.3
Financial & Business Services	9,448.2	23,049.2	26,293.3	28,630.1	32,797.3	38,238.1	46,310.4
Other Services	46.6	128.6	130.5	119.6	20.9	49.8	141.2
(II) Portfolio & Other Equity Investment	3,881.3	8,347.3	8,690.1	10,518.4	12,206.4	14,948.7	20,619.7

Note : Negative figures result when outstanding amount due from foreign head offices to their Singapore branches are larger than the amount due from branches to the head offices.

5.12 STOCK OF SINGAPORE'S EQUITY INVESTMENT ABROAD BY INDUSTRY

(End of Period)

Million Dollars							
Industry	1991	1992	1993	1994	1995	1996	
Total (I+II)	19,718	22,886	27,952	37,065	50,082	57,410	
(I) Direct Equity Investment Abroad ¹	15,184	17,741	22,181	29,765	39,145	44,837	
Manufacturing	2,901	3,760	4,550	7,042	10,218	10,917	
Construction	72	130	187	236	412	345	
Commerce	1,606	1,967	2,285	2,800	3,777	4,259	
Transport & Storage	245	290	546	893	1,213	1,495	
Financial	8,648	9,753	12,225	15,473	19,612	24,249	
Real Estate	859	963	1,420	1,989	2,660	2,641	
Business Services	605	595	766	1,005	905	575	
Others	247	283	202	329	349	356	
(II) Portfolio Equity Investment Abroad	4,534	5,144	5,770	7,300	10,937	12,573	

Notes : Data breakdown by industry prior to 1990 are not available.

Data prior to 1994 exclude investment undertaken by financial institutions such as banks, finance companies and insurance companies.

¹ Figures include stocks of attributable reserve of overseas subsidiaries and associates.

5.13 STOCK OF FOREIGN EQUITY INVESTMENT IN SINGAPORE BY COUNTRY

(End of Period)

Million Dollars

	1986	1991	1992	1993	1994	1995	1996
Total (I+II)	28,584.1	62,910.5	65,351.0	73,285.2	86,811.7	99,215.7	117,104.5
(I) Direct Equity Investment	24,702.8	54,563.2	56,660.9	62,766.9	74,605.2	84,267.0	96,484.8
United States	6,863.8	9,530.4	9,646.6	11,251.3	12,051.7	14,253.0	16,041.9
Australia	1,007.1	2,886.6	2,943.9	3,128.1	3,281.2	3,131.6	3,214.9
Europe	7,691.6	15,834.2	16,385.1	17,847.6	22,383.5	24,815.7	30,677.0
European Union	5,815.6	12,683.2	13,083.2	13,777.5	15,828.3	17,385.3	21,491.1
United Kingdom	3,612.5	6,150.0	6,020.5	6,165.9	6,616.8	6,666.3	7,114.5
Germany	711.6	985.9	1,032.5	1,069.4	1,345.3	1,894.9	2,191.1
Netherlands	1,116.5	4,344.9	4,078.5	4,056.6	4,194.6	4,397.2	7,146.4
Others	375.0	1,202.4	1,951.7	2,485.6	3,671.6	3,868.2	5,039.2
Switzerland	1,589.5	2,434.5	2,634.2	3,348.1	5,753.5	7,106.7	8,643.2
Others	286.5	716.5	667.7	722.0	801.7	323.7	542.7
Asia	7,074.9	18,422.8	20,176.3	21,965.6	25,800.9	28,388.4	32,239.8
Japan	3,654.0	11,717.9	13,186.3	13,471.1	15,806.3	16,969.5	19,361.9
Hong Kong	1,501.9	3,245.0	3,461.8	3,758.7	3,623.1	3,910.4	4,227.5
Taiwan	68.8	253.1	360.3	503.5	725.2	927.9	1,263.9
Asean	1,669.6	2,889.8	3,041.9	3,843.5	4,928.6	5,677.3	6,400.8
Malaysia	1,379.9	2,106.4	2,220.7	2,462.5	2,910.9	3,523.9	3,953.6
Indonesia	137.1	91.6	61.3	170.6	575.0	788.2	950.9
Philippines	34.3	157.2	150.3	167.8	351.0	356.7	380.5
Thailand	37.4	485.7	516.9	951.0	904.3	801.8	903.2
Brunei	80.8	48.9	92.7	91.5	187.4	206.2	211.4
Vietnam ¹	-	-	-	-	-	0.4	1.1
Others	180.6	317.0	126.0	388.8	717.7	903.3	985.7
Other Countries	2,065.4	7,889.2	7,509.0	8,574.3	11,087.9	13,678.3	14,311.2
(II) Portfolio & Other Equity Investment	3,881.3	8,347.3	8,690.1	10,518.4	12,206.4	14,948.7	20,619.7

1 With effect from 1995, Vietnam is included in Asean total.

5.14 STOCK OF SINGAPORE'S EQUITY INVESTMENT ABROAD BY COUNTRY

(End of Period)

		Million Dollars					
	Country	1991	1992	1993	1994	1995	1996
	Total (I+II)	19,718	22,886	27,952	37,065	50,082	57,410
(I)	Direct Equity Investment Abroad ¹	15,184	17,741	22,181	29,765	39,145	44,837
	Asia	7,402	9,209	11,643	17,358	23,264	24,473
	Asean	3,996	4,897	6,107	9,680	12,993	13,371
	Brunei	69	89	75	77	35	27
	Indonesia	267	328	620	1,997	3,305	3,340
	Malaysia	3,121	3,917	4,619	6,500	7,715	7,573
	Philippines	90	106	202	382	619	869
	Thailand	448	457	591	723	977	1,077
	Vietnam ²	-	-	70	127	342	486
	Hong Kong	2,369	3,051	3,847	4,940	5,414	4,833
	Taiwan	287	350	394	496	570	559
	China	220	283	652	1,533	3,082	4,237
	Japan	74	76	96	171	395	389
	Others	457	554	477	412	812	1,084
	Europe	1,398	1,480	1,566	2,200	3,865	5,179
	Netherlands	550	526	499	453	450	440
	United Kingdom	322	351	328	930	2,447	3,626
	Others	526	604	739	818	969	1,113
	Australia	570	637	583	999	1,257	1,317
	United States	1,304	1,590	1,773	1,681	2,089	2,553
	Other Countries	4,511	4,826	6,617	7,527	8,670	11,316
(II)	Portfolio Equity Investment	4,534	5,144	5,770	7,300	10,937	12,573

Note : Data prior to 1994 exclude investment undertaken by financial institutions such as banks, finance companies and insurance companies.

1 Data prior to 1990 exclude stock of attributable reserves of overseas subsidiaries and associates as they are only available from 1990 onwards.

2 With effect from 1995, Vietnam is included in Asean total.

THE CORPORATE SECTOR

6 THE CORPORATE SECTOR

Data on the Corporate Sector covered all companies incorporated or registered in Singapore, including branches of foreign companies. Partnerships and sole proprietorships were, however, not included because of the difficulty in obtaining financial statements for such business enterprises. For companies with up-to-date accounts filed with the Singapore Registry of Companies and Businesses (RCB), the data were extracted from those accounts. For the remaining companies, data were collected directly via a postal survey of the companies.

Definitions

Local-controlled companies : Refer to companies with at least 50 per cent of their ordinary paid-up shares owned by shareholders who have their residential or registered address in Singapore, with the exception of subsidiaries of local companies which are foreign-controlled.

Foreign-controlled companies : Refer to companies with at least 50 per cent of their ordinary paid-up shares owned by shareholders who have their residential or registered address outside Singapore. They include branches of foreign corporations as well as subsidiaries of foreign-controlled companies.

Equity Ratio : It is defined as the ratio of shareholders' equity to the total debt or

liabilities. This ratio measures the dependence of companies on external funding i.e. funding which is not from its shareholders or to its overseas headquarters in the case of the local branch of a foreign enterprise. The lower is this ratio, the higher is the company's dependence on external funding.

Current Ratio : It is defined as the ratio of current assets (including the outstanding funds due from holding and related companies) to current liabilities (including the outstanding amount due to holding and related companies). This ratio measures the liquidity of companies, i.e. their ability to meet current debt payments when due. A ratio of 1 indicates that the company has exactly balanced its current liabilities with current assets. The further is the ratio below 1, the higher is the risk of the company running into a liquidity problem. A ratio above 1 indicates an excess of liquidity in the company.

Other References

The report "Singapore's Corporate Sector, 1986-1995", published by the Singapore Department of Statistics, contains analyses of data and detailed tables showing the aggregated balance sheets and profit and loss accounts.

6.1 ACTIVE COMPANIES BY INDUSTRY

(End of Period)

Industry	Number						
	1986	1991	1992	1993	1994	1995	1996
Total	32,923	40,242	44,681	45,605	49,332	62,390	76,175
Agriculture & Fishing	87	141	87	90	62	77	197
Manufacturing	4,068	5,629	5,469	5,947	6,607	7,849	7,542
Construction	2,185	2,592	2,677	3,398	3,791	5,036	5,288
Commerce	13,573	16,361	18,302	18,870	20,015	24,421	30,407
Transport & Storage	2,495	3,229	3,537	3,591	4,034	4,849	5,496
Financial & Business Services	9,688	10,942	12,986	12,338	13,387	17,726	24,827
Social & Personal Services	810	1,319	1,585	1,360	1,416	2,407	2,382
Others	17	29	38	11	20	25	36

6.2 LOCAL-CONTROLLED COMPANIES BY INDUSTRY

(End of Period)

Industry	Number						
	1986	1991	1992	1993	1994	1995	1996
Total	25,995	31,463	34,263	34,362	36,242	51,100	65,182
Agriculture & Fishing	77	136	78	85	55	72	183
Manufacturing	3,094	4,301	4,299	4,624	4,697	6,465	6,432
Construction	1,899	2,404	2,462	2,963	3,132	4,765	4,879
Commerce	10,820	12,526	13,749	13,827	14,725	19,673	25,617
Transport & Storage	1,904	2,585	2,710	2,702	2,937	3,987	4,698
Financial & Business Services	7,463	8,293	9,539	8,938	9,399	14,030	21,125
Social & Personal Services	727	1,199	1,418	1,216	1,290	2,092	2,219
Others	11	19	8	7	7	16	29

6.3 FOREIGN-CONTROLLED COMPANIES BY INDUSTRY

(End of Period)

Industry							Number
	1986	1991	1992	1993	1994	1995	1996
Total	6,928	8,779	10,418	11,243	13,090	11,290	10,993
Agriculture & Fishing	10	5	9	5	7	5	14
Manufacturing	974	1,328	1,170	1,323	1,910	1,384	1,110
Construction	286	188	215	435	659	271	409
Commerce	2,753	3,835	4,553	5,043	5,290	4,748	4,790
Transport & Storage	591	644	827	889	1,097	862	798
Financial & Business Services	2,225	2,649	3,447	3,400	3,988	3,696	3,702
Social & Personal Services	83	120	167	144	126	315	163
Others	6	10	30	4	13	9	7

6.4 TOTAL ASSETS / LIABILITIES OF COMPANIES BY MAIN INDUSTRIAL SECTORS

(End of Period)

								Billion Dollars
	1986	1991	1992	1993	1994	1995	1996	
Total	641.7	990.3	1,048.4	1,175.8	1,272.8	1,444.2	1,654.5	
Financial Services Sector	499.0	714.0	759.0	840.8	878.6	967.0	1,102.3	
Non-Financial Sectors	142.7	276.4	289.4	335.0	394.2	477.3	552.1	
Manufacturing	37.3	71.5	71.7	82.5	96.6	108.3	121.1	
Construction	10.5	12.0	14.7	19.0	21.4	27.6	32.0	
Commerce	33.8	78.0	75.5	87.8	104.5	119.8	134.3	
Transport & Storage	18.4	30.5	37.4	40.7	46.5	50.3	58.5	
Insurance, Real Estate & Business Services	41.1	79.8	84.7	99.5	119.8	147.0	180.3	
Others	1.7	4.5	5.5	5.4	5.3	24.2	25.9	

6.5

EQUITY RATIOS OF COMPANIES BY MAIN INDUSTRIAL SECTORS

(End of Period)

	1986	1991	1992	1993	1994	1995	1996
Total	0.10	0.21	0.19	0.20	0.21	0.26	0.26
Financial Services Sector	0.03	0.15	0.13	0.14	0.14	0.20	0.19
Non-Financial Sectors	0.31	0.37	0.37	0.37	0.38	0.39	0.38
Manufacturing	0.52	0.47	0.48	0.48	0.49	0.51	0.51
Construction	0.10	0.17	0.12	0.11	0.10	0.11	0.12
Commerce	0.26	0.26	0.25	0.25	0.26	0.26	0.26
Transport & Storage	0.21	0.44	0.44	0.47	0.48	0.50	0.47
Insurance, Real Estate & Business Services	0.27	0.39	0.40	0.40	0.40	0.40	0.38
Others	0.39	0.51	0.44	0.44	0.42	0.60	0.63

6.6

CURRENT RATIOS OF COMPANIES BY MAIN INDUSTRIAL SECTORS

(End of Period)

	1986	1991	1992	1993	1994	1995	1996
Total	0.95	1.08	1.04	1.04	1.05	1.08	1.05
Financial Services Sector	0.94	1.09	1.04	1.05	1.04	1.09	1.07
Non-Financial Sectors	0.98	1.06	1.04	1.02	1.08	1.05	1.02
Manufacturing	1.42	1.27	1.31	1.30	1.35	1.33	1.25
Construction	0.98	0.87	0.83	0.84	0.88	0.91	0.98
Commerce	0.98	1.13	1.09	1.08	1.11	1.10	1.08
Transport & Storage	1.05	1.01	1.00	0.88	0.99	0.99	0.99
Insurance, Real Estate & Business Services	0.64	0.76	0.78	0.79	0.89	0.85	0.82
Others	0.72	1.24	1.02	1.06	0.86	0.71	0.78

6.7 NEW COMPANIES FORMED BY INDUSTRY

Industry	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	4,932	8,816	9,811	9,468	9,473	8,918	6,592
Agriculture, Fishing, Mining & Quarrying	32	17	27	23	25	44	23
Manufacturing	778	1,075	1,140	1,104	1,062	1,067	846
Construction	419	525	553	581	651	680	612
Commerce	2,081	3,632	3,719	3,551	3,557	3,099	2,241
Transport & Communications	352	545	573	645	589	559	387
Financial & Business Services	1,069	2,623	3,275	3,086	3,151	3,035	2,117
Other Services	200	399	450	440	433	433	345
Not Stated	1	-	74	38	5	1	21

Source : Registry of Companies and Businesses

AGRICULTURE, LIVESTOCK AND FISHERIES

General

The agricultural sector of Singapore is engaged mainly in the production of eggs, fish and vegetables for local consumption and orchids and ornamental fish for exports. About one per cent of Singapore's land area is used for agricultural purposes.

Land for farming has declined over the years. In order to achieve a significant measure of local production of fresh food supply, the government has initiated the development of agrotechnology parks to house large-scale intensive farms using such technology. Six agrotechnology parks covering a total land area of 1,465 hectares have been successfully developed.

Horticulture

The main crops cultivated are vegetables and orchids. Vegetable cultivation is highly intensive, producing mainly leafy vegetables like cai xin, gai lan, weng cai and xian cai, mushrooms and bean sprouts.

A number of farms and nurseries grow orchids, ornamental and foliage plants for export and domestic sale. Singapore is renowned for her exotic orchid cut flowers, which are exported to many countries. The orchid and other horticultural enterprises are supported by plant tissue laboratories which produce several hundred thousands of plantlets.

Poultry and Livestock

Hen egg production, an important farming activity in Singapore, meets about 35 per cent of eggs consumed locally. The seven

large-scale layer farms in agrotechnology parks are expected to increase their egg production to 1.6 million eggs or 53 per cent of projected daily consumption.

Pigs, sheep, goats and cattle are slaughtered at the Jurong and Kim Chuan Abattoirs under close supervision of the Primary Production Department.

Fisheries

Local fish production comprises mainly catches from the sea with relatively small quantities from aquaculture fish farms. Singapore also imports, exports and tranships fish caught by foreign fishing vessels.

The Jurong Fishing Port (JFP) plays an important role as a major fish landing and distribution point in Singapore. The Port handles the bulk of fresh fish landed by foreign vessels as well as those imported by air and road. The Senoko Fishing Port, which serves as a homebase for local fishing vessels, began its operations in September 1997. It handles fish landed by local fishing vessels as well as imported fish. However, the quantity handled is much smaller compared with Jurong Fishing Port - about 20 per cent of JFP's capacity. There are 93 fish processing establishments licensed to manufacture fishery products for the domestic market and 13 establishments approved for exports to EU markets.

There are 92 licensed marine farms covering about 55 hectares of coastal waters, culturing high-value fish like groupers and seabass for the live fish market.

7.1 PRODUCTION OF PRINCIPAL CROPS

	1988	1993	1994	1995	1996	1997	1998
Vegetables (Tonnes)	10,154	4,800	5,644	7,336	10,870	16,281	17,291
Orchid Flowers (Million Stalks)	na	37	33	29	29	16	17
Plants ¹ (Million Plants)	na	233	188	77	65	66	55

Source : Primary Production Department.

1 Include potted plants, foliage, ornamental plants, aquatic plants and tissue-cultured plantlets.

7.2 LIVESTOCK SLAUGHTERED

	1988	1993	1994	1995	1996	1997	Number 1998
Pigs	1,148,832	1,287,801	1,311,753	1,291,560	1,252,516	1,257,041	1,256,203
Sheep	41,642	24,331	20,170	14,357	9,077	7,905	6,581
Goats	310	246	235	19	48	56	80
Oxen	1,668	1,315	789	441	200	281	170

Source : Primary Production Department.

7.3 FISH SUPPLY AND AUCTION

	1988	1993	1994	1995	1996	1997	Tonnes 1998
Fish Supply							
Local Production ¹	15,168	11,940	14,101	13,353	13,129	13,049	11,030
Imports	155,588	167,077	178,537	181,090	156,077	150,257	119,810
Exports	107,074	109,966	136,518	136,909	116,396	102,427	104,549
Fish Auction	103,135	103,109	92,550	93,761	91,460	87,139	87,015

Source : Primary Production Department

Trade Development Board

Note : Exclude dried, salted and fish in brine.

1 Data include aquaculture production.

MANUFACTURING

German Industrial Production Index, 1987 as base year and the average of 1987 and 1988 as base year. The results provide comprehensive data for the study of the structure and trends of the manufacturing sector in Singapore.

The activities covered in the census are those which are primarily concerned with the production of goods and services for sale or use in the manufacturing sector.

The census is primarily conducted on a two standard questionnaire basis, using two standard questionnaire forms. The reference period is the calendar year ending on 31 December 1996.

Establishments are defined as a manufacturing unit engaged in one manufacturing activity and generally operating at one location. The census is primarily conducted on a two standard questionnaire basis, using two standard questionnaire forms. The reference period is the calendar year ending on 31 December 1996.

Workers refer to all persons engaged in the industrial activity of the establishment, that is, all employees, the self-employed and their relatives. Data generally refer to employment as at 30 June, except where establishments commence operation after June.

Remuneration: It refers to the amount expended for the whole year. For employees, total remuneration comprises salaries (including bonuses), contributions to the Central Provident Fund and pensions paid by

employers and other benefits payable to workers. It refers to the amount expended for the whole year. For employees, total remuneration comprises salaries (including bonuses), contributions to the Central Provident Fund and pensions paid by employers and other benefits payable to workers. It refers to the amount expended for the whole year. For employees, total remuneration comprises salaries (including bonuses), contributions to the Central Provident Fund and pensions paid by employers and other benefits payable to workers.

Establishments are defined as a manufacturing unit engaged in one manufacturing activity and generally operating at one location. The census is primarily conducted on a two standard questionnaire basis, using two standard questionnaire forms. The reference period is the calendar year ending on 31 December 1996.

Index of Industrial Production: The index of industrial production is a measure of the volume of output of the manufacturing sector. It is calculated by taking the weighted average of the output of the various manufacturing industries. The index is published annually by the Department of Statistics.

The index of industrial production was revised to 1996=100, using the value added weighting pattern obtained from the 1997 Census of Industrial Production data. The weighting pattern reflects the relative importance of the various manufacturing industries in the manufacturing sector. The index is published annually by the Department of Statistics.

Census of Industrial Production

A census of manufacturing establishments employing ten or more workers is conducted annually by the Research and Statistics Unit, Economic Development Board. The results provide comprehensive data for the study of the structure and trends of the manufacturing sector.

The activities covered in the census include manufacturing, industrial servicing and granite quarrying. They are classified according to the Singapore Standard Industrial Classification 1996.

The census is primarily conducted by mail, using two standard questionnaires. The reference period is the calendar year except for those establishments whose financial years do not coincide with the calendar year.

Definitions

Establishments : A manufacturing establishment is defined as a manufacturing unit engaged in one manufacturing activity and generally operating at one location.

Workers : They refer to all persons engaged in the industrial activity of the establishment, that is, all employees, the self-employed and their relatives. Data generally refer to employment as at 30 June, except where establishments commence operation after June.

Remuneration : It refers to the amount expended for the whole year. For employees, total remuneration comprises salaries (including bonuses), contributions to the Central Provident Fund and pensions paid by

employers, and other benefits provided. For working proprietors, it refers to the amount withdrawn for their personal use. For unpaid family workers, it refers to allowances.

Gross Output : The gross output of industries refers to the total value of all commodities produced (including by-products) and industrial services rendered during the year.

Materials Used : Materials used cover raw or basic materials, chemicals and packing materials consumed in the production. They refer to the actual consumption during the year.

Value Added : It refers to gross output less materials, utilities, fuel, transportation charges, work given out and other operating costs.

Index of Industrial Production

The index of industrial production covers all manufacturing activities classified under Section D of the Singapore Standard Industrial Classification 1996. Rubber processing, granite quarrying and production undertaken by government departments and statutory boards are not covered by the index. The indices published are at the 2-digit industry division level and the total manufacturing level.

The index of industrial production was rebased to 1996=100, using the value added weighting pattern obtained from the 1995 Census of Industrial Production data. The weighting pattern reflects the relative importance of the industry divisions and changing structure within the manufacturing sector. The Laspeyres' formula is used for the compilation of the index, with 1996 as the base year.

8 MANUFACTURING (cont'd)

Indices of Business and Labour Costs

The Unit Business Cost Index (UBCI) is compiled by the Singapore Department of Statistics. It measures the relative cost of producing one unit of real output with respect to the base year. The main components for business cost are labour cost, services cost and government rates and fees. The weighting pattern for the components are derived from the input-output tables. As a fixed-weight index, the UBCI takes the reference year of input-output tables as the base year. The Laspeyres' formula is used for the compilation of the index.

Unit labour cost is defined as the total labour cost per unit of real output. Total labour cost comprises wages and salaries, benefits, CPF contributions by employers, foreign workers' levy and skill development levy.

Investment Commitments

Investment commitments refer to investment projects in terms of gross fixed

assets which companies commit to invest in Singapore. Projects are only recorded as commitments if their potential for establishment is favourable and the company has made a firm undertaking to implement the project.

Pioneer Manufacturing Establishments

These are establishments which had been granted approval under the Pioneer Industries Programme of the Economic Expansion Incentives Act. The principal statistics of these establishments were obtained from the Census of Industrial Production.

Other References

More detailed statistics on the manufacturing sector are available from the "Report on the Census of Industrial Production". This report is published annually by the Research and Statistics Unit, Economic Development Board.

8.1 PRINCIPAL MANUFACTURING STATISTICS

	Unit	1988	1993	1994	1995	1996	1997	1998
Establishments	No	3,624	3,993	4,013	4,036	4,068	4,108	4,171
Workers	No	324,713	355,175	365,588	370,281	368,119	366,696	356,016
Materials	\$m	35,289	54,251	63,097	71,680	76,026	79,603	75,639
Output	\$m	56,470	87,639	100,622	113,358	119,869	126,531	123,880
Value Added	\$m	13,660	21,351	23,567	26,903	28,214	29,654	29,637
Remuneration	\$m	5,081	8,995	9,881	10,682	11,253	11,926	11,829
Capital Expenditure	\$m	3,547	5,624	5,972	7,136	8,088	10,428	na
Direct Exports	\$m	37,806	53,022	61,532	69,013	72,964	76,450	75,485

Source : Economic Development Board

Notes : Figures refer to establishments engaging 10 or more workers.

Data exclude rubber processing and granite quarrying.

8.2 SELECTED AVERAGES AND RATIOS IN THE MANUFACTURING SECTOR

	Unit	1988	1993	1994	1995	1996	1997	1998
Output Per Worker	\$'000	173.9	246.7	275.2	306.1	325.6	345.1	348.0
Value Added Per Worker	\$'000	42.1	60.1	64.5	72.7	76.6	80.9	83.2
Value Added to Output	%	24.2	24.4	23.4	23.7	23.5	23.4	23.9
Remuneration to Value Added	%	37.2	42.1	41.9	39.7	39.9	40.2	39.9
Remuneration to Output	%	9.0	10.3	9.8	9.4	9.4	9.4	9.5
Direct Exports to Total Sales	%	67.2	60.6	61.5	61.1	60.7	60.8	61.3
Direct Exports to Output	%	66.9	60.5	61.2	60.9	60.9	60.4	60.9

Source : Economic Development Board

Note : See notes to Table 8.1.

8.3 MANUFACTURING ESTABLISHMENTS BY INDUSTRY

Code	Industry	Number						
		1988	1993	1994	1995	1996	1997	1998
15/16	Food, Beverage & Tobacco	286	305	312	312	313	323	327
17	Textiles & Textile Manufactures	67	65	59	58	53	45	46
18	Wearing Apparel except Footwear	370	310	274	231	193	162	163
19	Leather, Leather Products & Footwear	60	44	39	33	27	24	24
20	Wood & Wood Products	90	75	69	64	57	52	53
21	Paper & Paper Products	88	103	106	110	104	98	99
22	Publishing, Printing & Reproduction of Recorded Media	311	387	386	407	415	400	406
23	Refined Petroleum Products	8	16	18	20	18	19	19
24	Chemicals & Chemical Products	157	174	185	187	195	211	214
25	Rubber & Plastic Products	310	333	337	346	355	349	352
26	Non-metallic Mineral Products	84	92	93	85	95	100	102
27	Basic Metals	28	29	27	25	25	26	27
28	Fabricated Metal Products except Machinery & Apparatus	416	533	559	584	605	633	643
29	Machinery & Equipment	391	473	499	515	565	600	612
30	Electrical Machinery & Apparatus	123	142	145	150	152	162	164
31	Electronic Products & Components	224	241	237	239	238	238	243
32	Medical, Precision & Optical Instruments, Watches & Clocks	48	60	57	62	62	67	68
33	Transport Equipment	221	285	294	305	307	316	321
34	Other Manufacturing Industries	339	319	310	295	279	273	277
35	Recycling of Metal/Non-metal Waste & Scrap	3	7	7	8	10	10	11
Total Manufacturing		3,624	3,993	4,013	4,036	4,068	4,108	4,171

Source : Economic Development Board

Notes : Figures refer to establishments engaging 10 or more workers.

Rubber processing and granite quarrying are excluded.

Data are classified according to Singapore Standard Industrial Classification, 1996.

8.4 MANUFACTURING OUTPUT BY INDUSTRY

Million Dollars

Code	Industry	1988	1993	1994	1995	1996	1997	1998
15/16	Food, Beverage & Tobacco	2,726.1	3,135.5	3,457.4	3,607.7	3,650.3	3,798.7	3,774.7
17	Textiles & Textile Manufactures	360.6	368.0	320.8	294.4	237.6	255.5	243.2
18	Wearing Apparel except Footwear	1,694.3	1,323.4	1,205.8	973.7	801.6	773.4	875.9
19	Leather, Leather Products & Footwear	103.3	123.6	121.4	116.5	112.1	152.7	115.3
20	Wood & Wood Products	392.2	295.1	283.3	289.6	270.2	290.6	321.9
21	Paper & Paper Products	701.2	855.5	950.4	1,056.9	1,021.9	954.7	837.3
22	Publishing, Printing & Reproduction of Recorded Media	1,342.2	2,330.2	2,446.5	2,660.8	2,755.3	2,799.8	2,609.4
23	Refined Petroleum Products	7,630.0	11,154.4	10,909.5	10,653.8	13,746.5	14,637.5	13,364.0
24	Chemicals & Chemical Products	4,776.1	5,154.4	5,918.7	6,865.1	7,163.1	9,339.0	10,295.3
25	Rubber & Plastic Products	1,374.0	2,019.1	2,275.7	2,588.5	2,601.0	2,654.8	2,309.6
26	Non-metallic Mineral Products	727.3	1,830.1	2,001.9	2,055.1	2,372.0	2,628.3	2,267.4
27	Basic Metals	622.6	734.2	720.9	662.7	636.9	646.2	556.3
28	Fabricated Metal Products except Machinery & Apparatus	2,758.8	4,668.8	5,607.5	6,313.2	6,297.8	6,496.0	6,382.4
29	Machinery & Equipment	3,224.9	4,395.1	4,965.1	5,849.2	6,452.2	6,896.8	6,683.7
30	Electrical Machinery & Apparatus	1,672.2	2,255.3	2,797.1	3,344.9	3,110.9	3,082.6	2,851.7
31	Electronic Products & Components	21,470.5	39,706.6	48,725.3	57,872.7	60,912.8	62,905.2	61,200.5
32	Medical, Precision & Optical Instruments, Watches & Clocks	631.2	1,137.0	1,184.8	1,473.1	1,547.1	1,693.3	1,964.8
33	Transport Equipment	2,756.0	4,622.4	5,071.6	5,191.7	4,828.0	5,166.4	6,168.7
34	Other Manufacturing Industries	1,497.2	1,514.0	1,639.2	1,463.3	1,315.0	1,314.8	990.0
35	Recycling of Metal/Non-metal Waste & Scrap	9.2	16.5	19.4	25.0	36.7	44.6	67.8
Total Manufacturing		56,470.0	87,639.0	100,622.1	113,358.0	119,869.0	126,530.9	123,879.8

Source : Economic Development Board

Notes : See notes to Table 8.3.

8.5 VALUE ADDED OF MANUFACTURING ESTABLISHMENTS BY INDUSTRY

		Million Dollars						
Code	Industry	1988	1993	1994	1995	1996	1997	1998
15/16	Food, Beverage & Tobacco	549.2	778.6	852.8	845.2	853.8	931.1	860.6
17	Textiles & Textile Manufactures	83.2	87.2	81.9	66.4	61.5	69.3	60.6
18	Wearing Apparel except Footwear	422.6	311.7	265.3	220.1	173.7	168.0	191.5
19	Leather, Leather Products & Footwear	21.5	36.2	35.2	33.3	32.2	38.1	33.3
20	Wood & Wood Products	62.1	57.0	58.5	61.3	59.4	68.7	72.7
21	Paper & Paper Products	215.6	324.7	366.9	372.2	378.3	376.4	328.2
22	Publishing, Printing & Reproduction of Recorded Media	510.1	1,029.5	1,236.5	1,304.3	1,322.1	1,436.0	1,286.7
23	Refined Petroleum Products	692.0	1,499.1	1,444.5	1,296.9	1,623.8	1,690.8	1,564.0
24	Chemicals & Chemical Products	1,882.4	1,984.7	2,162.8	2,527.8	2,731.1	2,995.5	3,790.8
25	Rubber & Plastic Products	346.8	658.7	732.0	781.7	796.1	812.0	720.5
26	Non-metallic Mineral Products	143.6	455.7	516.3	544.0	590.6	597.8	541.6
27	Basic Metals	158.6	170.1	160.2	148.0	133.7	132.3	118.3
28	Fabricated Metal Products except Machinery & Apparatus	685.4	1,332.0	1,509.2	1,680.6	1,704.1	1,755.1	1,705.2
29	Machinery & Equipment	921.9	1,333.6	1,392.5	1,636.7	1,753.7	1,856.8	1,787.9
30	Electrical Machinery & Apparatus	458.7	612.0	746.2	834.4	808.0	813.0	719.5
31	Electronic Products & Components	4,820.4	8,231.3	9,543.4	11,987.9	12,672.2	13,136.2	12,781.5
32	Medical, Precision & Optical Instruments, Watches & Clocks	285.9	471.3	472.1	536.4	578.5	635.9	736.1
33	Transport Equipment	1,078.7	1,667.8	1,700.8	1,731.2	1,655.4	1,824.2	2,084.4
34	Other Manufacturing Industries	317.4	305.8	284.4	289.1	276.7	304.7	234.3
35	Recycling of Metal/Non-metal Waste & Scrap	3.7	4.1	5.6	5.4	9.1	12.2	18.6
Total Manufacturing		13,659.6	21,351.0	23,567.1	26,902.9	28,214.1	29,654.2	29,636.5

Source : Economic Development Board

Notes : See notes to Table 8.3.

8.6 WORKERS IN MANUFACTURING BY INDUSTRY

		Number						
Code	Industry	1988	1993	1994	1995	1996	1997	1998
15/16	Food, Beverage & Tobacco	13,156	14,613	14,673	13,996	14,215	14,698	14,653
17	Textiles & Textile Manufactures	3,324	3,101	2,613	2,238	1,748	1,653	1,632
18	Wearing Apparel except Footwear	29,402	20,751	18,143	14,684	10,309	8,144	8,559
19	Leather, Leather Products & Footwear	1,518	1,285	1,187	1,076	998	1,164	1,047
20	Wood & Wood Products	3,183	1,903	1,749	1,626	1,450	1,720	1,688
21	Paper & Paper Products	4,093	5,198	5,475	5,730	5,474	5,213	4,989
22	Publishing, Printing & Reproduction of Recorded Media	14,331	18,230	18,115	18,651	18,932	19,005	18,587
23	Refined Petroleum Products	3,045	3,713	3,752	3,700	3,531	3,444	3,361
24	Chemicals & Chemical Products	8,607	11,169	11,995	12,730	13,621	15,247	15,267
25	Rubber & Plastic Products	13,702	18,627	19,255	20,547	21,609	21,329	20,606
26	Non-metallic Mineral Products	5,069	6,301	6,589	5,512	6,505	7,002	6,441
27	Basic Metals	2,165	2,217	2,301	2,215	2,105	1,913	1,907
28	Fabricated Metal Products except Machinery & Apparatus	22,821	30,603	32,450	33,634	34,765	35,696	35,575
29	Machinery & Equipment	27,668	30,214	31,700	32,936	35,145	37,396	37,620
30	Electrical Machinery & Apparatus	16,919	15,589	17,170	18,051	15,652	15,176	13,877
31	Electronic Products & Components	111,110	117,048	122,380	126,891	128,455	123,863	114,133
32	Medical, Precision & Optical Instruments, Watches & Clocks	7,780	8,766	9,266	9,232	9,291	9,104	9,263
33	Transport Equipment	20,666	33,234	34,964	36,620	34,892	34,854	37,882
34	Other Manufacturing Industries	16,091	12,502	11,692	10,085	9,247	9,883	8,687
35	Recycling of Metal/Non-metal Waste & Scrap	63	111	119	127	175	192	242
Total Manufacturing		324,713	355,175	365,588	370,281	368,119	366,696	356,016

Source : Economic Development Board

Notes : See notes to Table 8.3.

8.7 REMUNERATION IN MANUFACTURING BY INDUSTRY

		Million Dollars						
Code	Industry	1988	1993	1994	1995	1996	1997	1998
15/16	Food, Beverage & Tobacco	228.2	372.8	400.1	406.4	435.0	460.9	460.1
17	Textiles & Textile Manufactures	45.2	62.6	56.8	52.4	43.8	41.8	41.1
18	Wearing Apparel except Footwear	292.2	281.0	263.8	224.6	176.5	151.6	156.8
19	Leather, Leather Products & Footwear	16.2	25.0	26.0	25.3	24.8	28.3	26.5
20	Wood & Wood Products	42.6	39.4	40.5	38.8	35.1	42.5	40.9
21	Paper & Paper Products	75.7	137.5	153.0	167.5	171.7	171.9	161.2
22	Publishing, Printing & Reproduction of Recorded Media	291.1	537.3	587.6	647.9	671.1	716.9	704.7
23	Refined Petroleum Products	151.7	282.7	280.8	277.2	301.8	303.7	300.0
24	Chemicals & Chemical Products	236.3	488.6	554.4	627.9	676.2	857.6	894.6
25	Rubber & Plastic Products	186.8	408.0	444.8	505.1	539.4	554.5	519.1
26	Non-metallic Mineral Products	81.2	169.8	195.5	182.9	210.6	229.3	226.6
27	Basic Metals	50.9	80.2	84.2	82.1	87.0	85.5	85.4
28	Fabricated Metal Products except Machinery & Apparatus	367.3	753.8	845.5	945.6	1,006.1	1,078.6	1,030.1
29	Machinery & Equipment	499.6	875.8	967.4	1,078.3	1,183.7	1,312.5	1,371.2
30	Electrical Machinery & Apparatus	237.2	390.3	449.0	501.2	484.8	483.2	462.5
31	Electronic Products & Components	1,550.1	2,639.7	2,953.4	3,280.1	3,522.5	3,641.6	3,503.2
32	Medical, Precision & Optical Instruments, Watches & Clocks	104.8	210.8	240.8	258.3	288.8	291.2	308.2
33	Transport Equipment	425.8	995.3	1,081.9	1,132.7	1,164.9	1,222.0	1,312.4
34	Other Manufacturing Industries	197.0	241.8	252.0	242.7	223.9	246.1	216.3
35	Recycling of Metal/Non-metal Waste & Scrap	1.0	3.0	3.6	4.6	5.4	6.3	8.2
Total Manufacturing		5,081.0	8,995.4	9,881.0	10,681.7	11,253.2	11,926.0	11,829.2

Source : Economic Development Board

Notes : See notes to Table 8.3.

8.8 VALUE OF OUTPUT OF SELECTED MANUFACTURED PRODUCTS

Million Dollars

Commodity	1987	1992	1993	1994	1995	1996	1997
Soft Drinks	236.9	309.6	303.8	315.4	286.7	281.8	283.1
Fabrics	111.2	135.7	140.9	146.0	152.3	123.1	132.5
Paints	165.4	355.3	339.0	381.6	453.6	459.6	494.9
Pharmaceutical Products	811.2	1,373.1	1,439.4	1,327.3	1,345.4	1,704.8	1,806.3
Lubricating Oil	406.0	632.5	629.0	642.3	781.9	945.0	1,217.2
Cement	120.8	374.1	426.8	454.8	485.7	471.3	420.6
Ready-mixed Concrete	215.5	497.1	587.0	700.7	809.8	1,024.5	1,274.1
Metal Stampings	184.1	516.7	639.9	838.1	930.0	989.8	999.1
Oil Rigs & Oilfield Equipment	469.3	864.2	785.3	865.4	940.8	1,197.1	1,366.9
Motors	264.3	366.4	384.7	441.8	497.5	446.3	449.9
Disk Drives	3,653.2	7,724.6	8,499.2	10,456.3	12,617.0	15,826.9	17,608.6
Communication Equipment	914.2	1,491.2	1,846.7	1,653.7	1,914.2	1,683.7	2,053.3
Television Receivers	860.4	1,135.5	1,134.2	1,156.8	1,252.3	1,236.6	570.0
Radios & Cassette Recorders (with or without radio)	1,355.1	1,232.0	1,173.1	1,419.2	1,125.5	594.8	571.1
Capacitors	136.7	409.7	489.9	518.1	498.7	406.6	458.5
Shipbuilding & Repairing	1,168.4	2,446.1	2,375.6	2,671.3	2,769.9	2,389.2	2,315.9
Marine Engines & Parts	112.8	243.8	266.4	356.9	303.5	306.7	345.8
Jewellery	153.1	333.4	316.6	412.3	305.4	276.4	262.0

Source : Economic Development Board

8.9 INDEX OF INDUSTRIAL PRODUCTION

(1996=100)

Code	Industry	1988	1993	1994	1995	1996	1997	1998
15/16	Food, Beverage & Tobacco	75.9	93.9	98.9	99.4	100.0	94.6	83.8
17	Textiles & Textile Manufactures	225.6	192.1	184.4	134.7	100.0	107.5	104.8
18	Wearing Apparel except Footwear	248.7	169.4	146.2	120.8	100.0	95.9	104.7
19	Leather, Leather Products & Footwear	155.9	137.9	128.8	118.4	100.0	91.1	92.2
20	Wood & Wood Products	165.5	108.3	100.1	97.0	100.0	91.0	91.0
21	Paper & Paper Products	91.8	91.0	96.9	105.0	100.0	92.9	80.4
22	Publishing, Printing & Reproduction of Recorded Media	58.0	89.5	96.3	100.2	100.0	103.2	92.9
23	Refined Petroleum Products	61.7	95.0	97.2	94.9	100.0	103.9	102.3
24	Chemicals & Chemical Products	53.2	85.8	93.1	94.1	100.0	125.4	157.5
25	Rubber & Plastic Products	78.5	88.6	98.9	108.1	100.0	94.8	79.0
26	Non-metallic Mineral Products	43.2	78.6	81.2	90.2	100.0	96.7	84.8
27	Basic Metals	90.2	107.9	109.4	100.0	100.0	105.0	87.2
28	Fabricated Metal Products except Machinery & Apparatus	69.9	79.3	88.4	102.5	100.0	97.0	92.2
29	Machinery & Equipment	51.8	69.9	84.7	95.1	100.0	106.4	97.3
30	Electrical Machinery & Apparatus	73.3	87.4	96.7	101.4	100.0	101.4	88.5
31	Electronic Products & Components	38.9	64.7	78.7	93.7	100.0	103.4	100.2
32	Medical, Precision & Optical Instruments, Watches & Clocks	39.1	71.4	73.1	98.8	100.0	110.9	129.0
33	Transport Equipment	69.2	97.2	104.1	105.7	100.0	107.5	120.7
34	Other Manufacturing Industries	186.2	126.0	133.4	104.4	100.0	96.1	74.8
	Total Manufacturing ¹	53.9	77.7	87.8	96.8	100.0	104.6	104.1

Source : Economic Development Board

Note : The industries are classified according to Singapore Standard Industrial Classification (SSIC) 1996.

The current index series have been rebased with base year 1996=100. The rebased indices reflect the relative importance of the industry divisions and changing structure within the total manufacturing sector.

¹ Exclude rubber processing.

8.10

INDICES OF UNIT BUSINESS COST AND UNIT LABOUR COST (1988=100)

	Weights ¹	1988	1993	1994	1995	1996	1997	1998
Unit Business Cost of Manufacturing								
Total	100.0	100.0	121.1	120.1	122.8	125.3	126.3	124.8
Unit Labour Cost	49.4	100.0	130.0	126.0	124.4	127.3	128.4	127.3
Services Cost	48.3	100.0	110.1	112.2	118.1	119.9	121.1	121.4
Government Rates & Fees	2.3	100.0	158.3	161.5	186.7	196.2	192.4	144.1
Unit Labour Cost of Overall Economy		100.0	126.7	130.0	133.1	136.3	138.3	140.3

¹ The unit business cost indices prior to 1988 are based on the 1983 input structure and those from 1988 onwards are based on the 1988 input structure.

8.11

PRINCIPAL STATISTICS OF PIONEER MANUFACTURING ESTABLISHMENTS (End of Period)

	Unit	1987	1992	1993	1994	1995	1996	1997
Establishments	No	443	420	421	410	405	397	391
Workers	No	130,191	166,724	162,341	166,042	171,206	170,780	165,431
Materials	\$m	18,349	30,010	36,315	43,140	50,880	54,748	56,731
Output	\$m	28,988	47,330	56,334	65,415	76,345	82,418	86,211
Value Added	\$m	7,562	11,328	13,760	14,871	17,581	19,156	19,932
Remuneration	\$m	2,101	3,989	4,271	4,612	5,013	5,352	5,539
Paid - up Capital	\$m	4,581	7,089	8,155	9,752	9,463	10,097	9,790
Gross Fixed Assets	\$m	14,441	24,661	27,389	29,758	32,596	36,115	41,267
Direct Exports	\$m	22,498	33,531	39,461	45,871	53,087	56,293	59,228
Value Added Per Worker	\$ '000	58	68	85	90	103	112	120

Source : Economic Development Board

8.12 PRINCIPAL STATISTICS OF PIONEER MANUFACTURING ESTABLISHMENTS BY INDUSTRY, DECEMBER 1997

Industry	Establish- ments	Workers	Materials	Output	Value Added
	Number		Million Dollars		
Total	391	165,431	56,731	86,211	19,932
Food & Beverages	8	972	238	389	91
Textiles & Wearing Apparel	6	612	16	49	26
Paper Products & Printing	8	1,277	149	397	193
Petroleum, Chemicals & Chemical Products	50	8,727	11,886	17,045	3,752
Rubber & Plastic Products	19	2,797	130	309	117
Non-metallic Mineral Products	10	1,866	244	564	205
Basic Metals	8	1,309	317	493	101
Fabricated Metal Products	37	6,874	798	1,429	449
Machinery & Equipment	72	12,921	1,148	2,473	821
Electrical Machinery & Apparatus	24	7,851	719	1,493	488
Electronic Products & Components	93	104,289	39,874	58,290	12,445
Instrumentation Equipment	21	6,699	636	1,359	541
Transport Equipment	24	8,003	484	1,748	652
Miscellaneous	11	1,234	94	173	52

Industry	Remun- eration	Paid-up Capital	Gross Fixed Assets	Direct Exports	Value Added Per Worker
	Million Dollars				\$ '000
Total	5,539	9,790	41,267	59,228	120
Food & Beverages	36	132	312	231	94
Textiles & Wearing Apparel	13	35	71	36	42
Paper Products & Printing	50	31	371	357	151
Petroleum, Chemicals & Chemical Products	599	2,733	15,142	6,977	430
Rubber & Plastic Products	77	103	431	145	42
Non-metallic Mineral Products	61	207	780	226	110
Basic Metals	63	267	404	110	77
Fabricated Metal Products	230	310	854	504	65
Machinery & Equipment	475	525	2,267	1,505	64
Electrical Machinery & Apparatus	241	204	1,224	1,039	62
Electronic Products & Components	3,128	4,553	17,135	45,421	119
Instrumentation Equipment	209	121	789	1,266	81
Transport Equipment	326	498	1,295	1,286	81
Miscellaneous	30	69	192	127	42

Source : Economic Development Board

8.13 NET INVESTMENT COMMITMENTS IN MANUFACTURING BY INDUSTRY

Million Dollars

Industry	1988	1993	1994	1995	1996	1997	1998
Total	2,007.4	3,922.6	5,764.6	6,809.1	8,085.1	8,488.4	7,829.4
Food, Beverage & Tobacco	164.0	92.9	36.3	92.5	201.4	142.5	130.8
Textiles	10.6	-	-	3.3	2.2	-	10.2
Wearing Apparel except Footwear	0.9	2.4	-	-	10.1	0.4	-
Leather & Footwear	-	-	-	0.4	-	-	-
Wood & Wood Products	-	-	-	-	-	-	19.4
Paper & Paper Products	4.2	12.3	30.4	18.5	2.8	3.0	35.7
Printing & Publishing	67.9	81.7	264.4	132.5	319.7	163.2	61.0
Petroleum & Petroleum Products	-	84.6	1,180.3	1,186.4	108.3	581.3	26.5
Chemical & Chemical Products	159.6	1,123.9	1,306.7	1,583.9	2,754.8	2,239.6	2,913.7
Rubber & Plastic Products	54.3	54.3	36.8	54.8	102.9	110.2	164.2
Non-metallic Mineral Products	133.8	126.1	206.8	43.1	84.5	85.7	32.2
Basic Metals	20.7	69.2	6.6	63.8	9.5	112.0	10.1
Fabricated Metal Products	102.9	161.1	249.5	278.5	350.5	366.6	347.3
Machinery & Equipment	206.4	293.4	224.6	330.9	306.2	323.7	445.5
Electrical Machinery & Apparatus	109.0	113.7	141.5	112.6	5.3	124.4	165.6
Electronic Products & Components	812.4	1,227.4	1,494.7	2,551.3	3,477.6	3,805.8	3,047.9
Instrumentation Equipment	42.4	113.7	26.5	49.5	82.6	70.1	44.2
Transport Equipment	117.6	341.2	555.4	296.5	250.5	359.9	357.4
Furniture & Other Manufacturing	0.7	24.7	4.3	10.7	16.2	-	17.7

Source : Economic Development Board

Note : Net investment commitments refer to gross commitments less projects withdrawn or uncertain as at 31 December 1998.

The industries are classified according to Singapore Standard Industrial Classification (SSIC) 1996.

8.14 NET INVESTMENT COMMITMENTS IN MANUFACTURING BY COUNTRY OF ORIGIN

Million Dollars

Country	1988	1993	1994	1995	1996	1997	1998
Total	2,007.4	3,922.6	5,764.6	6,809.1	8,085.1	8,488.4	7,829.4
Local	349.6	745.5	1,437.2	1,956.7	2,293.3	2,524.6	2,615.9
Foreign	1,657.8	3,177.1	4,327.4	4,852.4	5,791.8	5,963.8	5,213.5
United States	586.6	1,452.2	2,451.7	2,075.8	2,336.0	2,422.6	2,293.0
Japan	691.3	779.4	913.8	1,152.5	1,962.0	2,032.0	1,822.2
Europe	358.1	881.9	907.0	1,526.3	1,389.1	1,423.7	1,040.0
European Union ¹ (EU)	345.1	806.2	893.0	1,510.8	1,320.5	1,398.4	880.8
United Kingdom	56.6	357.8	525.1	771.6	397.6	445.1	8.5
Netherlands	82.9	7.7	175.6	391.4	517.8	384.7	44.0
Germany	46.7	204.6	91.8	183.9	246.4	121.3	522.7
France	86.0	124.9	54.0	140.5	59.1	271.5	138.4
Italy	68.0	43.3	38.9	12.8	53.9	175.0	89.9
Sweden	-	5.0	-	-	-	-	24.3
Other EU Countries	4.8	62.9	7.6	10.6	45.7	0.8	53.0
Switzerland	10.1	66.3	11.4	13.2	60.1	25.2	153.8
Other European Countries	2.9	9.5	2.7	2.2	8.5	-	5.3
Others	21.7	63.5	54.9	97.8	104.8	85.5	58.4

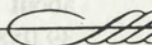
Source : Economic Development Board

¹ The European Union (EU) comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Electricity was first made available in the Republic in 1906. Today, electricity is generated by PowerGen and PowerGen, which operate 4 power stations. The total installed generating capacity is 2,521 megawatts (MW).

A network of 400 kilovolt (KV), 130KV, 66KV, 23KV, 6.6KV and 0.4KV cables is supplied from the power stations to the customers. The network now consists of 22,044 kilometers of cable circuit, 2,521 substations in order to meet future demand for electricity. PowerGen is putting in place a very large high voltage of 400KV transmission system to enhance the handling capacity of the grid system while at the same time providing

UTIL



9 UTILITIES

The Public Utilities Board (PUB) is the Water Authority and Regulator of the electricity and piped gas industries in Singapore.

As the Regulator, PUB ensures that customers in Singapore continue to enjoy safe and adequate supply of electricity and piped gas at fair prices. The seven companies which have been issued with licences to engage in the production, transmission and supply of electricity and piped gas are: PowerSenoko Ltd, PowerSeraya Ltd, PowerGrid Ltd, Power Supply Ltd, PowerGas Ltd, Tuas Power Ltd and SembCorp Cogen Pte Ltd. At the end of 1998, there were 6,193 electrical workers, 1,548 electrical contractors, 430 gas service workers, 827 water service workers and 662 cable detection workers on PUB's register.

Water

Singapore, with 648 sq km and a total population of some 3.9 million, uses an average of 1.21 million cubic metres of water per day in 1998. PUB is the authority responsible for providing an adequate and reliable supply of potable water at the most economic cost to sustain Singapore's economic growth.

Fresh potable water, drinkable straight from the tap, is supplied by PUB to all parts of the main island of Singapore and to major offshore islands. The water is moderately soft and treated to a quality well within the World Health Organisation's Guidelines for Drinking Water Quality and is fluoridated.

Singapore's water supply comes from both local sources and sources in Johor, Malaysia. PUB's total water supply system comprises 19 raw water reservoirs, 14 storage or service reservoirs and about 4,840 kilometres of pipeline.

Electricity

Electricity was first made available to the Republic in 1906. Today, electricity is generated by PowerSenoko and PowerSeraya which operate 4 power stations. The total installed generating capacity is 5,521 megawatts (MW).

A network of 400 kilovolt (kV), 230kV, 66kV, 22kV, 6.6kV and 0.4kV cables interlinked by transformers at substations forms PowerGrid's transmission and distribution system whereby electricity is supplied from the power stations to the customers. The network now consists of about 22,044 kilometres of cable circuits, 39,058 megavolt-amperes of transformer capacity and 8,221 substations. In order to meet future demand for electricity, PowerGrid is putting in place a new extra high voltage of 400kV transmission system to enhance the fault handling capability of the grid system while at the same time providing economic transmission of electricity supply.

Gas

Built at a cost of \$240 million, PowerGas's Senoko Gasworks replaced Kallang Gasworks and started operations in October 1996.

Senoko Gasworks has a total installed gas production capacity of 1.6 million cubic metres per day. It has 5 cyclic and 3 continuous gasmaking plants, 2 high pressure spherical gasholders and 2 water sealed gasholders, 3 naphtha tanks, a naphtha splitter plant and a jetty for the delivery of naphtha. With an increased production capacity of 45 per cent, Senoko Gasworks will produce enough gas to meet the needs of Singapore into the 21st century.

9.1 ELECTRICITY GENERATION AND SALES AND GAS SALES

	1988	1993	1994	1995	1996	1997	1998
Electricity							
Generation (mkh)	13,017.5	18,962.4	20,675.4	22,057.4	23,458.4	26,188.1	28,283.2
Sales (mkh)	11,734.9	17,194.1	18,901.5	20,239.6	21,906.1	24,627.8	26,072.9
Domestic	1,864.2	3,124.3	3,466.0	3,833.3	4,162.9	4,736.9	5,328.4
Manufacturing	5,471.6	7,793.0	8,528.2	8,978.4	9,659.1	10,946.5	11,117.1
Other Industries	4,399.0	6,276.8	6,907.3	7,427.9	8,084.0	8,944.5	9,627.4
Gas Sales							
Piped (million units) ¹	647.4	998.3	1,045.7	1,083.9	1,151.3	1,218.2	1,266.3
LP (Nett Tonnes)	na	na	144,395.3	142,697.5	127,064.1	125,330.9	124,697.9

Source : Singapore Department of Statistics

PowerGrid Ltd

PowerGas Ltd

mkh = million kilowatt hours

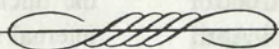
1 One unit is equivalent to one kilowatt hour

9.2 WATER TREATMENT AND SALES

	Thousand Cubic Metres						
	1988	1993	1994	1995	1996	1997	1998
Treatment	389,487.6	465,428.8	487,385.4	501,932.1	513,020.4	521,709.5	517,297.3
Sales	344,073.8	433,940.5	455,866.2	468,972.0	481,327.0	494,661.5	491,430.8
Domestic	159,657.0	205,251.1	215,840.5	217,889.1	224,979.9	231,758.8	234,563.1
Shipping	2,453.7	2,982.0	3,471.1	3,014.8	2,871.6	2,771.3	2,521.4
Commerce & Industry	99,318.7	134,375.3	145,983.9	152,625.5	163,592.4	176,851.8	175,123.1
Government & Statutory Boards	35,503.7	28,130.5	29,617.6	29,941.3	29,958.4	29,676.4	27,648.4
Johore	47,140.2	63,201.6	60,953.1	65,501.3	59,924.8	53,603.0	51,575.3

Source : Public Utilities Board

CONSTRUCTION AND REAL ESTATE



Construction and Real Estate

Building construction refers to erection of new building and addition/alteration to existing building, but excludes erection of temporary structures, illegal building works or minor works which do not require planning approval. Data on new buildings given written permission and building plan approval and submitted notice of commencement and issued TOPs are compiled from the administrative records of the Development Control Division, Urban Redevelopment Authority (URA) and Building Control Division of the Public Works Department (PWD). Data on notices of tender invitation and completion of public buildings are collected through surveys conducted by the Research Section, URA. Statistics on contracts awarded and progress payments certified are collected through surveys conducted by the Construction Economics & Resources Unit, Construction Industry Development Board (CIDB). CIDB and PWD's Building Control Division have been officially merged on 1 April 1999 to form a new statutory board – Building and Construction Authority (BCA).

Definitions

Written Permission: Refers to the approval granted by the Minister for National Development or the Competent Authority to develop any land subject to conditions in accordance with the development rules in force.

Building Plan Approval (Private Sector Only): Refers to the approval granted by the Building Authority in respect of building plans and specifications submitted in accordance with the prescribed building regulations in force.

Building Commencement: Refers to the construction of a building project which is deemed to have commenced when a permit to commence building works in respect of that building is issued by the Building Authority. In

the case of a public sector project for which such permit from the Building Authority is not required, the construction of the project is deemed to have commenced when the first tender is invited. Where the contractor is selected by pre-qualification or closed tender, the date of contract awarded will be taken as the date of building commencement.

Building Completion: Refers to a building completed when the Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC) in respect of that building is issued by the Building Authority. In the case of a public sector project, it is completed when the certificate of completion is issued by the architect or engineer in charge of the project.

Gross Floor Area: Refers to the total area of floor space within a building measured between the centre line of party walls including the thickness of external walls but excluding internal voids except ducts and refuse chutes.

Contracts Awarded: Refers to the full contract given to the main contractor by the architect, engineer or developer/owner even though part or all the works may be further sub-contracted to another contractor.

Progress Payment Certified: Refers to the value of all construction works done and certified for progress payment. Where construction works are carried out by the developer/owner himself and the architect does not certify progress payments, the expenses incurred on the construction work are taken to be the progress payments certified.

Other References

More details of construction and real estate statistics may be obtained from the "URA Real Estate Statistics Series, Potential Supply", "URA Real Estate Statistics Series, Prices & Rental Indices", and "URA Real

Estate Statistics Series, Stock and Occupancy" published by the Research Section, URA. Details on contracts awarded and progress payments certified may be obtained from the "Construction Focus" and "Construction Economics Report" published by the CIDB.

Housing

The Housing and Development Board (HDB) was established on 1 February 1960 as the public housing authority of Singapore. HDB's mission is to provide affordable public housing of a high quality. HDB also develops and maintains other facilities, namely commercial and industrial properties, markets and hawker centres and car parks. To help build communities, HDB provides recreational and communal facilities such as neighbourhood parks and children's playground in its housing estates.

The public housing building programme is carried out through five-year plans. HDB is currently into its eighth five-year building programme (1996-2000), under which about 140,000 flats are targeted to be built. In 1998, 36,609 flats were completed, bringing the total number of flats built since HDB's inception in 1960 to 861,974.

The Home Ownership for the People Scheme introduced in 1964 enable citizens to buy HDB flats. HDB sold 36,966 HDB flats in 1998. To-date 86 per cent of Singaporeans lives in HDB flats and 82 per cent of the population own their flats. HDB offers a number of measures to help low-income families own HDB flats. These are the sale of flats to sitting tenants, sale of 4-room budget flats, buying of 3-room flats for sale at subsidised prices and priority allocation of 4-

room or smaller flats to tenants of rental flats. To help the singles own flats, HDB has introduced the Singles Grant for the purchase of resale flats.

To bridge the gap between the standards of the older estates and those of the newer towns, the Estate Renewal Strategy was introduced in September 1995. HDB's programmes such as the Main Upgrading Programme (MUP), the Interim Upgrading Programme (IUP), the Selective En Bloc Redevelopment Scheme, Sale of Sites and Project to improve the Living Conditions of the Elderly are all part of the Estate Renewal Strategy.

At the end of 1998, the number of precincts selected under the MUP was 80, involving about 84,500 units of HDB flats. Under the MUP, improvements are made to the flat, the apartment block and the precincts. At the end of 1998, the upgrading works at 24 precincts had been completed. Under the IUP carried out by the Town Councils to improve the precincts, five batches comprising 121 precincts had so far been selected. The IUP works in all the 52 precincts in the first and second batches and 9 precincts in the third batch had been completed as at end 1998.

The Selective En Bloc Redevelopment Scheme was launched in August 1995. Under the scheme, selected old flats that are economically not viable for upgrading are redeveloped into more intensive and better quality housing. As at December 1998, 29 precincts have been announced for redevelopment.

Since 1993, HDB had selected six batches of 31 blocks of 1-room flats comprising 9,202 units for improvement works under the project to improve the living conditions of the elderly.

10.1 WRITTEN PERMISSION BY TYPE OF DEVELOPMENT IN THE PUBLIC SECTOR

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	73	102	118	144	135	139	122
Residential	8	37	39	57	45	49	35
Commercial	4	6	5	10	9	10	4
Industrial	6	9	11	14	10	10	10
Others	55	50	63	63	71	70	73
Gross Floor Area (Thousand Square Metres)							
Total	2,455	4,190	5,244	7,801	6,666	7,689	5,424
Residential	1,779	3,526	4,562	6,746	5,185	6,118	3,745
Commercial	27	78	17	26	70	183	15
Industrial	134	144	153	495	490	408	700
Others	515	442	513	535	921	980	965

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new buildings only.

10.2 WRITTEN PERMISSION BY TYPE OF DEVELOPMENT IN THE PRIVATE SECTOR

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	718	842	991	1,460	1,464	1,187	428
Residential	477	645	760	1,178	1,109	888	235
Commercial	47	52	73	82	106	92	48
Industrial	152	97	126	153	209	161	118
Others	42	48	32	47	40	46	27
Gross Floor Area (Thousand Square Metres)							
Total	2,434	3,972	4,318	4,949	6,455	6,733	3,555
Residential	1,581	1,875	2,359	2,699	2,980	3,093	1,142
Commercial	228	697	721	494	776	653	278
Industrial	461	936	1,145	1,484	2,537	2,640	2,042
Others	164	464	93	272	162	347	93

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new buildings only.

10.3

COMMENCEMENT OF BUILDING CONSTRUCTION BY TYPE OF DEVELOPMENT IN THE PUBLIC SECTOR

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	105	119	130	117	111	138	103
Residential	27	62	58	57	48	61	46
Commercial	9	8	6	6	7	11	6
Industrial	9	15	20	8	10	7	6
Others	60	34	46	46	46	59	45
Gross Floor Area (Thousand Square Metres)							
Total	2,242	5,046	4,849	6,931	5,081	6,406	5,550
Residential	1,692	4,492	4,210	5,552	3,808	4,907	4,299
Commercial	18	66	28	48	36	268	222
Industrial	167	181	294	580	379	558	279
Others	364	308	318	752	859	672	750

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new buildings only.

10.4

COMMENCEMENT OF BUILDING CONSTRUCTION BY TYPE OF DEVELOPMENT IN THE PRIVATE SECTOR

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	724	859	1,044	1,254	1,282	1,136	370
Residential	491	653	767	921	966	806	183
Commercial	35	48	90	98	118	106	66
Industrial	149	118	143	199	165	191	91
Others	49	40	44	36	33	33	30
Gross Floor Area (Thousand Square Metres)							
Total	1,895	3,994	4,648	4,958	5,531	6,021	1,772
Residential	1,088	2,184	2,550	2,384	2,585	2,953	620
Commercial	162	279	607	494	702	421	325
Industrial	558	1,421	1,305	1,980	2,105	2,527	714
Others	87	109	186	100	139	120	113

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new buildings only.

10.5 PUBLIC SECTOR CONSTRUCTION PROJECTS COMPLETED BY TYPE OF DEVELOPMENT

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	140	99	94	142	107	96	116
Residential	78	39	48	63	55	43	47
Commercial	7	5	8	11	6	5	7
Industrial	5	9	12	23	8	10	8
Others	50	46	26	45	38	38	54
Gross Floor Area (Thousand Square Metres)							
Total	5,038	3,397	3,428	4,698	4,541	5,624	7,103
Residential	4,400	2,541	2,655	3,867	3,762	4,562	6,136
Commercial	121	17	97	84	23	24	33
Industrial	60	259	331	260	301	392	255
Others	458	580	346	486	455	647	680

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new buildings only.

10.6 PRIVATE SECTOR CONSTRUCTION PROJECTS COMPLETED BY TYPE OF DEVELOPMENT

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	404	630	747	841	1,057	1,320	853
Residential	252	445	561	611	760	997	507
Commercial	28	50	43	51	80	100	103
Industrial	91	109	112	135	178	181	193
Others	33	26	31	44	39	42	50
Gross Floor Area (Thousand Square Metres)							
Total	1,235	3,109	2,784	3,495	4,250	5,440	5,134
Residential	430	1,409	1,344	1,226	1,542	2,686	2,230
Commercial	230	878	479	794	592	658	657
Industrial	525	691	786	1,314	1,737	1,954	2,073
Others	50	131	175	161	380	142	174

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new buildings only.

10.7 BUILDING PLAN APPROVALS BY TYPE OF DEVELOPMENT IN THE PRIVATE SECTOR

Type of Development	1988	1993	1994	1995	1996	1997	1998
Number							
Total	667	716	970	1,240	1,388	1,434	632
Residential	458	533	755	972	1,031	1,078	309
Commercial	36	52	60	93	110	122	98
Industrial	129	99	114	136	213	189	171
Others	44	32	41	39	34	45	54
Gross Floor Area (Thousand Square Metres)							
Total	1,765	3,157	4,101	4,106	5,979	6,607	4,590
Residential	951	1,762	2,392	2,255	2,615	3,112	1,304
Commercial	138	491	367	559	738	604	576
Industrial	559	808	1,196	1,167	2,421	2,551	2,397
Others	118	96	146	125	206	341	313

Source : Urban Redevelopment Authority (with effect from September 1989)
Note : Figures refer to erections of new buildings only.

10.8

RESIDENTIAL UNITS IN THE PUBLIC SECTOR BY TYPE OF BUILDING AND STAGE OF DEVELOPMENT

Type of Building								Number
	1988	1993	1994	1995	1996	1997	1998	
Planning Approval Stage								
Total	10,623	19,207	30,002	44,728	34,342	42,963	27,552	
Terrace	-	-	-	-	3	-	-	
Flats	10,623	19,207	30,002	44,728	33,145	40,477	24,454	
Condominium	-	-	-	-	1,194	2,486	3,098	
Building Commencement Stage								
Total	10,631	25,626	27,603	31,745	24,862	33,471	30,518	
Flats	10,631	25,626	27,603	31,745	23,668	29,744	28,661	
Condominium	-	-	-	-	1,194	3,727	1,857	
Building Completion Stage								
Total	29,149	12,978	17,932	24,564	24,550	25,088	40,270	
Flats	28,319	12,978	17,932	24,564	24,550	25,088	40,270	
Others	830	-	-	-	-	-	-	

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new residential units only.

10.9

RESIDENTIAL UNITS IN THE PRIVATE SECTOR BY TYPE OF BUILDING AND STAGE OF DEVELOPMENT

Type of Building								Number
	1988	1993	1994	1995	1996	1997	1998	
Planning Approval Stage								
Total	6,676	10,073	13,983	15,363	17,292	17,704	7,285	
Detached	234	279	384	665	502	396	150	
Semi-detached	396	505	938	1,191	1,304	648	103	
Terrace	2,119	533	1,724	1,728	1,781	2,874	566	
Flats	) 3,926	2,797	2,579	4,833	3,987	3,651	1,067	
Condominium	)	5,959	8,358	6,946	9,718	10,135	5,399	
Others	1	-	-	-	-	-	-	
Building Plan Approval Stage								
Total	3,988	9,266	13,316	12,823	15,188	17,871	7,798	
Detached	173	211	351	566	493	475	187	
Semi-detached	382	433	683	1,098	913	1,030	195	
Terrace	1,802	328	1,485	1,354	1,218	2,413	680	
Flats	) 1,629	2,459	1,646	3,971	4,500	3,801	1,736	
Condominium	)	5,835	9,151	5,834	8,064	10,152	5,000	
Others	2	-	-	-	-	-	-	
Building Commencement Stage								
Total	4,720	10,640	14,287	13,890	15,461	17,633	3,653	
Detached	217	290	426	509	424	315	122	
Semi-detached	350	532	1,066	872	980	812	103	
Terrace	1,654	1,018	1,624	1,602	1,504	2,130	381	
Flats	) 2,498	2,011	2,574	5,037	3,275	2,341	910	
Condominium	)	6,789	8,597	5,870	9,278	12,035	2,137	
Others	1	-	-	-	-	-	-	
Building Completion Stage								
Total	1,705	5,920	7,027	6,725	8,111	14,582	14,038	
Detached	85	157	216	257	351	470	417	
Semi-detached	345	528	394	605	705	1,169	388	
Terrace	625	1,278	699	683	1,305	1,278	1,102	
Flats	) 650	1,479	1,017	1,261	2,182	2,614	5,183	
Condominium	)	2,478	4,701	3,919	3,568	9,051	6,948	
Others	-	-	-	-	-	-	-	

Source : Urban Redevelopment Authority (with effect from September 1989)

Note : Figures refer to erections of new residential units only.

10.10 CONTRACTS AWARDED BY SECTOR AND TYPE OF WORK

							Million Dollars	
Type of Work	1988	1993	1994	1995	1996	1997	1998	
All Sectors								
Total	3,391	10,587	12,227	17,287	20,136	23,535	14,987	
Building Work	2,710	8,689	11,235	14,135	16,103	19,055	11,408	
Residential	1,586	4,639	6,125	7,974	7,467	11,331	5,236	
Commercial	256	1,264	1,637	1,460	2,293	2,219	2,457	
Industrial	411	1,434	1,945	2,700	3,999	3,158	1,629	
Others	458	1,352	1,528	2,001	2,343	2,348	2,087	
Civil Engineering Work	681	1,898	992	3,152	4,033	4,481	3,580	
Private Sector								
Total	1,587	4,376	6,649	8,251	9,607	11,886	4,446	
Building Work	1,450	4,312	6,510	7,893	9,338	11,763	4,288	
Residential	813	1,812	3,127	3,934	3,692	6,871	1,952	
Commercial	223	999	1,468	1,356	2,007	1,430	980	
Industrial	339	1,205	1,604	2,277	3,243	2,835	1,045	
Others	76	296	311	326	396	626	310	
Civil Engineering Work	137	64	139	359	269	124	158	
Public Sector								
Total	1,804	6,211	5,578	9,036	10,529	11,649	10,542	
Building Work	1,260	4,377	4,725	6,243	6,764	7,292	7,121	
Residential	773	2,827	2,998	4,040	3,775	4,459	3,284	
Commercial	33	265	169	104	286	788	1,477	
Industrial	72	229	341	423	755	322	584	
Others	382	1,056	1,217	1,676	1,948	1,722	1,777	
Civil Engineering Work	544	1,834	853	2,794	3,765	4,357	3,421	

Source : Construction Industry Development Board (with effect from October 1993)

10.11

PROGRESS PAYMENTS CERTIFIED BY SECTOR AND TYPE OF WORK

Million Dollars

Type of Work	1988	1993	1994	1995	1996	1997	1998
All Sectors							
Total	3,942	9,555	11,343	12,146	15,647	19,053	19,098
Building Work	2,685	8,230	9,470	10,344	13,467	16,100	15,886
Residential	1,410	4,147	4,531	4,932	6,999	8,711	8,715
Commercial	216	1,814	1,978	1,954	1,761	1,867	1,880
Industrial	534	1,202	1,317	2,080	3,174	3,243	2,789
Others	526	1,067	1,644	1,378	1,533	2,280	2,502
Civil Engineering Work	1,257	1,325	1,873	1,802	2,181	2,952	3,212
Private Sector							
Total	1,291	4,525	5,463	6,327	8,426	9,539	9,091
Building Work	1,237	4,443	5,314	6,171	8,094	9,162	8,633
Residential	514	1,475	1,852	2,446	3,589	4,419	4,153
Commercial	166	1,673	1,839	1,737	1,570	1,555	1,618
Industrial	489	1,019	1,118	1,755	2,555	2,783	2,402
Others	69	276	505	232	380	405	460
Civil Engineering Work	54	82	149	157	332	377	458
Public Sector							
Total	2,651	5,030	5,880	5,819	7,222	9,514	10,008
Building Work	1,448	3,787	4,156	4,174	5,373	6,938	7,254
Residential	896	2,672	2,679	2,486	3,410	4,292	4,562
Commercial	50	141	139	216	191	312	263
Industrial	45	183	199	325	619	460	387
Others	457	791	1,139	1,147	1,153	1,875	2,043
Civil Engineering Work	1,203	1,243	1,724	1,646	1,849	2,576	2,754

Source : Construction Industry Development Board (with effect from October 1993)

10.12 PROPERTIES UNDER THE MANAGEMENT OF HOUSING AND DEVELOPMENT BOARD (End of Period)

	Number						
	1988	1993	1994	1995	1996	1997	1998
Residential	630,645	655,487	676,558	700,060	725,144	755,313	790,898
1-room	53,356	27,446	26,769	25,930	25,540	25,182	25,161
2-room	46,590	36,682	36,127	35,165	34,939	34,610	34,592
3-room	254,449	244,824	242,128	241,085	240,164	239,562	238,860
4-room	185,709	215,467	224,417	236,798	252,809	267,517	282,601
5-room	66,864	90,431	100,899	111,664	121,486	134,051	150,556
Executive ¹	18,070	35,173	40,754	44,100	46,134	50,320	55,711
HUDC ²	5,607	5,464	5,464	5,318	4,072	4,071	3,417
Commercial/Industrial Units	26,637	30,697	30,914	30,527	30,037	30,351	30,410

Source : Housing & Development Board

1 From 1987, figures include multi-generation flats.

2 From 1989, figures include other residential properties.

10.13 RESIDENTIAL UNITS CONSTRUCTED AND SOLD BY HOUSING AND DEVELOPMENT BOARD

	1988	1993	1994	1995	1996	1997	1998
Flats Constructed ¹ (No)	27,071	17,888	25,987	26,185	27,484	31,312	36,609
Flats Sold Under 'Home Ownership Scheme' ² (No)	40,688	19,030	23,770	27,776	26,532	28,220	36,966
Percentage of Population Living in Public Flats ³ (End of Period)	87	87	86	86	86	86	86

Source : Housing & Development Board

1 Figure for 1992 excludes 96 units due to reclassification.

2 Flats are considered 'sold' only when keys are issued to the applicants. From 1989, figures include HUDC units.

3 From 1990 onwards, data refer to resident population.

Town ¹							Number
	Total	1-room	2-room	3-room	4-room	5-room	Executive ²
Total	787,481	25,161	34,592	238,860	282,601	150,556	55,711
Ang Mo Kio	47,926	1,626	3,791	25,991	11,879	4,217	422
Bedok	56,998	2,247	2,053	22,895	17,973	9,136	2,694
Bishan	19,035	396	-	2,391	9,199	5,389	1,660
Bukit Batok	31,037	92	164	11,212	12,786	4,052	2,731
Bukit Merah	47,439	6,538	6,185	19,996	9,029	5,655	36
Bukit Panjang	21,969	-	-	2,620	11,138	5,961	2,250
Bukit Timah	2,425	-	-	445	920	680	380
Central Area	13,285	2,469	2,603	5,625	2,465	116	7
Choa Chu Kang	34,950	-	240	1,316	17,652	11,074	4,668
Clementi	23,913	484	656	13,017	7,000	2,158	598
Geylang	31,288	1,044	4,537	12,748	8,749	3,382	828
Hougang	45,972	538	315	9,635	22,075	9,105	4,304
Jurong East	22,629	-	-	7,911	7,015	5,837	1,866
Jurong West	54,649	1,048	502	13,518	22,435	12,190	4,956
Kallang/Whampoa	34,347	5,115	3,615	14,282	7,082	3,803	450
Lim Chu Kang	93	-	-	64	29	-	-
Marine Parade	7,868	-	1,350	3,053	1,798	1,667	-
Pasir Ris	27,418	-	21	168	10,716	9,053	7,460
Queenstown	29,346	619	3,849	17,839	4,201	2,480	358
Sembawang	5,585	-	-	435	2,512	1,930	708
Sengkang	12,964	160	-	243	4,660	6,082	1,819
Serangoon	21,247	-	154	4,759	10,231	3,738	2,365
Tampines	61,288	154	126	12,286	27,057	15,826	5,839
Toa Payoh	36,014	1,747	4,095	17,764	7,062	4,497	849
Woodlands	52,070	868	320	5,547	23,877	15,724	5,734
Yishun	45,726	16	16	13,100	23,061	6,804	2,729

Source : Housing & Development Board

Note : Data exclude HUDC and landed properties.

1 Equivalent to Town Registration Boundary.

2 Include multi-generation flats and penthouses.

Type of Property	1988	1993	1994	1995	1996	1997	1998
Private Residential Units ¹ (No)	51,310	71,299	78,012	129,106	149,114	161,273	173,573
Landed	14,977	23,371	24,583	59,796	61,594	63,231	64,258
Non-Landed	36,333	47,928	53,429	69,310	87,520	98,042	109,315
Office Space ^{2,3} ('000 sq m)	3,302	4,384	4,579	4,857	5,107	5,481	5,733
Private Sector	2,138	3,316	3,494	3,798	4,016	4,446	4,700
Public Sector	1,164	1,068	1,085	1,059	1,091	1,035	1,033
Shop Space ^{2,3} ('000 sq m)	1,520	2,844	2,887	2,944	3,013	3,030	3,103
Private Sector	820	1,743	1,750	1,789	1,836	1,862	1,921
Public Sector	700	1,101	1,137	1,155	1,177	1,168	1,182
Factory Space ³ ('000 sq m)	12,189	15,929	16,647	18,002	19,482	21,113	22,575
Private Sector	7,897	11,061	11,642	12,819	14,059	15,597	16,868
Public Sector	4,292	4,868	5,005	5,183	5,423	5,516	5,707
Warehouse Space ³ ('000 sq m)	2,266	3,128	3,404	3,641	4,090	4,528	4,932
Private Sector	1,714	2,538	2,693	2,984	3,434	4,318	4,721
Public Sector	552	590	711	657	656	210	211

Source : Urban Redevelopment Authority

1 From 1995, coverage has been expanded to include another 44,891 private housing units built before 1974.

Prior to this, only housing units completed after 1973 were surveyed.

From 1996, coverage has been expanded to include 12,489 units comprising HUDC units which have not been privatised, apartments above shops and privatised apartments previously under the Government Housing Schemes for employees.

2 From 1993, coverage of office space and shop space has been expanded to include 372,000 sq m nett and 980,000 sq m nett respectively for unrefurbished pre-war shophouses and units in HDB towns and housing estates.

3 Refer to nett floor area.

10.16

OCCUPANCY RATE OF PRIVATE PROPERTIES (End of Period)

Type of Property	Per Cent						
	1988	1993	1994	1995	1996	1997	1998
Private Residential Units ¹	93.9	92.9	93.0	94.3	93.8	91.0	91.0
Landed	na	94.6	94.6	95.1	93.8	94.0	94.6
Non-Landed	na	92.1	92.2	93.6	93.8	89.1	88.9
Office Space ^{2,3}	85.8	90.1	92.4	91.0	91.5	88.8	85.4
Private Sector	88.2	89.4	92.0	90.2	90.8	87.9	84.0
Public Sector	81.4	92.6	93.5	93.8	94.0	92.7	91.5
Shop Space ^{2,3}	88.5	92.7	92.7	93.0	92.4	92.9	91.0
Private Sector	89.1	89.6	89.7	90.4	89.3	90.3	89.6
Public Sector	87.7	97.5	97.3	97.1	97.3	97.2	93.3
Factory Space ³	90.8	96.9	97.3	97.4	96.1	93.2	89.8
Private Sector	92.6	97.0	96.8	97.2	96.5	93.1	90.0
Public Sector	87.5	96.7	98.4	97.9	95.2	93.3	89.0
Warehouse Space ³	95.4	94.5	94.6	95.5	93.0	91.1	86.8
Private Sector	95.2	94.2	94.3	95.2	92.9	91.2	87.0
Public Sector	96.0	95.4	95.6	97.1	93.4	89.0	81.0

Source : Urban Redevelopment Authority

Note : See notes to Table 10.15.

Type of Property	1993	1994	1995	1996	1997	1998
Private Residential Units (No)	69,020	79,137	88,080	103,034	86,670	62,942
Landed	15,005	17,562	18,348	17,460	10,556	8,216
Non-Landed	54,015	61,575	69,732	85,574	76,114	54,726
Office Space ¹ ('000 sq m)	2,199	2,554	2,708	2,823	2,656	1,803
Private Sector	1,617	1,890	2,009	1,922	1,807	1,149
Public Sector	582	664	699	901	849	655
Shop Space ¹ ('000 sq m)	1,454	1,243	1,013	1,087	745	439
Private Sector	1,261	1,071	888	914	658	353
Public Sector	193	172	125	173	87	86
Factory Space ¹ ('000 sq m)	4,653	4,989	7,101	8,375	10,159	6,490
Private Sector	3,908	4,159	5,980	7,227	8,460	4,767
Public Sector	745	830	1,121	1,148	1,699	1,724
Warehouse Space ¹ ('000 sq m)	874	1,258	1,546	1,457	1,202	740
Private Sector	776	1,001	1,332	1,229	1,057	583
Public Sector	98	257	214	228	145	157

Source : Urban Redevelopment Authority

Note : The potential supply of properties covers all developments under construction as well as those which have yet to commence construction.

1 Refer to gross floor area.

10.18

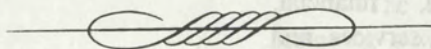
DEMAND, SUPPLY AND OCCUPANCY OF JURONG TOWN CORPORATION STANDARD/FLATTED FACTORIES AND INDUSTRIAL LANDS

Factory Space/Industrial Land	1988	1993	1994	1995	1996	1997	1998
Flatted Factory Space ('000 sq m)							
Gross Allocation	141	158	159	159	159	227	105
Termination	93	114	99	112	153	176	171
Net Allocation	49	44	60	48	6	51	-66
Demand	910	929	987	1,034	1,036	1,112	1,046
Supply	961	1,014	1,057	1,069	1,133	1,297	1,337
Occupancy Rate (%)	95	92	93	97	91	86	78
Standard Factory Space ('000 sq m)							
Gross Allocation	115	138	173	159	156	133	38
Termination	16	28	37	17	39	46	56
Net Allocation	100	110	137	140	115	76	-25
Demand	1,305	1,772	1,913	2,062	2,185	2,265	2,250
Supply	1,454	1,846	1,925	2,128	2,332	2,384	2,522
Occupancy Rate (%)	90	96	99	97	94	95	89
Industrial Land ¹ (hectares)							
Gross Allocation	103	101	227	160	161	171	200
Land under preparation	-	8	-	-	-	-	-
Prepared Land	-	93	-	-	-	-	-
Termination	19	9	21	33	30	39	81
Net Allocation	84	93	206	126	131	123	88
Prepared Land							
Demand	2,834	3,329	3,530	3,647	3,797	3,929	4,034
Supply	3,578	3,781	4,017	4,022	4,059	4,245	4,682

Source : Jurong Town Corporation

¹ Exclude industrial land used for JTC Standard/Flatted Factory developments.

COMMERCE AND SERVICES



The first statistical survey conducted in the Republic of China was the 1942 Survey of Commerce and Services for the Republic of China, which was conducted by the Statistical Bureau of the Republic of China. This survey was the first of a series of surveys conducted by the Statistical Bureau of the Republic of China, which have been conducted at regular intervals since 1942. The 1942 Survey of Commerce and Services for the Republic of China was a comprehensive survey of the commerce and services sector of the Republic of China. It covered a wide range of activities, including retail trade, wholesale trade, transportation, communication, and other services. The survey was conducted in a systematic and thorough manner, and the results were published in a detailed report. The 1942 Survey of Commerce and Services for the Republic of China was a landmark survey, as it was the first of its kind in the Republic of China. It provided a comprehensive overview of the commerce and services sector of the Republic of China at that time, and its results have been used as a basis for many subsequent surveys and studies.

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11 COMMERCE AND SERVICES

The first statistical inquiry on the Services Sector was conducted by the Singapore Department of Statistics for the reference year 1967 and that on the Commerce Sector for the reference year 1968. The next inquiries on these two sectors were for reference years 1972 and 1973 respectively. Since then, they were conducted biennially until 1985 and subsequently on an annual basis.

Scope and Coverage

The Survey of Services covers all establishments, including, statutory boards, non-profit organizations engaged in transport, storage and communications, financial, insurance, real estate, business services and community, social and personal services, as classified under Sections I, J, K, L, M, N and O of the "Singapore Standard Industrial Classification (SSIC) 1996". Government ministries and departments, foreign missions, political parties, taxi and trishaw operators, independent artistes and domestic servants are outside the scope of the survey. From the reference year 1986, establishments engaged in financial activities such as banking, financial, stock-broking and insurance services are surveyed by the Monetary Authority of Singapore.

The Survey of Commerce covers all establishments (except hawkers and stall-holders) engaged in wholesale and retail trades, restaurants and hotels as classified under Sections G and H of the SSIC 1996.

Prior to 1976, both surveys were conducted on a census basis. From 1976 to 1982, sample surveys were carried out while for reference years 1983 and 1984, censuses of commerce and services were respectively undertaken. For reference years 1985 to 1992 and 1995 to 1997, annual sample surveys were conducted. Censuses of commerce and services were again conducted for reference years 1993 and 1994 respectively.

For sample surveys, stratified sampling by industry was adopted. Within each industry, establishments with large operating receipts were selected with certainty and the rest were sampled.

The statistical unit used in both surveys is the establishment. A separate return is normally required from each branch of a multi-activity firm, organization or enterprise. However, a consolidated return is allowed if the accounts are so kept that it is not possible to obtain separate data for each individual branch.

Definitions

Establishment: Refers to a business or organization unit engaged in one activity and generally operating in a single location.

Employment: Refers to the total number of persons engaged including part-time employees, working proprietors and partners, working directors and unpaid family workers as at 30 June of the reference year. It includes those temporarily away on leave.

Remuneration: Refers to the amount paid to employees in the form of wages and salaries, bonuses and allowances, CPF/ pension fund contributions and that given to unpaid family workers and directors as allowances, fees and benefits in kind.

Turnover/Operating Receipts: Refers to the total receipts and receivables from sales of goods and services including commissions and brokerage fees, insurance premiums and rental income. For financial institutions, operating receipts include interest, dividend income and gains from transactions in stocks and shares and foreign exchange.

11 COMMERCE AND SERVICES (cont'd)

Operating Expenditure: Refers to the aggregate of all current expenditure after adjustment for changes in stocks and work-in-progress. For insurance companies, claims, surrenders, cash bonus and annuities paid and increases in insurance funds or liability reserves are also included in operating expenditure.

Operating Surplus: Refers to the amount of operating receipts less operating expenditure plus depreciation of fixed assets. For local offices of foreign airlines and foreign shipping lines, representative offices of foreign banks and companies and non-profit organizations, operating surplus refers only to depreciation of fixed assets.

Value Added: Comprises the value of operating surplus, remuneration and indirect taxes. However, for financial and insurance services, value added is computed on a different basis. For the Monetary Authority of Singapore, Board of Commissioners of Currency and investment holding companies, value added is the sum of remuneration, depreciation allowances and indirect taxes. For other financial institutions, value added refers to the sum of operating surplus, remuneration and indirect taxes less dividends received and net gains from stocks and share transactions, commodity and financial futures and gold trading. For insurance companies, value added refers to the sum of operating surplus, remuneration, imputed amount of commissions paid and indirect taxes less dividends received and net gains from foreign exchange, stocks and share transactions as well as gold trading.

Sales Indices of Retail and Catering Trade

The sales indices of retail and catering trade are compiled from the results of the Retail and Catering Trade Sales Survey initiated in 1985. The survey covers a sample of retail and catering establishments. Retail

establishments are defined as those selling merchandise directly to the consumers. Catering establishments are defined as those selling prepared food and drinks for in-premises consumption or on a take-away basis such as restaurants, fast food outlets, coffee houses, cafes, coffee shops, creameries, snack bars, canteens and food caterers. Hawkers and stall-holders (including those in the food courts) selling cooked food and prepared drinks are not considered as catering establishments

For the compilation of indices, survey data are supplemented by administrative records.

The overall indices are compiled by assigning a weight to each activity based on their turnover in the base year. Two series of the indices are compiled and presented, one in current prices and the other in constant prices. The base year of the index is 1991.

Wholesale Trade Index

The Wholesale Trade Index (WTI) measures the sales transactions of wholesale establishments in the economy. Data for the compilation of the WTI are sourced from some 750 wholesale establishments covered in the quarterly survey of wholesale trade and business expectations surveys. The base year for the WTI is 1994.

Two series of the WTI are compiled - the Domestic WTI and Foreign WTI. The Domestic WTI records sales transactions made locally. It captures the sale of wholesale goods from wholesalers to other wholesalers, manufacturers and retailers whose business operations are in Singapore. The Foreign WTI pertains to wholesale trade outside Singapore. It comprises wholesale exports of goods manufactured in Singapore, re-exports, offshore merchandise and transshipment cargo.

Other References

Further information on the concepts and methodology and detailed statistics prior to the reference year 1990 may be obtained from the "Report on the Survey of Services", and the "Report on the Survey of Wholesale Trade, Retail Trade, Restaurants and Hotels". From

the reference year 1990 onwards, they can be obtained from the various industry-specific reports under the Economic Survey Series, viz "Transport & Communications", "Real Estate & Business Services", "Community, Social & Personal Services", "Wholesale & Retail", "Hotels & Catering" and "The Services Sector".

11.1

PRINCIPAL STATISTICS OF THE COMMERCE SECTOR BY INDUSTRY

Year	Establish- ments	Employ- ment	Remunera- tion	Turnover	Operating Expenditure	Operating Surplus	Value Added
	Number		Million Dollars				
Total							
1987	38,121	227,229	2,956	92,870	90,706	2,692	5,915
1992	46,750	307,703	6,811	243,851	239,513	5,452	13,603
1993	50,999	330,911	7,835	272,823	267,105	7,013	17,125
1994	47,393	329,957	8,805	296,257	289,866	7,798	20,451
1995	47,792	341,805	9,803	341,305	334,416	8,447	21,985
1996	51,865	354,191	10,886	373,376	366,427	8,749	22,997
1997	54,968	350,374	10,714	382,514	375,883	8,440	21,955
Wholesale Trade							
1987	18,582	105,023	1,901	79,013	77,455	1,857	3,824
1992	25,299	157,879	4,721	219,820	216,813	3,725	8,578
1993	27,900	170,427	5,410	243,806	239,500	5,138	10,684
1994	26,178	173,703	6,147	264,899	260,036	5,785	12,733
1995	26,203	179,673	6,919	311,263	305,889	6,423	14,357
1996	28,832	188,659	7,761	342,733	337,320	6,674	15,456
1997	31,511	179,135	7,458	351,275	346,056	6,499	14,683
Retail Trade							
1987	16,535	66,452	496	11,430	10,950	558	1,204
1992	18,150	77,896	1,004	19,427	18,692	881	2,960
1993	19,731	86,316	1,216	24,119	23,210	1,084	4,296
1994	18,005	85,032	1,378	26,235	25,324	1,115	5,370
1995	18,415	86,318	1,456	24,623	23,737	1,095	5,094
1996	19,566	87,330	1,553	24,888	23,974	1,136	4,864
1997	19,867	86,222	1,578	25,088	24,317	996	4,478
Hotels and Catering							
1987	3,004	55,754	559	2,427	2,302	278	887
1992	3,301	71,928	1,086	4,604	4,008	846	2,066
1993	3,368	74,168	1,209	4,898	4,395	791	2,145
1994	3,210	71,222	1,280	5,123	4,506	898	2,348
1995	3,174	75,814	1,428	5,419	4,790	929	2,534
1996	3,467	78,202	1,572	5,755	5,133	939	2,677
1997	3,590	85,017	1,678	6,151	5,510	945	2,794

11.2

SELECTED AVERAGES AND RATIOS IN THE COMMERCE SECTOR

Year	Turnover	Operating Surplus	Value Added	Value Added Per Person Engaged	Operating Surplus to Turnover	Remuneration to Operating Expenditure	Remuneration to Value Added
	Per Establishment						
	Thousand Dollars						
Total							
1987	2,436	71	155	26	2.9	3.3	50.0
1992	5,216	117	291	44	2.2	2.8	50.1
1993	5,350	138	336	52	2.6	2.9	45.8
1994	6,251	165	432	62	2.6	3.0	43.1
1995	7,141	177	460	64	2.5	2.9	44.6
1996	7,199	169	443	65	2.3	3.0	47.3
1997	6,959	154	399	63	2.2	2.9	48.8
Wholesale Trade							
1987	4,252	100	206	36	2.4	2.5	49.7
1992	8,689	147	339	54	1.7	2.2	55.0
1993	8,739	184	383	63	2.1	2.3	50.6
1994	10,119	221	486	73	2.2	2.4	48.3
1995	11,879	245	548	80	2.1	2.3	48.2
1996	11,887	231	536	82	1.9	2.3	50.2
1997	11,148	206	466	82	1.9	2.2	50.8
Retail Trade							
1987	691	34	73	18	4.9	4.5	41.2
1992	1,070	49	163	38	4.5	5.4	33.9
1993	1,222	55	218	50	4.5	5.2	28.3
1994	1,457	62	298	63	4.2	5.4	25.7
1995	1,337	59	277	59	4.4	6.1	28.6
1996	1,272	58	249	56	4.6	6.5	31.9
1997	1,263	50	225	52	4.0	6.5	35.2
Hotels and Catering							
1987	808	92	295	16	11.4	24.3	63.0
1992	1,395	256	626	29	18.4	27.1	52.6
1993	1,454	235	637	29	16.1	27.5	56.4
1994	1,596	280	732	33	17.5	28.4	54.5
1995	1,707	293	798	33	17.1	29.8	56.3
1996	1,660	271	772	34	16.3	30.6	58.7
1997	1,713	263	778	33	15.4	30.5	60.1

11.3

PRINCIPAL STATISTICS OF THE SERVICES SECTOR BY INDUSTRY

Year	Establish- ments	Employ- ment	Remunera- tion	Operating Receipts ¹	Operating Expenditure ¹	Operating Surplus ¹	Value Added
	Number		Million Dollars				
Transport, Storage and Communications Services							
1987	5,757	89,263	1,866	13,612	10,908	3,488	5,561
1992	6,654	102,064	3,090	21,540	17,246	5,773	9,232
1993	7,167	109,885	3,514	24,510	19,499	6,690	10,582
1994	8,149	118,175	4,060	28,097	22,115	7,806	12,369
1995	7,983	123,272	4,555	30,677	23,990	8,593	13,682
1996	8,058	123,991	4,764	32,421	25,706	8,743	14,042
1997	8,724	130,671	5,308	34,016	26,902	9,124	15,000
Financial and Insurance Services ²							
1987	2,341	9,972	246	7,230	3,127	4,151	792
1992	3,371	12,198	506	11,336	6,387	5,064	1,036
1993	3,766	13,761	603	15,438	6,221	9,352	1,277
1994	4,881	16,453	828	15,932	10,109	5,992	1,883
1995	4,797	17,403	937	17,817	10,944	7,057	2,038
1996	5,156	17,984	1,128	24,308	11,094	13,428	2,476
1997	5,499	18,705	1,230	22,826	9,986	13,067	2,837
Real Estate and Business Services							
1987	8,763	68,946	1,244	8,944	7,167	2,224	3,738
1992	12,253	96,375	3,005	19,753	15,578	4,841	8,436
1993	13,492	102,786	3,396	24,216	19,462	5,532	9,539
1994	17,873	126,845	4,632	35,091	29,160	6,892	12,411
1995	18,137	133,993	5,345	35,789	29,915	6,881	13,304
1996	20,214	139,592	5,936	39,506	33,430	7,445	14,452
1997	21,853	152,257	6,441	41,514	34,748	8,208	15,674

(continued on next page)

1 With effect from 1995, 'rental for land' has been reclassified from an operating to a non-operating item, according to the Singapore System of National Accounts classification.

2 With effect from 1986, data exclude establishments within the purview of the Monetary Authority of Singapore (MAS).

11.3 PRINCIPAL STATISTICS OF THE SERVICES SECTOR BY INDUSTRY (continued)

Year	Establish- ments	Employ- ment	Remunera- tion	Operating Receipts ¹	Operating Expenditure ¹	Operating Surplus ¹	Value Added
	Number		Million Dollars				
	Community, Social and Personal Services ³						
1987	8,635	49,630	518	2,359	2,027	422	1,222
1992	10,121	69,620	1,408	5,422	4,719	968	3,059
1993	10,500	73,364	1,589	6,175	5,293	1,187	3,557
1994	11,786	84,298	1,952	7,457	6,487	1,355	4,229
1995	11,706	86,667	2,111	7,988	7,006	1,390	4,560
1996	10,634	84,548	2,316	8,395	7,435	1,369	4,876
1997	11,402	92,265	2,594	9,438	8,390	1,480	5,366
Non-profit Organisations ⁴							
1987	4,365	37,726	786	470	1,578	158	969
1992	4,979	44,313	1,380	1,280	3,289	208	1,661
1993	5,449	46,585	1,617	1,586	3,782	257	1,930
1994	5,452	50,922	1,981	1,982	4,444	307	2,396
1995	5,664	52,565	2,169	2,117	5,175	496	2,686
1996	6,070	59,330	2,479	2,639	6,146	635	3,254
1997	6,067	61,232	2,521	2,938	6,758	637	3,332

3 The formulas for computing operating receipts, operating surplus and value added have been revised in 1993. For comparability, data from 1986 onwards were correspondingly revised.

4 With effect from 1986, data exclude mutual benefit organisations, citizens' consultative committees & residents' committees.

11.4

SELECTED AVERAGES AND RATIOS IN THE SERVICES SECTOR

(Excluding Non-Profit Organisations)

Year	Operating Receipts ¹	Operating Surplus ¹	Value Added	Value Added Per Person Engaged	Operating Surplus to Operating Receipts ¹	Remuneration to Operating Expenditure ¹	Remuneration to Value Added
	Per Establishment						
	Thousand Dollars				Per Cent		
Total							
1987	1,261	403	444	52	32.0	16.7	34.2
1992	1,792	514	672	78	28.7	18.2	36.8
1993	2,014	652	715	83	32.4	18.0	36.5
1994	2,028	516	724	89	25.5	16.9	37.1
1995	2,165	561	788	93	25.9	18.0	38.6
1996	2,375	703	814	98	29.6	18.2	39.5
1997	2,270	671	819	99	29.6	19.5	40.1
Transport, Storage and Communications Services							
1987	2,364	606	966	62	25.6	17.1	33.6
1992	3,237	868	1,387	90	26.8	17.9	33.5
1993	3,420	933	1,476	96	27.3	18.0	33.2
1994	3,448	958	1,518	105	27.8	18.4	32.8
1995	3,843	1,076	1,714	111	28.0	19.0	33.3
1996	4,024	1,085	1,743	113	27.0	18.5	33.9
1997	3,899	1,046	1,719	115	26.8	19.7	35.4
Financial and Insurance Services ²							
1987	3,088	1,773	338	79	57.4	7.9	31.0
1992	3,363	1,502	307	85	44.8	7.9	48.8
1993	4,099	2,483	339	93	60.6	9.7	47.2
1994	3,264	1,228	386	114	37.6	8.2	44.0
1995	3,714	1,471	425	117	39.6	8.6	46.0
1996	4,714	2,604	480	138	55.2	10.2	45.5
1997	4,151	2,376	516	152	57.2	12.3	43.4

(continued on next page)

1 With effect from 1995, 'rental for land' has been reclassified from an operating to a non-operating item, according to the Singapore System of National Accounts classification.

2 With effect from 1986, data exclude establishments within the purview of the Monetary Authority of Singapore (MAS).

11.4 SELECTED AVERAGES AND RATIOS IN THE SERVICES SECTOR *(continued)*

(Excluding Non-Profit Organisations)

Year	Operating Receipts ¹	Operating Surplus ¹	Value Added	Value Added Per Person Engaged	Operating Surplus to Operating Receipts ¹	Remuneration to Operating Expenditure ¹	Remuneration to Value Added
	Per Establishment						
	Thousand Dollars				Per Cent		
Real Estate and Business Services							
1987	1,021	254	427	54	24.9	17.4	33.3
1992	1,612	395	689	88	24.5	19.3	35.6
1993	1,795	410	707	93	22.8	17.5	35.6
1994	1,963	386	694	98	19.6	15.9	37.3
1995	1,973	379	734	99	19.2	17.9	40.2
1996	1,954	368	715	104	18.8	17.8	41.1
1997	1,900	376	717	103	19.8	18.5	41.1
Community, Social and Personal Services ³							
1987	273	49	142	25	17.9	25.5	42.4
1992	536	96	302	44	17.9	29.8	46.0
1993	588	113	339	48	19.2	30.0	44.7
1994	633	115	359	50	18.2	30.1	46.2
1995	682	119	390	53	17.4	30.1	46.3
1996	789	129	459	58	16.3	31.2	47.5
1997	828	130	471	58	15.7	30.9	48.4

3 The formulas for computing operating receipts, operating surplus and value added have been revised in 1993. For comparability, data from 1986 onwards were correspondingly revised.

11.5

RETAIL SALES INDEX

(1991=100)

	Weights ¹	1988	1993	1994	1995	1996	1997	1998
At Current Prices								
Total	10,000	86.4	119.9	123.0	124.8	126.6	123.5	110.9
Total (excl Motor Vehicles)	8,087	88.1	107.1	110.9	113.3	119.9	122.9	108.4
Textiles & Personal Effects	2,043	98.0	106.5	107.0	103.7	104.4	106.2	81.9
Furniture & Household Equipment	1,160	82.5	104.4	106.4	108.7	121.1	132.5	122.7
Motor Vehicles	1,913	81.6	173.7	174.2	173.5	155.0	126.1	121.4
Petrol Service Stations	505	63.2	109.3	110.2	113.4	121.5	119.5	118.0
Department Stores & Supermarkets	1,766	86.3	112.2	122.4	127.8	133.1	133.8	125.2
Provision & Sundry Shops	853	98.8	100.1	102.1	104.6	106.2	109.8	108.3
Others	1,760	92.2	107.3	111.3	117.4	130.1	132.2	110.3
At Constant Prices								
Total	10,000	86.6	115.4	113.7	116.5	120.0	119.8	107.8
Total (excl Motor Vehicles)	8,087	90.0	106.5	107.8	111.1	118.1	122.4	107.2
Textiles & Personal Effects	2,043	87.6	108.2	106.5	105.3	106.4	113.7	86.7
Furniture & Household Equipment	1,160	82.5	104.4	102.5	107.1	120.0	131.6	123.8
Motor Vehicles	1,913	77.3	153.2	138.5	139.6	127.7	108.8	110.3
Petrol Service Stations	505	84.9	111.6	113.3	115.4	122.4	115.3	113.3
Department Stores & Supermarkets	1,766	89.9	109.0	115.9	119.9	124.1	123.3	115.8
Provision & Sundry Shops	853	102.8	95.8	94.4	95.8	95.7	96.5	94.4
Others	1,760	94.2	107.0	109.6	117.6	134.1	140.2	115.9

¹ Based on turnover data derived from the 1991 Annual Survey of Retail Trade.

11.6 SALES INDEX OF CATERING TRADE (1991=100)

	Weights ¹	1988	1993	1994	1995	1996	1997	1998
At Current Prices								
Total	1,000	78.6	114.4	120.6	127.0	133.1	139.8	133.0
Restaurants	411	79.1	114.0	122.4	128.6	132.2	132.7	111.4
Fast Food Outlets	134	72.4	126.9	142.9	157.0	168.8	182.6	183.6
Other Eating Places	455	80.8	111.0	112.5	116.7	123.4	133.5	137.7
At Constant Prices								
Total	1,000	84.6	109.9	111.5	113.5	116.5	120.5	112.9
Restaurants	411	85.6	108.8	112.4	112.6	113.8	111.5	92.0
Fast Food Outlets	134	78.7	121.5	133.7	143.8	151.4	165.2	161.2
Other Eating Places	455	85.0	107.6	104.2	105.4	108.7	115.5	117.5

Note : Catering trade refers to the sales of prepared food and drinks for in-premises consumption or on a take-away basis.

All eating places are included with the exception of hawker stalls.

1 Based on turnover data derived from the 1991 Annual Survey of Catering Trade.

11.7 WHOLESALE TRADE INDEX

(1994=100)

	Weights ¹	1995	1996	1997	1998
Domestic Wholesale Trade Index					
Total	10,000	109.9	107.5	117.2	104.3
Total (excl Petroleum)	8,091	114.4	106.9	115.5	102.0
Food, Beverages & Tobacco	839	130.5	128.4	133.6	133.9
Textiles, Wearing Apparel & Personal Effects	519	83.7	85.9	93.4	69.3
Household Equipment & Furniture	1,138	120.1	99.7	131.5	108.3
Petroleum & Petroleum Products	1,909	90.8	110.4	124.6	114.6
Electronic & Electrical Components & Industrial Machinery	2,067	124.3	98.6	99.3	84.1
Office Equipment, Computers & Accessories	566	111.6	139.4	162.5	171.2
Timber, Paints & Construction Materials	767	104.7	113.6	113.7	82.4
General Wholesale Trade	513	132.4	120.2	136.2	141.5
Other Wholesale Trade	1,682	99.9	99.6	101.1	87.3
Foreign Wholesale Trade Index					
Total	10,000	118.9	132.0	141.4	120.7
Total (excl Petroleum)	6,550	123.1	125.5	127.2	110.7
Food, Beverages & Tobacco	583	112.8	107.8	122.7	147.2
Textiles, Wearing Apparel & Personal Effects	257	102.6	103.5	97.0	69.4
Household Equipment & Furniture	1,227	100.7	98.6	87.8	77.0
Petroleum & Petroleum Products	3,450	111.1	144.3	168.3	139.8
Electronic & Electrical Components & Industrial Machinery	1,026	129.3	136.9	134.6	134.3
Office Equipment, Computers & Accessories	327	136.2	153.3	169.9	140.5
Timber, Paints & Construction Materials	360	105.8	97.1	98.4	58.5
General Wholesale Trade	1,472	124.5	122.2	123.7	98.0
Other Wholesale Trade	1,298	147.9	158.8	167.9	137.1

¹ Based on turnover data derived from the 1994 Annual Survey of Wholesale Trade.

EXTERNAL TRADE

Singapore's external trade is one of the most important features of its economy. It has been a major factor in the country's economic growth and development. The trade sector is a key component of the country's economic structure, and it has played a significant role in the country's economic recovery from the effects of the global financial crisis.

- (i) Postal packages which are based on particular countries or regions.
- (ii) Bankers and stores supplied to the Government and the public.

Coverage

The "general" system for recording trade statistics is based on the principle that all goods imported into or exported from Singapore are included in the external trade statistics with the following major exceptions:

- (i) Transshipment cargo on through bills of lading or through air waybills.
- (ii) Fish and other marine products landed by Singapore and foreign vessels registered in Singapore.
- (iii) Goods imported and exported by or on behalf of diplomatic services and Armed Forces.

and includes the following categories of goods:

- (v) Television news films, news or feature films, and other motion pictures.
- (vi) Printed matter, including books, newspapers, magazines, and other printed publications.
- (vii) Films, tapes, and other audio-visual recordings.
- (viii) Photographs, slides, and other photographic prints.
- (ix) Postcards, stamps, and other postal items.
- (x) Works of art, including paintings, sculptures, and other objects of artistic value.
- (xi) Antiques, including furniture, jewelry, and other objects of historical or scientific interest.
- (xii) Works of scientific or technical interest, including books, journals, and other publications.
- (xiii) Works of literary or historical interest, including books, journals, and other publications.
- (xiv) Works of religious or philosophical interest, including books, journals, and other publications.
- (xv) Works of general interest, including books, journals, and other publications.

Goods of these categories are exempt from the payment of import duties and are subject to a simplified customs procedure.

Gold Bullion and Gold Coins

Gold bullion and gold coins are treated as goods of general interest and are subject to the payment of import duties.

Definitions

Imports: Goods brought into Singapore, except those specified as excluded under the Coverage section, irrespective of whether they are for consumption, for processing, for use in manufacturing, or for subsequent re-exportation to other countries.

Sources of Data

From April 1987, Singapore's external trade statistics are compiled by the Trade Development Board from import and export permits submitted to the Controller and Registrar of Imports and Exports or the Director-General of Customs and Excise, Singapore, except for the following: -

- (i) Postal packages which are based on particulars furnished by the Singapore Post Pte Ltd; and
- (ii) Bunkers and stores supplied to non-Singapore-registered ships and aircraft, which are compiled from statements furnished by ships and aircraft agents to the Trade Development Board.

Prior to April 1987, external trade statistics were compiled by the Singapore Department of Statistics from the same sources.

Coverage

The "general" system for recording trade statistics is adopted in Singapore. Under this system, all goods imported into or exported from Singapore are included in the external trade statistics with the following major exceptions:

- (i) Transshipment cargo on through bills of lading or through air waybills;
- (ii) Fish and other marine produce landed by Singapore and Peninsular Malaysian registered vessels direct from sea;
- (iii) Goods imported and exported by, or on behalf of, diplomatic services and Armed Forces;

- (iv) Exposed cinematographic films imported or exported on rental basis;
- (v) Television news films, news or press materials;
- (vi) Ships and aircraft arriving for or departing after repairs;
- (vii) Goods temporarily taken in or out of the country to be returned after a specific purpose eg for exhibition;
- (viii) Personal and household effects accompanying passengers or crews;
- (ix) Samples and specimens for test or analysis; and unaccompanied personal effects and gifts not exceeding the value of \$400;
- (x) Gold bullion and gold coins; and
- (xi) Issued currency notes and coins.

Ships and aircraft are included if they are imported or exported as merchandise whether or not they arrive or depart under their own power.

Definitions

Imports: Refers to all goods brought into Singapore, except those specified as excluded under the **Coverage** section, irrespective of whether they are for consumption, for processing, for use in manufacturing, or for subsequent re-shipment to other countries.

12 EXTERNAL TRADE (cont'd)

Exports: Refers to all goods taken out of Singapore, except those specified as excluded under the **Coverage** section. It comprises domestic exports and re-exports.

Domestic Exports: Refers to exports of Singapore origin. It comprises (i) primary commodities grown or produced in Singapore and (ii) goods which have been transformed, that is, manufactured, assembled or processed in Singapore including those with imported materials or parts.

Re-exports: Refers to all goods which are exported from Singapore in the same form as they have been imported (including goods that have undergone minor processing, such as re-packing, splitting into lots, sorting or grading, making and the like).

Trade at 1990 Prices: This is obtained by adjusting the recorded value of trade using import/export price indices with base year 1990. The series on trade at 1990 prices indicate the volume of trade after adjusting for the effect of price changes.

Valuation

Imports are valued at cif, that is, the value of goods at the frontier of the exporting

country plus the cost of insurance and freight to the registration area. Customs duties and other import charges payable in the registration area are not included in the value of imports.

Exports are valued at fob, that is, the value of goods to the purchaser abroad up to the point where the goods are deposited on board the outgoing vessel, aircraft or vehicle.

Classification

With effect from 1 January 1996, the trade classification adopted for documenting Singapore's external trade is the 1996 Singapore Trade Classification and Customs Duties, which is based on the Harmonised System. However, for the publication of external trade statistics, a classification based on the Standard International Trade Classification (Revision 3) is used. Imports are classified by the country of origin and exports by the country of destination.

Other References

Detailed monthly trade statistics are available in the "Singapore Trade Statistics, Imports and Exports".

12.1 EXTERNAL TRADE BY TYPE

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
At Current Prices							
Total Trade	167,278	257,076	303,723	343,828	361,455	382,218	353,627
Exports	79,051	119,473	147,327	167,515	176,272	185,613	183,763
Oil	12,353	14,612	14,075	13,858	16,728	16,219	13,639
Non-oil	66,698	104,862	133,252	153,657	159,544	169,393	170,124
Domestic Exports	49,555	75,394	88,533	98,473	103,589	107,535	105,918
Oil	11,341	14,557	13,985	13,721	16,551	15,912	13,473
Non-oil	38,214	60,837	74,548	84,751	87,038	91,624	92,445
Re-exports	29,496	44,079	58,794	69,042	72,683	78,077	77,846
Imports	88,227	137,603	156,396	176,314	185,183	196,605	169,864
Oil	12,422	14,912	13,788	14,204	17,313	18,635	13,647
Non-oil	75,805	122,691	142,608	162,110	167,870	177,971	156,217
At 1990 Prices							
Total Trade	166,848	284,346	343,485	394,721	423,053	454,497	424,593
Exports	79,297	134,884	172,097	199,736	214,296	228,821	227,235
Oil	16,565	20,114	22,360	22,389	23,339	23,220	24,394
Non-oil	62,732	114,770	149,737	177,347	190,957	205,601	202,841
Domestic Exports	51,732	88,719	109,988	125,765	133,799	140,352	140,568
Oil	15,240	20,036	22,230	22,188	23,104	22,820	24,104
Non-oil	36,492	68,682	87,758	103,578	110,694	117,532	116,463
Re-exports	27,566	46,165	62,109	73,970	80,497	88,469	86,668
Imports	87,550	149,462	171,388	194,986	208,757	225,676	197,358
Oil	16,505	20,792	20,314	20,482	22,408	23,940	23,867
Non-oil	71,046	128,670	151,073	174,504	186,349	201,736	173,491

Source : Trade Development Board

Note : Figures from 1994 are slightly inflated due to improved coverage arising from the implementation of Goods and Services Tax from 1 April 1994.

12.2

TOTAL TRADE BY AREA/COUNTRY

Million Dollars

Area/Country	1988	1993	1994	1995	1996	1997	1998
Total	167,278	257,076	303,723	343,829	361,455	382,218	353,627
America	35,955	51,398	56,712	62,531	69,099	74,226	74,704
Brazil	691	961	906	1,127	1,164	1,008	813
Canada	1,252	1,320	1,548	1,552	1,396	1,595	1,708
United States ¹	32,544	46,652	51,539	57,017	62,703	67,135	67,759
Asia	98,529	155,991	190,038	217,105	224,019	235,316	206,239
Bahrain	553	258	196	191	230	245	261
Bangladesh	659	614	708	868	989	897	1,204
Brunei	1,058	1,374	1,565	2,394	2,702	2,337	1,321
China, Peo Rep	5,754	6,945	7,619	9,640	11,043	14,484	14,917
Hong Kong	7,375	14,703	18,100	20,173	21,609	23,629	20,178
India	2,014	2,613	3,136	3,967	4,354	4,846	5,085
Iran (Islamic Rep)	1,020	1,205	999	848	676	1,071	988
Japan	26,192	39,032	44,765	50,355	48,071	47,688	40,524
Korea, Rep of	4,094	7,754	9,856	12,249	11,715	11,539	9,379
Kuwait	1,095	1,228	1,303	1,757	2,013	1,870	1,259
Malaysia	23,650	39,612	54,690	59,410	59,551	61,953	54,251
Pakistan	414	530	574	524	480	495	588
Philippines	1,573	3,027	3,604	4,291	5,197	7,335	8,122
Saudi Arabia	4,429	5,982	6,110	5,841	7,577	8,529	6,132
Sri Lanka	555	567	603	611	618	661	956
Taiwan	6,232	10,099	11,958	14,073	14,291	16,575	14,445
Thailand	6,698	12,481	15,657	18,768	20,123	18,613	15,156
United Arab Emirates	1,797	2,554	2,552	3,238	4,168	3,823	3,476
Europe	25,275	39,814	46,361	53,055	56,564	60,574	60,003
France	2,898	4,890	5,317	6,816	8,717	9,080	8,629
Germany, Fed Rep ²	6,013	8,950	10,499	11,793	12,173	12,101	11,406
Italy	2,460	2,885	3,259	3,601	3,904	3,675	2,701
Netherlands	2,045	4,375	5,569	6,061	5,860	6,253	7,954
Switzerland	1,188	2,192	2,479	2,735	2,911	2,664	3,536
United Kingdom	4,863	7,168	8,311	9,039	10,050	11,703	10,873
Commonwealth of Independent States ³	446	1,155	1,551	1,907	1,552	1,571	823
Oceania	5,095	6,609	7,480	7,965	8,607	8,878	9,112
Australia ⁴	3,886	5,086	5,883	6,230	6,811	6,997	7,442
New Zealand	576	656	773	837	875	895	893
Africa	2,424	3,265	3,132	3,172	3,167	3,223	3,569

Source : Trade Development Board

¹ Prior to 1986, the United States of America included Puerto Rico.² Figures from Oct 1990 include the former German Democratic Republic.³ Data prior to 1992 referred to Soviet Union.⁴ Prior to 1989, Australia included Christmas Island.

12.3

IMPORTS BY AREA/COUNTRY

Million Dollars

Area/Country	1988	1993	1994	1995	1996	1997	1998
Total	88,227	137,603	156,396	176,314	185,183	196,605	169,864
America	15,191	24,168	25,923	28,856	33,209	36,297	34,130
Brazil	464	487	538	510	477	385	322
Canada	536	544	634	742	830	1,028	767
United States	13,718	22,360	23,902	26,470	30,256	33,017	31,253
Asia	57,244	89,837	103,135	115,932	117,093	124,271	105,062
Bahrain	487	205	149	154	190	201	207
Bangladesh	93	54	50	34	45	71	76
Brunei	225	350	319	317	290	271	293
China, Peo Rep	3,386	3,877	4,412	5,730	6,259	8,447	8,123
Hong Kong	2,432	4,339	5,286	5,821	5,922	5,780	4,759
India	534	1,080	1,208	1,306	1,427	1,548	1,012
Iran (Islamic Rep)	804	1,049	901	675	511	873	836
Japan	19,365	30,111	34,422	37,288	33,617	34,564	28,434
Korea, Rep of	2,542	4,428	5,986	7,652	6,362	6,056	5,087
Kuwait	922	1,106	1,171	1,654	1,911	1,769	1,151
Malaysia	12,929	22,670	25,600	27,285	27,808	29,548	26,252
Pakistan	89	107	103	91	100	88	64
Philippines	529	813	1,193	1,558	1,960	2,954	4,002
Saudi Arabia	3,873	5,359	5,607	5,380	7,042	7,974	5,493
Sri Lanka	72	64	87	77	72	69	80
Taiwan	3,997	5,458	6,018	7,251	7,421	8,208	6,517
Thailand	2,386	5,676	7,471	9,097	10,117	10,080	8,118
United Arab Emirates	1,274	1,454	1,335	2,035	2,898	2,430	1,763
Europe	13,082	19,718	23,623	27,640	30,654	31,944	26,995
France	1,586	3,131	3,318	3,964	5,250	5,431	4,888
Germany, Fed Rep	3,265	4,203	5,270	6,127	6,760	6,723	5,843
Italy	1,317	1,832	2,209	2,510	3,188	2,903	1,840
Netherlands	687	1,275	1,638	1,600	1,787	1,695	1,623
Switzerland	928	1,488	1,694	2,168	2,347	2,292	1,650
United Kingdom	2,562	3,593	4,326	4,687	5,067	5,513	4,636
Commonwealth of Independent States	186	263	287	513	237	394	169
Oceania	2,068	2,741	2,744	2,910	3,231	3,111	2,546
Australia	1,744	2,384	2,393	2,556	2,797	2,668	2,167
New Zealand	305	290	292	293	333	335	278
Africa	641	1,139	971	976	997	982	1,131

Source : Trade Development Board

Note : See notes to Table 12.2.

12.4

EXPORTS BY AREA/COUNTRY

Million Dollars

Area/Country	1988	1993	1994	1995	1996	1997	1998
Total	79,051	119,473	147,327	167,515	176,272	185,613	183,763
America	20,764	27,230	30,789	33,675	35,890	37,929	40,574
Brazil	227	475	368	618	688	623	491
Canada	716	775	915	810	565	568	941
United States	18,826	24,292	27,637	30,547	32,446	34,117	36,506
Asia	41,285	66,154	86,903	101,173	106,926	111,045	101,177
Bahrain	66	53	47	37	40	44	53
Bangladesh	566	560	658	835	944	825	1,129
Brunei	833	1,025	1,246	2,077	2,412	2,067	1,028
China, Peo Rep	2,369	3,068	3,207	3,911	4,784	6,038	6,794
Hong Kong	4,944	10,364	12,814	14,352	15,687	17,848	15,418
India	1,480	1,533	1,928	2,661	2,927	3,297	4,073
Iran (Islamic Rep)	216	156	98	173	165	198	153
Japan	6,828	8,921	10,343	13,066	14,455	13,125	12,090
Korea, Rep of	1,552	3,326	3,871	4,597	5,353	5,483	4,291
Kuwait	173	122	132	103	102	101	108
Malaysia	10,721	16,942	29,089	32,125	31,743	32,405	27,999
Pakistan	325	423	471	433	380	407	524
Philippines	1,045	2,214	2,411	2,733	3,238	4,382	4,120
Saudi Arabia	556	623	503	461	535	555	639
Sri Lanka	483	503	516	534	546	591	876
Taiwan	2,235	4,641	5,940	6,822	6,870	8,367	7,929
Thailand	4,311	6,805	8,186	9,672	10,006	8,532	7,037
United Arab Emirates	523	1,100	1,217	1,203	1,270	1,393	1,713
Europe	12,193	20,096	22,738	25,415	25,910	28,630	33,008
France	1,312	1,759	1,999	2,852	3,467	3,648	3,741
Germany, Fed Rep	2,748	4,747	5,230	5,666	5,413	5,378	5,564
Italy	1,143	1,053	1,050	1,091	716	771	861
Netherlands	1,357	3,100	3,931	4,461	4,073	4,558	6,331
Switzerland	260	705	785	567	564	373	1,886
United Kingdom	2,302	3,575	3,985	4,352	4,984	6,190	6,236
Commonwealth of Independent States	260	892	1,264	1,394	1,315	1,176	654
Oceania	3,027	3,868	4,736	5,055	5,376	5,767	6,566
Australia	2,142	2,702	3,490	3,674	4,014	4,328	5,275
New Zealand	271	366	481	544	542	559	615
Africa	1,783	2,126	2,161	2,196	2,170	2,241	2,438

Source : Trade Development Board

Note : See notes to Table 12.2.

Area/Country	1988	1993	1994	1995	1996	1997	1998
Total	49,555	75,394	88,533	98,473	103,589	107,535	105,918
America	16,836	21,218	23,757	26,234	27,907	29,193	30,408
Brazil	37	334	219	335	393	307	249
Canada	546	510	626	545	357	320	667
United States	15,616	19,239	21,728	24,213	25,689	26,849	27,778
Asia	21,967	36,513	45,408	50,875	53,835	55,036	50,196
Bahrain	43	28	18	17	17	23	25
Bangladesh	229	340	410	485	576	372	612
Brunei	262	332	323	379	388	405	285
China, Peo Rep	1,351	2,197	2,089	2,350	2,844	3,599	3,849
Hong Kong	3,224	6,719	7,845	8,377	9,538	10,536	8,719
India	652	729	865	1,116	1,194	1,379	1,954
Iran (Islamic Rep)	135	82	35	48	58	47	48
Japan	4,876	5,802	6,959	9,051	9,789	7,956	6,947
Korea, Rep of	940	1,957	2,010	2,424	3,019	2,767	2,020
Kuwait	112	58	63	66	56	51	53
Malaysia	3,986	8,009	13,429	13,441	13,299	13,997	12,641
Pakistan	118	154	156	160	158	169	235
Philippines	492	1,173	1,280	1,345	1,525	2,208	2,012
Saudi Arabia	268	209	188	174	197	226	232
Sri Lanka	158	215	192	206	214	254	331
Taiwan	1,224	2,594	3,285	3,884	3,710	4,223	3,784
Thailand	2,753	3,975	4,115	4,759	4,561	4,041	3,534
United Arab Emirates	266	397	353	395	416	386	581
Europe	7,979	14,255	15,495	17,297	17,821	19,360	21,386
France	953	1,311	1,536	2,035	2,557	2,520	2,343
Germany, Fed Rep	1,848	3,468	3,388	3,575	3,456	3,579	3,805
Italy	914	710	735	790	459	463	493
Netherlands	813	2,363	2,946	3,384	3,168	3,149	4,431
Switzerland	146	500	436	216	303	125	201
United Kingdom	1,661	2,662	2,901	3,306	3,601	4,557	4,660
Commonwealth of Independent States	180	283	492	436	418	303	214
Oceania	1,952	2,385	2,856	3,022	3,097	3,004	2,941
Australia	1,367	1,663	2,088	2,139	2,258	2,129	2,215
New Zealand	154	185	256	312	266	256	280
Africa	822	1,023	1,018	1,046	929	943	987

Source : Trade Development Board

Note : See notes to Table 12.2.

12.6

IMPORTS BY COMMODITY

Million Dollars

Commodity	1988	1993	1994	1995	1996	1997	1998
Total	88,227	137,603	156,396	176,314	185,183	196,605	169,864
Food	4,667	5,033	5,218	5,153	5,160	5,223	4,515
Cereals & Cereal Preparations	509	513	519	523	573	588	506
Fruits & Vegetables	1,151	1,279	1,224	1,223	1,222	1,161	1,023
Coffee & Spices	791	533	704	603	495	613	547
Beverages & Tobacco	730	2,074	2,141	2,024	2,393	2,641	2,307
Crude Materials	2,999	1,968	1,939	2,086	1,889	1,787	1,367
Rubber	1,698	508	533	684	553	455	359
Wood	311	317	344	369	321	304	198
Mineral Fuels	12,422	14,912	13,788	14,204	17,313	18,635	13,647
Petroleum & Petroleum Products	12,413	14,903	13,778	14,196	17,304	18,625	13,643
Animal & Vegetable Oils	941	834	641	753	517	514	524
Unprocessed Vegetable Oils	351	330	322	314	418	448	452
Chemicals	5,809	9,615	10,114	11,385	10,940	11,268	10,280
Chemical Compounds	1,546	2,047	2,302	2,944	2,749	3,127	2,825
Medicinal Products	367	702	799	937	964	1,072	990
Plastic Materials	2,000	1,558	1,756	1,977	1,795	2,010	1,680
Manufactured Goods by Material	12,994	16,013	16,523	19,191	18,255	19,626	15,081
Textile Manufactures	2,952	3,163	3,072	2,987	2,701	2,556	1,751
Non-metal Mineral Manufactures	1,254	1,891	2,268	2,662	3,059	3,025	2,077
Iron & Steel	2,666	3,289	3,222	3,910	3,758	4,254	3,235
Metal Manufactures	1,673	2,602	2,697	3,006	3,170	3,549	3,301
Paper, Paperboard & Related Articles	1,134	1,295	1,408	1,674	1,446	1,376	1,171
Machinery & Transport Equipment	38,299	71,916	88,306	102,055	107,209	113,163	102,692
Non-electric Machinery	14,154	27,641	32,744	37,143	41,916	45,536	40,176
Electric Machinery	19,849	35,916	47,902	56,194	53,767	55,975	52,635
Transport Equipment	4,296	8,359	7,661	8,719	11,527	11,652	9,881
Miscellaneous Manufactured Articles	7,999	13,415	15,428	17,390	19,347	20,685	16,942
Scientific & Optical Instruments	2,359	4,124	4,843	5,359	5,563	6,461	5,544
Watches & Clocks	779	1,221	1,412	1,452	1,545	1,650	1,391
Miscellaneous Transactions nec	1,367	1,823	2,298	2,072	2,160	3,063	2,509

Source : Trade Development Board

12.7

EXPORTS BY COMMODITY

Million Dollars

Commodity	1988	1993	1994	1995	1996	1997	1998
Total	79,051	119,473	147,327	167,515	176,272	185,613	183,763
Food	3,285	2,910	3,542	3,554	3,192	3,220	3,018
Cereals & Cereal Preparations	251	212	255	265	262	238	207
Fruits & Vegetables	412	450	543	558	554	488	397
Coffee & Spices	1,290	728	1,082	1,073	818	1,010	1,080
Beverages & Tobacco	553	2,389	2,448	2,274	2,631	2,766	2,677
Crude Materials	4,047	2,132	2,193	2,405	1,987	1,797	1,756
Rubber	2,291	808	819	981	777	568	445
Wood	563	374	319	270	220	247	195
Mineral Fuels ¹	12,353	14,612	14,075	13,858	16,728	16,219	13,639
Petroleum & Petroleum Products	10,009	11,880	11,412	11,250	13,575	12,720	10,438
Animal & Vegetable Oils	886	610	574	718	520	509	491
Unprocessed Vegetable Oils	455	220	247	280	353	369	346
Chemicals	5,199	7,663	8,418	9,999	9,885	11,136	11,832
Chemical Compounds	1,670	2,613	2,884	3,593	3,488	4,113	4,262
Medicinal Products	349	599	753	852	869	916	990
Plastic Materials	1,846	1,567	1,751	2,090	2,059	2,427	2,557
Manufactured Goods by Material	6,529	7,756	8,856	10,614	10,072	10,402	8,327
Wood Manufactures	750	505	433	317	270	278	255
Textile Manufactures	1,387	1,980	2,154	2,119	1,900	1,844	1,439
Iron & Steel	721	977	1,083	1,212	1,168	1,230	929
Metal Manufactures	857	1,266	1,614	1,820	1,852	1,982	1,789
Machinery & Transport Equipment	37,939	69,641	94,199	110,007	116,262	122,474	122,116
Non-electric Machinery	16,355	35,214	45,096	52,424	58,313	62,592	62,397
Electric Machinery	19,415	31,284	45,949	54,427	54,422	56,008	55,710
Transport Equipment	2,168	3,142	3,154	3,156	3,528	3,874	4,010
Miscellaneous Manufactured Articles	7,111	9,768	11,185	12,552	13,103	14,260	15,024
Clothing	2,491	2,500	2,322	2,075	1,972	2,215	2,387
Scientific & Optical Instruments	1,558	2,721	3,288	3,704	3,758	4,165	4,570
Watches & Clocks	317	708	860	1,156	1,388	1,510	1,218
Miscellaneous Transactions nec	1,151	1,993	1,838	1,532	1,892	2,831	4,884

Source : Trade Development Board

¹ Include oil bunkers.

12.8

DOMESTIC EXPORTS BY COMMODITY

Million Dollars

Commodity	1988	1993	1994	1995	1996	1997	1998
Total	49,555	75,394	88,533	98,473	103,589	107,535	105,918
Food	905	1,078	1,169	1,197	1,259	1,275	1,221
Animal Feeding Stuffs	49	44	51	52	62	61	46
Beverages & Tobacco	249	519	529	483	494	407	393
Crude Materials ¹	469	427	448	579	495	562	549
Mineral Fuels ²	11,341	14,557	13,985	13,722	16,551	15,912	13,473
Oil Bunkers	2,206	2,544	2,447	2,393	2,878	3,178	2,912
Animal & Vegetable Oils	611	456	335	333	299	316	333
Chemicals	3,100	4,464	4,696	5,621	5,626	6,650	7,163
Medicinal Products	223	263	269	280	298	282	383
Plastic Materials	1,306	966	1,087	1,346	1,374	1,711	1,933
Manufactured Goods by Material	1,778	2,443	2,731	2,924	2,844	2,935	2,565
Wood Products excluding Furniture	243	122	110	85	64	59	51
Textile Yarn & Thread	74	150	170	158	159	166	151
Woven Textile Fabrics	85	158	140	142	123	123	113
Lime, Cement & Fabricated Construction Materials	22	29	29	38	22	18	19
Iron & Steel Pipes & Fittings	85	67	65	82	86	116	104
Machinery & Transport Equipment	26,144	46,083	59,071	67,751	70,288	72,845	72,428
Office Machines	9,719	22,083	27,961	33,504	37,415	39,453	39,916
Other Non-electric Machines	1,122	1,577	1,870	2,033	2,103	2,311	2,155
Electric Generators	1,721	1,741	2,627	2,812	2,822	2,949	2,969
Telecommunications Apparatus	5,641	6,937	9,066	8,758	7,455	6,224	5,318
Other Electric Machinery	5,101	8,887	12,495	15,477	15,970	17,785	17,951
Ships, Boats & Oil Rigs	376	931	647	575	435	238	599
Miscellaneous Manufactured Articles	4,671	4,987	5,208	5,332	5,176	6,017	7,005
Clothing	1,781	1,201	1,026	831	699	654	718
Scientific & Optical Instrument	739	1,145	1,262	1,477	1,434	1,643	2,104
Watches & Clocks	131	313	233	252	243	303	236
Printed Matters	314	517	612	705	661	643	656
Toys & Games	447	221	184	139	137	110	48
Miscellaneous Transactions nec	288	380	361	532	558	617	787

Source : Trade Development Board

1 Exclude processed rubber and sawn timber.

2 Include oil bunkers.

Commodity	1988	1993	1994	1995	1996	1997	1998
Meat	347	365	404	392	417	403	366
Rice	149	156	166	164	195	225	203
Unmilled Cereals	187	84	71	64	56	59	44
Fruits & Nuts	488	580	546	531	543	529	473
Spices	238	171	158	170	196	273	248
Animal Feed	150	86	70	59	66	51	44
Crude Rubber	1,660	453	463	617	486	388	293
Sawn Timber	272	287	291	295	273	272	177
Crude Petroleum	8,262	10,363	8,929	9,190	11,256	11,925	8,500
Petroleum Products	4,151	4,540	4,849	5,006	6,048	6,700	5,144
Fixed Vegetables Oils	351	330	322	314	418	448	452
Medicinal Products	367	702	799	937	964	1,072	990
Paper & Paperboard	844	816	909	1,172	935	835	691
Textile Yarn & Thread	291	333	351	318	286	293	213
Woven Textile Fabrics	2,141	2,160	2,019	1,914	1,648	1,479	1,028
Iron & Steel Plates, Sheets, Bars Shapes, etc	1,655	2,009	1,980	2,620	2,331	2,608	1,895
Iron & Steel Pipes & Fittings	616	802	801	837	996	1,156	1,053
Generators	5,140	7,298	8,671	8,879	8,630	8,864	8,665
Industrial Machinery	1,860	2,775	3,114	3,796	4,661	4,798	4,407
Telecommunications Apparatus	4,613	9,611	11,315	11,421	10,152	10,461	8,072
Office Machines	4,726	12,160	15,132	18,666	21,594	24,750	22,416
Motor Vehicles	1,726	3,344	3,171	3,782	3,589	3,587	2,438
Ships, Boats & Oil Rigs	1,349	2,098	1,872	2,350	3,622	3,294	3,038
Clothing	1,210	2,174	2,399	2,330	2,442	2,682	2,355
Scientific & Optical Instrument	2,359	4,124	4,843	5,359	5,563	6,461	5,544
Watches & Clocks	779	1,221	1,412	1,452	1,545	1,650	1,391
Toys & Games	365	630	637	666	694	648	406

Source : Trade Development Board

12.10

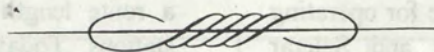
EXPORTS OF SPECIFIC COMMODITIES

Million Dollars

Commodity	1988	1993	1994	1995	1996	1997	1998
Spices	389	208	218	312	269	444	516
Coffee	335	133	484	400	194	222	177
Animal Feed	114	111	107	112	91	86	71
Crude Rubber	2,274	779	785	949	744	531	406
Sawn Timber	530	343	285	231	191	212	167
Petroleum Products	9,639	11,880	11,404	11,239	13,575	12,720	10,438
Fixed Vegetable Oils	455	220	247	280	353	369	346
Medicinal Products	349	599	753	852	869	916	990
Manufactured Fertilizers	104	38	31	19	21	23	21
Crude Vegetable Materials	359	246	275	270	262	242	220
Wood Products excluding Furniture	749	504	432	316	269	278	252
Textile Yarn & Thread	267	360	418	379	350	354	291
Woven Textile Fabrics	965	1,379	1,457	1,406	1,214	1,133	869
Iron & Steel Plates, Sheets, Bars Shapes, etc	429	562	616	756	629	628	416
Iron & Steel Pipes & Fittings	250	335	385	350	435	513	444
Generators	2,906	3,963	5,498	5,795	5,727	5,984	6,001
Office Machines	10,911	26,655	34,339	41,024	46,637	50,680	51,303
Industrial Machinery	1,015	1,656	2,250	2,652	2,831	2,916	3,034
Telecommunications Apparatus	7,570	11,560	15,284	15,163	14,117	13,062	11,199
Household Equipment	636	694	680	658	665	691	658
Motor Vehicles	555	1,492	1,405	1,647	1,754	1,883	1,461
Ships, Boats & Oil Rigs	1,190	1,204	1,322	922	945	939	1,519
Furniture	340	358	363	295	272	257	171
Clothing	2,491	2,500	2,322	2,075	1,972	2,215	2,387
Scientific & Optical Instrument	1,558	2,721	3,288	3,704	3,758	4,165	4,570
Watches & Clocks	317	708	860	1,156	1,388	1,510	1,218
Printed Matters	398	600	736	863	839	844	815

Source : Trade Development Board

TRANSPORT AND COMMUNICATIONS



13 TRANSPORT AND COMMUNICATIONS

Vessels Entered and Cleared

Data on the movement of vessels are compiled from declarations submitted to the Port Master by all merchant ships entering or leaving Singapore waters. The data are given in terms of number and gross registered tonnage.

Sea Cargo Handled

The volume of cargo handled refers to those handled by vessels of all tonnages at all parts of Singapore including private wharves and anchorages. The data include transshipment cargo but exclude ship's stores and mineral oil supplied as bunker fuel to vessels.

Civil Air Traffic

The Civil Aviation Authority of Singapore (CAAS) is responsible for operating the Singapore Changi Airport and Seletar Aerodrome. It also provides air traffic services, regulates and promotes the development of air transport and aerospace industries, as well as compiles and collates statistics on passengers, airfreight, airmail and aircraft traffic passing through Changi Airport and Seletar Aerodrome.

Data on passenger arrivals and departures and incoming and outgoing mail are obtained from manifests submitted by airlines through their handling agents. Statistics on aircraft movements are compiled by the Authority's Aeronautical Information Services Unit.

Monthly statistics on passengers, aircraft landings and mail carried through

Changi Airport and Seletar Aerodrome are available in the "Air Transport Statistics" published by the CAAS.

Roads

Data on public roads refer to the length of roads in kilometres and are classified into expressways, major arterial roads, collector roads and local roads.

Mass Rapid Transit (MRT)

Singapore MRT Ltd is the operator of the MRT system in Singapore. It provides passenger service along major high density travel corridors in Singapore to satisfy the needs of the travelling public. Since operation in 1987, the MRT system has been extended to a route length of 83 km and a total of 48 stations. Today, close to a million passenger trips are made on the MRT daily.

Vehicles Registered

All vehicles to be kept or used in Singapore must be registered with the Vehicle and Transit Licensing Division of the Land Transport Authority.

Road Casualties

Data on road casualties are compiled from reports made to the police on all traffic accidents occurring on roads.

13.1 SEA CARGO AND SHIPPING STATISTICS

	1988	1993	1994	1995	1996	1997	1998
Vessel Arrivals (No)	44,855	92,655	101,107	104,014	117,723	130,333	140,922
Shipping Tonnage ('000 GT)	402,960	623,841	678,560	710,573	768,521	808,305	857,655
Total Cargo ('000 tonnes)	154,739	273,723	290,075	305,484	314,164	327,507	312,322
General	66,940	142,643	157,247	169,745	175,083	185,559	172,968
Bulk	87,799	131,080	132,828	135,739	139,081	141,948	139,354
Total Container Throughput ('000 TEUs)	3,375	9,047	10,400	11,846	12,944	14,136	15,136
Bunker Sales ('000 tonnes)	-	16,723	17,642	17,489	16,939	16,941	18,064
Singapore Ship Registry (End of Period)							
Number	1,243	2,394	2,647	2,910	3,157	3,380	3,412
'000 GT	7,328	12,164	13,201	14,964	18,239	20,774	22,025

Source : Maritime and Port Authority of Singapore

Notes : GT = Gross Tonnes

TEU = Twenty-Foot Equivalent Unit

13.2 CIVIL AIRCRAFT LANDINGS, PASSENGERS AND PARCEL MAIL

	1988	1993	1994	1995	1996	1997	1998
Aircraft Landings (No)	41,646	68,355	72,565	78,134	83,345	86,276	82,590
Passengers ('000)							
Arriving	5,686	9,421	10,134	10,920	11,587	11,916	11,292
Departing	5,720	9,375	10,069	10,823	11,542	11,883	11,231
In Transit	1,189	1,191	1,442	1,453	1,384	1,375	1,281
Parcel Mail (Tonnes)							
In-coming	4,359	7,927	8,538	9,521	10,572	10,813	10,580
Out-going	5,102	6,759	8,401	9,543	10,380	10,977	11,354

Source : Civil Aviation Authority of Singapore

Note : Figures from 1989 refer to Changi Airport only.

13.3

AIR CARGO DISCHARGED BY REGION AND SELECTED COUNTRY OF ORIGIN

Region/Country	Tonnes						
	1988	1993	1994	1995	1996	1997	1998
Total	263,248	444,019	529,334	577,749	622,019	696,778	651,568
South East Asia	77,668	119,529	134,259	136,795	154,068	168,936	167,875
Malaysia	15,917	21,664	23,996	23,409	21,882	26,945	28,675
Philippines	4,423	5,351	7,650	8,251	11,772	16,500	22,837
Thailand	22,599	36,212	42,022	44,934	47,096	51,049	41,902
North East Asia	79,912	136,316	162,282	183,040	196,745	229,292	216,981
Hong Kong	15,566	28,644	35,562	39,403	40,720	46,764	40,311
Japan	35,934	53,557	57,450	58,314	58,375	71,259	63,021
Taiwan	18,274	25,641	35,888	46,510	50,715	54,607	54,880
South Asia	14,256	26,919	31,165	32,480	37,666	38,684	34,772
India	9,359	16,984	19,971	20,256	24,305	22,394	20,976
West Asia	2,060	4,831	10,263	9,608	8,259	9,869	8,362
Oceania	28,893	60,366	65,680	67,523	69,155	72,437	74,365
Australia	26,082	52,715	56,289	59,067	61,271	64,314	64,412
New Zealand	2,541	7,330	8,771	8,018	7,570	7,808	9,659
Europe	41,315	70,516	86,036	96,429	102,118	116,040	109,179
France	2,424	4,192	5,102	6,626	8,355	14,455	14,269
Germany ¹	3,114	8,626	10,365	11,808	12,297	15,413	18,243
Netherlands	7,716	11,772	18,389	18,209	20,255	16,824	15,893
Scandinavia	3,554	7,240	7,902	9,921	10,471	12,335	11,732
Switzerland	3,338	8,976	9,596	11,966	10,380	14,549	11,393
United Kingdom	7,074	11,377	12,052	13,545	15,454	16,295	17,420
North America	18,880	22,823	36,440	47,944	49,779	57,087	35,994
USA	18,259	21,458	35,121	46,257	48,667	56,275	35,451
Other Regions	264	2,719	3,209	3,930	4,229	4,433	4,040

Source : Civil Aviation Authority of Singapore

Notes : Data refer to Changi Airport only. Data exclude passenger baggage, diplomatic cargo and aircraft stores.

¹ Data prior to 1991 referred to Federal Republic of Germany only.

13.4

AIR CARGO LOADED BY REGION AND SELECTED
COUNTRY OF DESTINATION

Region/Country	Tonnes						
	1988	1993	1994	1995	1996	1997	1998
Total	248,293	394,397	480,430	528,024	568,438	639,570	632,093
South East Asia	59,149	93,143	121,047	126,481	144,984	145,204	113,078
Malaysia	15,125	25,533	28,069	31,272	33,002	31,264	25,842
Philippines	5,419	8,463	10,130	12,791	19,043	24,790	25,983
Thailand	16,070	27,597	41,565	36,446	37,207	38,125	30,661
North East Asia	69,529	136,631	166,943	197,688	206,249	233,576	231,638
Hong Kong	18,827	35,840	40,065	45,106	47,708	56,109	54,633
Japan	32,423	56,016	61,934	74,741	77,706	83,056	79,113
Taiwan	7,109	18,413	31,910	36,626	35,251	45,671	45,968
South Asia	13,816	17,150	21,362	25,979	28,861	31,856	38,561
India	7,545	9,491	11,540	15,855	19,069	20,815	24,694
West Asia	6,014	10,583	12,506	11,264	11,527	13,632	16,838
Oceania	23,597	32,114	40,720	43,573	45,662	54,815	58,958
Australia	19,174	25,482	32,394	35,423	37,636	46,006	49,730
New Zealand	3,264	5,711	7,424	7,226	7,167	7,784	8,561
Europe	52,945	73,229	80,721	82,938	85,833	101,670	114,016
France	3,449	2,241	3,339	4,928	6,195	11,933	15,680
Germany ¹	4,026	7,985	8,836	10,106	11,525	14,230	19,874
Netherlands	10,077	13,729	16,963	14,766	15,496	15,127	16,072
Scandinavia	2,460	4,354	4,008	4,897	5,537	6,241	5,552
Switzerland	3,913	7,050	6,627	8,289	7,896	8,843	8,213
United Kingdom	11,771	11,899	12,594	12,927	16,095	17,346	20,159
North America	20,912	27,869	32,960	35,620	39,667	52,477	52,418
USA	19,942	26,465	31,798	34,408	39,140	51,896	51,529
Other Regions	2,331	3,678	4,171	4,481	5,655	6,340	6,586

Source : Civil Aviation Authority of Singapore

Note : See notes to Table 13.3.

13.5

AIR PASSENGER ARRIVALS BY REGION AND SELECTED
COUNTRY OF EMBARKATION

Thousand

Region/Country	1988	1993	1994	1995	1996	1997	1998
Total	5,686	9,421	10,134	10,920	11,587	11,916	11,292
South East Asia	2,692	4,420	4,614	4,944	5,211	5,235	4,602
ASEAN	2,677	4,317	4,569	4,876	5,117	5,145	4,534
Brunei	115	127	129	133	140	139	132
Indonesia	667	1,162	1,265	1,400	1,583	1,610	1,181
Malaysia	1,090	1,818	1,842	1,944	1,854	1,820	1,601
Philippines	145	208	229	207	279	326	306
Thailand	660	1,002	1,004	1,074	1,134	1,121	1,182
Vietnam	na	na	100	119	127	130	131
North East Asia	1,136	2,217	2,471	2,761	2,956	2,947	2,745
Hong Kong	450	725	733	795	887	816	793
Japan	476	871	961	1,049	1,104	1,086	930
Taiwan	135	351	433	467	445	456	436
South Asia	341	480	517	602	644	755	768
India	216	269	289	348	383	458	475
Pakistan	27	34	39	40	43	44	42
Sri Lanka	56	96	98	100	96	107	109
West Asia	69	115	123	126	128	133	143
Oceania	676	930	1,029	1,056	1,087	1,172	1,300
Australia	572	795	873	908	933	1,010	1,113
New Zealand	85	120	138	134	142	150	176
Europe	616	945	1,033	1,075	1,172	1,259	1,330
France	33	63	76	74	84	109	120
Germany ¹	69	167	180	197	223	228	270
Netherlands	74	93	110	117	119	116	117
Scandinavia	33	47	47	46	50	58	56
Switzerland	46	69	77	89	112	113	102
United Kingdom	228	340	359	384	426	472	504
North America	112	222	246	241	264	287	276
USA	105	197	221	220	247	269	255
Other Regions	44	92	102	115	125	127	129

Source : Civil Aviation Authority of Singapore

Notes : Data refer to Changi Airport only.

Data exclude transit passengers who continued their journey on the same flight.

¹ Data prior to 1991 referred to Federal Republic of Germany only.

13.6

AIR PASSENGER DEPARTURES BY REGION AND SELECTED
COUNTRY OF DISEMBARKATION

Thousand

Region/Country	1988	1993	1994	1995	1996	1997	1998
Total	5,720	9,375	10,069	10,823	11,542	11,883	11,231
South East Asia	2,635	4,303	4,522	4,825	5,113	5,153	4,397
ASEAN	2,623	4,207	4,480	4,765	5,022	5,070	4,330
Brunei	121	126	127	132	144	139	125
Indonesia	679	1,218	1,336	1,467	1,618	1,678	1,207
Malaysia	1,030	1,656	1,684	1,780	1,743	1,723	1,457
Philippines	128	196	224	215	278	319	316
Thailand	664	1,011	1,011	1,053	1,108	1,079	1,095
Vietnam	na	na	99	119	132	132	130
North East Asia	1,130	2,266	2,495	2,779	2,960	2,962	2,792
Hong Kong	428	740	741	797	881	782	824
Japan	486	886	963	1,059	1,101	1,103	957
Taiwan	142	369	454	491	474	508	462
South Asia	345	459	491	553	602	697	765
India	222	263	277	323	359	419	457
Pakistan	27	35	39	40	41	38	34
Sri Lanka	51	91	94	93	86	101	112
West Asia	69	106	115	113	118	120	142
Oceania	723	990	1,082	1,135	1,164	1,240	1,376
Australia	616	846	922	979	999	1,072	1,183
New Zealand	88	127	144	143	153	156	182
Europe	660	925	1,012	1,048	1,151	1,259	1,321
France	38	63	74	73	82	111	123
Germany ¹	74	155	171	189	221	229	270
Netherlands	69	87	103	110	114	117	123
Scandinavia	34	48	48	47	53	61	58
Switzerland	53	73	85	94	116	120	106
United Kingdom	238	325	355	372	409	447	473
North America	115	231	251	256	308	327	308
USA	107	204	234	235	290	307	285
Other Regions	42	95	102	115	126	126	130

Source : Civil Aviation Authority of Singapore

Note : See notes to Table 13.5.

13.7 PUBLIC ROADS (End of Period)

	Kilometres						
	1988	1993	1994	1995	1996	1997	1998
Total	2,810	2,989	3,027	3,056	3,072	3,101	3,122
Paved Roads	2,725	2,905	2,943	2,972	2,988	3,017	3,038
Expressways	96	112	128	132	139	148	150
Major Arterial Roads	500	563	565	567	566	559	560
Collector Roads	238	309	315	326	330	340	345
Local Roads Improved	1,891	1,921	1,935	1,947	1,953	1,970	1,983
Local Roads Unimproved	85	84	84	84	84	84	84

Source : Land Transport Authority (with effect from 1995)

13.8 MOTOR VEHICLE POPULATION (End of Period)

	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	491,808	584,322	611,611	642,129	668,304	683,204	681,081
Cars ¹	237,801	303,864	321,556	342,245	362,142	373,345	370,804
Rental Cars	3,140	4,141	4,341	5,144	5,451	6,152	6,536
Taxis	10,473	13,917	14,750	16,517	16,857	16,933	17,886
Buses	8,924	9,716	10,198	10,723	10,998	11,240	11,429
Motor Cycles & Scooters	117,570	119,939	126,156	129,587	132,344	132,629	133,375
Goods & Other Vehicles	113,900	132,745	134,610	137,913	140,512	142,905	141,051

Source : Land Transport Authority

¹ Include private and company cars.

13.9 CAR POPULATION BY CC RATING

(End of Period)

CC Rating	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	238,984	306,216	324,026	345,432	365,558	377,365	375,217
1,000 cc & below	35,915	46,245	47,019	48,558	51,094	53,094	52,183
1,001 to 1,600 cc	162,573	189,155	195,694	205,563	214,814	217,830	214,321
1,601 to 2,000 cc	30,627	54,083	61,410	67,726	73,018	77,343	78,775
2,001 to 3,000 cc	8,745	13,623	15,950	18,515	20,815	22,856	23,816
3,001 cc & above	1,124	3,110	3,953	5,070	5,817	6,242	6,122

Source : Land Transport Authority

Notes : Figures refer to private cars, company cars and rental cars only.

They do not include taxis and tax exempted cars.

13.10 AGE DISTRIBUTION OF CARS

(End of Period)

Age (Years)	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	238,984	306,216	324,026	345,432	365,558	377,365	375,217
Below 1	26,454	39,621	34,044	32,701	28,785	25,064	27,898
1 - below 2	12,607	29,553	39,616	33,975	32,672	28,774	24,976
2 - below 3	8,156	28,747	29,548	39,591	33,859	32,594	28,683
3 - below 4	13,457	31,920	28,740	29,531	39,558	33,682	31,984
4 - below 5	22,218	35,494	31,902	28,722	29,471	39,518	32,575
5 - below 6	30,742	26,522	35,466	31,874	28,695	29,390	39,294
6 - below 7	31,216	12,787	26,399	35,317	31,734	28,623	29,100
7 - below 8	22,669	8,625	12,442	25,637	34,432	31,110	28,003
8 - below 9	28,786	13,482	8,589	12,392	25,509	34,214	30,771
9 - below 10	16,551	17,589	10,691	7,345	11,049	23,253	29,976
10 - below 11	6,703	8,467	5,047	2,289	2,256	2,343	2,638
11 - below 12	4,639	11,642	8,439	5,017	2,276	2,245	2,324
12 - below 13	1,749	6,993	11,608	8,375	4,976	2,263	2,232
13 - below 14	1,842	10,532	6,956	11,545	8,283	4,924	2,218
14 - below 15	2,647	8,716	10,508	6,910	11,460	8,060	4,637
15 & above	8,548	15,526	24,031	34,211	40,543	51,308	57,908

Source : Land Transport Authority

Note : See notes to Table 13.9.

13.11

ROAD CASUALTIES

	1988	1993	1994	1995	1996	1997	1998
Total ¹							
Killed	226	258	255	225	225	257	222
Injured	6,739	7,636	6,751	6,727	7,628	7,341	7,412
Pedestrians							
Killed	81	61	67	63	70	78	67
Injured	1,135	930	841	831	862	839	804
Pedal Cyclists, Trishaw Riders & Passengers							
Killed	14	19	17	7	15	16	15
Injured	285	265	240	239	262	262	252
Motor Cyclists & Passengers							
Killed	101	123	118	117	94	111	87
Injured	3,093	3,840	3,546	3,538	3,825	3,703	3,641
Motor Vehicle Drivers & Passengers							
Killed	26	52	51	38	39	47	52
Injured	2,149	2,503	2,055	2,050	2,440	2,370	2,674

Source : Traffic Police Department

1 Include other categories of road users not shown in table.

13.12

VEHICLES INVOLVED IN ROAD ACCIDENTS BY TYPE OF VEHICLE

	1988	1993	1994	1995	1996	1997	1998
Total	8,755	9,679	8,856	8,867	9,816	9,652	9,781
Pedal Cycles	301	287	260	252	280	283	267
Motor Cycles & Scooters	3,013	3,462	3,211	3,187	3,440	3,374	3,351
Motor Cars & Station Wagons	3,238	3,823	3,436	3,449	3,941	3,992	4,103
Light Goods Vehicles	857	655	597	567	670	634	608
Heavy Goods Vehicles ¹	673	901	850	872	952	916	967
Buses	548	450	427	454	425	380	403
Others	125	101	75	86	108	73	82

Source : Traffic Police Department

1 Cover lorries, tippers/trucks and trailers only.

13.13

MASS RAPID TRANSIT OPERATION AND RIDERSHIP

	1988	1993	1994	1995	1996	1997	1998
Total Train Km Operated ('000)	3,116	9,046	9,127	9,172	11,746	12,212	12,238
Total Number of Passengers ('000)	81,950	239,634	257,373	271,279	312,429	334,016	346,543
Average Number of Weekday Passengers (No)	212,500	671,900	724,500	765,300	877,000	945,400	988,100
Average Weekday Traffic of Selected Stations (No)							
Orchard Station	66,293	78,086	84,200	85,100	87,800	91,300	88,500
Raffles Place Station	33,385	72,324	97,400	100,400	105,700	108,600	104,600
City Hall Station	57,076	83,708	81,100	81,600	88,100	94,100	94,800
Ang Mo Kio	55,675	70,240	73,200	74,100	83,900	89,400	90,400
Tanjong Pagar	27,796	50,570	63,300	67,500	70,400	71,000	70,800

Source : Singapore MRT Ltd

13.14

POSTAL ARTICLES HANDLED AND TELECOMMUNICATIONS

	1988	1993	1994	1995	1996	1997	1998
Postal Articles Handled (million)	743	1,117	1,181	1,245	1,344	1,454	1,476
Subscribers ('000)							
Telephone ¹	945	1,227	1,310	1,400	1,531	1,656	1,751
Mobile Phone ¹	na	162	222	292	404	743	1,020
Pager ^{1,2}	156	616	772	925	1,032	1,314	1,309
Dial-up Internet ^{1,3}	na	na	2	25	129	267	394
Out-going International ('000)							
Telegrams	267	164	105	45	29	23	16
Telex Calls	13,633	5,178	4,547	4,288	3,344	2,818	2,525
International Telephone Call Minutes ⁴ (million)	165	376	451	550	579	697	794
Telephone Lines Installed ¹ ('000)	924	1,227	1,310	1,400	1,531	1,656	1,751
Residential	648	777	816	858	928	995	1,069

Source : Singapore Post
Telecommunication Authority of Singapore
Singapore Telecom

1 As at end of period.

2 Figures prior to 1992 are as at March of period.

3 The first commercial Internet service, SingNet, was launched in July 1994.

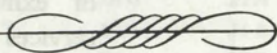
Figures prior to 1995 exclude subscriptions from academic, government and R & D organisations.

4 Exclude calls to Malaysia. Figures prior to 1996 refer to financial year.

From 1998, figures include Real-Time Fax and Budgetcall Services.

TOURISM

TOURISM



1. Figures for 1970 and 1971 are based on the 1970 and 1971 Survey of Visitor Expenditure in Singapore.
2. Figures for 1972 are based on the 1972 Survey of Visitor Expenditure in Singapore.
3. Data for 1973 are preliminary.
4. CIP stands for the Composite Index of Prices for Tourists' Goods and Services.

Visitor Arrivals

Data on visitor arrivals are compiled from Disembarkation/Embarkation Forms (IMM 23A) completed by all visitors arriving in Singapore at the points of entry.

Monthly and annual summaries of characteristics of visitor arrivals from major markets are available respectively in the "Singapore Monthly Report on Tourism Statistics" and the "Singapore Annual Report on Tourism Statistics" published by the Singapore Tourism Board (STB).

Visitor Expenditure

Data are collected in the STB's Survey of Overseas Visitors to Singapore. Face-to-face interviews with visitors leaving Singapore by air are conducted throughout the year.

Definitions

Average Expenditure Per Visitor Per Day : This is obtained by dividing the sum of the total expenditures of those who indicated the total amount spent in Singapore by the sum of the party size and visitor-days.

Events : These refer to any form of organised gatherings such as corporate meetings, conventions, congresses, conferences, symposiums, seminars, trade shows, fairs, exhibitions, or incentive meetings.

Conventions : The terms "congress", "conference", "convention", "symposium" and "seminar" are used interchangeably.

Exhibitions : Trade shows, exhibitions and trade fairs are interchangeable terms. An exhibition is defined as an event held during a limited period of time at which a large number of exhibitors display product samples or services with the ultimate goal of selling to the trade, industrial users and bulk buyers.

Incentive Travel : This refers to any form of travel programme sponsored by a company to reward or motivate employees to achieve extraordinary levels of performance.

Foreign Participants : They refer to foreign nationals who are not permanent residents of Singapore, nor are they based in Singapore; delegates, speakers, observers, and members of the press are included.

14.1

VISITOR ARRIVALS BY REGION AND SELECTED COUNTRY OF RESIDENCE

Thousand

Region/Country	1988	1993	1994	1995	1996	1997	1998
Total	4,186.1	6,425.8	6,899.0	7,137.3	7,292.5	7,198.0	6,241.0
America	281.8	389.6	428.1	425.8	459.5	460.4	425.4
Canada	42.6	63.9	65.5	61.9	65.6	62.5	64.3
USA	226.8	307.4	343.7	345.6	374.1	376.4	342.6
Asia	2,586.7	4,470.4	4,918.8	5,231.6	5,319.4	5,201.1	4,221.8
ASEAN ¹	1,158.0	1,940.5	2,141.1	2,189.9	2,255.9	2,327.0	1,878.6
Hong Kong	124.1	252.8	270.8	279.8	288.6	264.8	273.1
India	203.7	179.7	173.8	188.5	204.2	226.6	243.6
Japan	682.4	1,001.0	1,109.4	1,179.0	1,171.9	1,094.1	843.7
South Korea	54.9	198.3	289.6	351.0	384.5	298.4	99.3
Pakistan	33.8	36.4	38.8	51.1	45.9	40.8	34.9
Saudi Arabia	20.9	21.2	21.1	18.7	16.9	15.0	20.3
Sri Lanka	38.2	47.2	47.5	48.8	46.4	47.1	53.1
Taiwan	152.1	427.0	510.8	563.3	528.5	499.8	362.4
Europe	810.7	1,019.6	1,016.7	966.0	1,002.8	987.6	982.7
Austria	19.4	20.6	21.4	21.6	23.0	18.9	17.6
Belgium & Luxembourg	15.7	19.6	21.6	18.9	20.1	22.0	20.2
France	63.1	77.2	77.2	74.6	76.7	73.6	75.7
Greece	23.9	15.1	15.3	14.5	13.9	13.0	13.5
Italy	53.5	64.5	53.5	47.0	41.9	41.4	40.8
Netherlands	63.9	78.6	75.9	70.6	66.1	63.2	60.1
Scandinavia ²	86.9	90.9	95.0	93.5	102.0	106.2	83.6
Switzerland	56.3	62.5	60.1	54.3	60.7	53.0	48.3
United Kingdom	253.6	310.7	302.0	288.7	312.5	333.2	357.9
Germany ³	118.5	188.2	196.0	190.2	190.6	169.5	159.2
CIS ⁴ & Eastern Europe	30.0	42.3	51.4	47.0	48.5	46.8	42.0
Oceania	458.0	447.9	434.3	426.6	431.0	462.8	519.8
Australia	361.5	365.1	347.4	346.8	351.6	381.5	427.2
New Zealand	79.1	63.0	69.1	66.2	67.7	70.4	81.6
Others	48.9	98.2	101.1	87.2	79.8	86.1	91.4
Africa	46.6	97.6	100.7	86.9	79.6	70.6	79.1

Source : Singapore Tourism Board

Note : Exclude arrivals of Malaysians by land.

1 Figures from 1995 include Vietnam and from 1998 include Laos People's Democratic Republic and Myanmar.

2 Figures from 1998 include Denmark, Norway and Sweden.

3 Data prior to 1991 referred to Federal Republic of Germany only.

4 CIS denotes The Commonwealth of Independent States formerly known as Soviet Union.

14.2 VISITOR ARRIVALS BY (a) SEX AND (b) AGE GROUP

	Thousand					
	1993	1994	1995	1996	1997	1998
Total	6,425.8	6,899.0	7,137.3	7,292.5	7,198.0	6,241.0
Sex						
Males	3,982.7	4,204.2	4,361.4	4,434.2	4,540.7	3,931.2
Females	2,443.1	2,694.7	2,775.9	2,858.3	2,657.3	2,309.7
Age Group (Years)						
Under 15	397.5	439.8	466.0	469.9	485.1	442.2
15 - 19	172.4	186.6	193.4	195.1	202.7	187.1
20 - 24	530.0	561.5	567.7	537.1	516.5	441.0
25 - 34	1,649.0	1,763.5	1,817.8	1,818.4	1,808.3	1,573.0
35 - 44	1,517.9	1,612.4	1,663.5	1,711.8	1,674.6	1,458.1
45 - 54	1,165.2	1,262.7	1,317.3	1,376.7	1,343.2	1,157.6
55 - 64	656.1	706.8	742.4	788.2	755.6	637.1
65 & Over	308.2	338.8	348.6	374.0	364.1	312.2
Not Stated	29.5	27.1	20.6	21.3	47.8	32.7

Source : Singapore Tourism Board

Note : Exclude arrivals of Malaysians by land.

14.3

VISITOR ARRIVALS BY (a) PURPOSE OF VISIT AND (b) TYPE OF ACCOMMODATION

Thousand								
	1988	1993	1994	1995	1996	1997	1998	
Total	4,186.1	6,425.8	6,899.0	7,137.3	7,292.5	7,198.0	6,241.0	
Purpose of Visit								
Holiday	2,786.2	3,751.9	4,024.1	3,965.4	3,880.2	3,442.2	2,828.1	
Business	531.9	863.0	929.4	1,010.8	1,063.2	1,156.0	1,029.6	
Business & Holiday	187.2	206.6	213.3	212.4	212.3	208.5	172.3	
Others	327.8	982.5	1,101.4	1,234.1	1,452.2	1,724.3	1,600.3	
In Transit	352.9	621.8	630.8	714.6	684.7	667.0	610.6	
Type of Accommodation								
Hotel	3,232.4	4,709.9	5,065.9	5,121.3	5,100.1	4,553.0	3,682.9	
Residence of Friends/Relatives	447.7	743.3	745.5	766.7	764.7	766.1	707.9	
Others	314.4	599.3	686.0	806.7	936.4	1,367.1	1,372.1	
No Accommodation Required	191.6	373.3	401.6	442.6	491.3	511.8	478.1	

Source : Singapore Tourism Board
Note : Exclude arrivals of Malaysians by land.

14.4

VISITOR ARRIVALS BY LENGTH OF STAY

Thousand

Length of Stay (Days)	1988	1993	1994	1995	1996	1997	1998
Total	3,972.8	6,251.7	6,723.5	6,902.2	7,073.6	6,922.6	5,963.5
Under 1	384.7	872.6	969.6	1,066.6	1,243.7	1,303.8	1,121.8
1	823.2	1,462.2	1,606.1	1,727.5	1,825.2	1,778.7	1,508.5
2	918.6	1,503.2	1,589.7	1,577.0	1,526.7	1,397.5	1,156.4
3	708.2	977.2	1,041.3	1,019.2	1,003.6	975.4	839.5
4 - 7	760.9	916.3	994.2	983.3	959.6	949.0	838.3
8 - 14	249.0	339.0	331.3	325.5	316.9	320.5	309.6
15 - 29	) 102.1	108.8	121.9	123.1	130.4	124.5	
30 - 59	) 128.1	44.8	46.9	45.7	41.0	39.9	39.7
60 & Over	) 34.3	35.6	35.5	33.7	27.4	25.2	
Average Length of Stay (Days)	3.4	3.6	3.5	3.4	3.3	3.3	3.4

Source : Singapore Tourism Board

Notes : Exclude arrivals of Malaysians by land.

Refer to visitors who left Singapore during the period specified.

14.5

AVERAGE EXPENDITURE PER VISITOR PER DAY BY COUNTRY OF RESIDENCE

Dollars

Country	1987	1992	1993	1994	1995	1996	1997
Total	219	213	237	216	221	220	206
ASEAN	203	229	271	241	277	255	249
Australia	194	234	230	170	194	184	201
Canada	179	158	164	158	131	147	138
China	na	95	277	138	146	165	133
France	257	210	256	165	164	187	245
Germany	202	201	169	177	155	163	170
Hong Kong	136	136	148	153	154	160	171
India	237	184	286	235	231	216	207
Italy	300	245	196	209	215	226	220
Japan	307	197	244	236	229	221	197
Netherlands	176	185	185	170	143	153	138
New Zealand	188	210	233	180	227	216	193
South Africa	na	na	638	320	358	312	284
South Korea	na	164	163	183	160	307	154
Switzerland	201	216	184	185	213	193	158
Taiwan	199	205	184	256	195	203	152
United Kingdom	199	156	162	141	174	148	162
USA	198	164	180	194	163	181	195

Source : Singapore Tourism Board

14.6 OUTBOUND DEPARTURES OF SINGAPORE RESIDENTS BY MODE OF TRANSPORT

										Number
1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total					2,156,235	2,446,519	2,867,242	3,304,714	3,671,149	3,744,944
Air					1,587,416	1,740,030	1,979,378	2,204,125	2,391,808	2,197,759
Sea					568,819	706,489	887,864	1,100,589	1,279,341	1,547,185

Source : Singapore Immigration & Registration

14.7 HOTELS AND CESS COLLECTION

	1988	1993	1994	1995	1996	1997	1998
Tourist Hotels ¹							
Number (At End Year)	67	70	75	80	89	94	101
Number of Rooms Available	22,612	23,959	24,601	25,590	27,010	27,915	27,540
Weighted Average Hotel Tariff (\$)							
Single	97.0	171.0	173.0	183.0	182.0	174.0	160.0
Double	99.0	180.0	181.0	189.0	187.0	179.0	163.0
Average Occupancy Rate (%)	79.3	83.4	86.6	84.1	82.2	79.5	71.3
Cess Collected ² (\$ ' 000)	14,420.9	40,483.6	19,748.7	11,896.1	12,494.0	12,512.0	10,352.0
Cess on Food & Beverages ² (\$ ' 000)	31,177.0	59,957.0	28,406.0	17,332.0	17,328.0	17,458.0	14,663.0

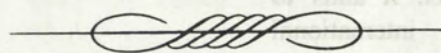
Source : Singapore Tourism Board
Customs & Excise Department

1 Refer to gazetted hotels.
2 With effect from 1 April 1994, the rate has been reduced from 4% to 1%.

							Number
	1987	1992	1993	1994	1995	1996	1997
Events							
Conventions	421	582	702	642	673	996	1,011
Exhibitions	49	76	78	96	114	106	104
Incentive groups	1,090	2,548	3,307	3,348	3,275	3,693	3,059
Foreign Participants							
Conventions	31,668	34,176	34,864	52,591	56,119	52,004	59,577
Exhibitions	166,311	249,170	243,476	216,455	230,507	254,996	195,037
Incentive Groups	55,546	99,025	117,630	113,582	110,798	119,051	149,326

Source : Singapore Tourism Board

FINANCE



Central Provident Fund

Please see text in Section 4.

Definitions

Money Supply: Refers to the amount of money in an economy. Narrowly defined, money supply (M1) consists of currency in active circulation and demand deposits. A broad definition of money supply (M2) comprises money supply (M1) and quasi money. The latter includes fixed, savings and other deposits with banks as well as negotiable certificates of deposit in Singapore dollar issued by Singapore banks. Money supply (M3) consists of M2 and net deposits with non-bank financial institutions.

Asian Currency Unit (ACU): Refers to an operational unit of a financial institution which has been granted approval by the MAS to participate in the Asian Dollar Market in Singapore. The ACU is essentially a separate accounting unit of a financial institution set up for its transactions in the Asian Dollar Market.

Official Foreign Reserves: Refers to the gold and foreign exchange, Special Drawing Rights and Singapore's reserve position in the International Monetary Fund.

Banking and Finance Company Statutes: are compiled from monthly returns submitted to the MAS.

Asian Dollar Market: The Asian Dollar Market was officially established in October 1968 when approval was first given for a bank to operate an Asian Currency Unit (ACU). Since then, merchant banks have also been allowed to operate ACUs. There are now a total of 197 ACUs in operation. Data on ACUs are compiled from returns submitted regularly by the ACU operators to the MAS.

Insurance: The insurance industry is regulated by the MAS under the Insurance Act (Cap. 142). The MAS is responsible for supervising and developing the insurance industry in Singapore.

Insurance Business in Singapore: comprises life and general insurance. The general insurance business covers a wide range of risks, including fire, theft, marine, motor, aviation, and other risks. Life insurance covers the risk of death, providing a lump sum payment to the beneficiary upon the insured's death.

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Before 1971, the various monetary functions normally associated with a central bank were performed by several government departments and agencies. To centralise these functions, the Monetary Authority of Singapore (MAS) was established in 1971 to assume the central bank role except for the currency issuing function which remained the responsibility of the Board of Commissioners of Currency. The MAS conducts monetary and exchange rate policies appropriate for steady and non-inflationary economic growth in Singapore. It administers the statutes pertaining to money and banking and formulates policies for the development of a sound banking system and an orderly financial market. It aims to develop Singapore into an international financial centre.

Banking and finance company statistics are compiled from monthly returns submitted to the MAS.

Asian Dollar Market

The Asian Dollar Market was officially established in October 1968 when approval was first given for a bank to operate an Asian Currency Unit (ACU). Since then, merchant banks have also been allowed to operate ACUs. There are now a total of 197 ACUs in operation. Data on ACUs are compiled from returns submitted regularly by the ACU operators to the MAS.

Insurance

The insurance industry is regulated by the MAS under the Insurance Act (Cap 142). The MAS is responsible for supervising and developing the insurance industry in Singapore.

Insurance business in Singapore comprises life and general insurance. The general insurance business covers a wide range

of risks such as fire, marine and aviation, motor, workmen's compensation, public liability and personal accident. The main types of insurance plans offered by life insurers are whole life insurance, endowment insurance, term insurance and annuity contracts.

Data on insurance are compiled by the MAS from returns submitted by all insurance companies in Singapore.

Statistics on banking, finance and insurance may be found in the "Monthly Statistical Bulletin" and MAS annual report published by the MAS.

Central Provident Fund

Please see text in Section 4.

Definitions

Money Supply: Refers to the amount of money in an economy. Narrowly defined, money supply (M1) consists of currency in active circulation and demand deposits. A broad definition of money supply (M2) comprises money supply (M1) and quasi money. The latter includes fixed, savings and other deposits with banks as well as negotiable certificates of deposit in Singapore dollar issued by Singapore banks. Money supply (M3) consists of M2 and net deposits with non-bank financial institutions.

Asian Currency Unit (ACU): Refers to an operational entity of a financial institution which has been granted approval by the MAS to participate in the Asian Dollar Market in Singapore. The ACU is essentially a separate accounting unit of a financial institution set up for its transactions in the Asian Dollar Market.

Official Foreign Reserves: Refers to the gold and foreign exchange, Special Drawing Rights and Singapore's reserve position in the International Monetary Fund.

Special Drawing Rights (SDR): Refers to an international reserve asset created by the IMF and allocated to its members in proportion to their quotas as a supplement to existing reserve assets. The SDR is a unit of

account of the IMF. The valuation of the SDR is determined on the basis of a basket of five currencies: the US Dollar, the Deutschmark, the French Franc, the Japanese Yen and the Pound Sterling.

	1988	1992	1994	100 months ending 31 March 1995	100 months ending 31 March 1996	100 months ending 31 March 1997
Money Supply (M1)	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Financial Institutions	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9
Post Office Savings Bank	11,913.0	10,727.8	10,727.8	10,727.8	10,727.8	10,727.8
Finance Companies	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9
Net Deposits with Non-bank Financial Institutions	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Net Deposits with Bank	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Money Supply (M2)	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Financial Institutions	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9
Post Office Savings Bank	11,913.0	10,727.8	10,727.8	10,727.8	10,727.8	10,727.8
Finance Companies	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9
Net Deposits with Non-bank Financial Institutions	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Net Deposits with Bank	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Money Supply (M3)	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Financial Institutions	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9
Post Office Savings Bank	11,913.0	10,727.8	10,727.8	10,727.8	10,727.8	10,727.8
Finance Companies	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9	2,041.9
Net Deposits with Non-bank Financial Institutions	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7
Net Deposits with Bank	42,087.6	42,130.7	42,130.7	42,130.7	42,130.7	42,130.7

15.1 CURRENCY IN CIRCULATION

(End of Period)

	1988	1993	1994	1995	1996	1997	1998
Gross Circulation (\$m)	6,702.2	9,674.7	10,169.6	10,756.5	11,276.2	11,732.7	11,337.9
Notes	6,323.1	9,073.3	9,520.2	10,053.9	10,520.9	10,928.1	10,515.1
Coins	379.1	601.4	649.4	702.6	755.4	804.6	822.8
Active Circulation ¹ (\$m)	5,996.7	8,942.1	9,420.3	9,906.5	10,293.1	10,703.8	10,146.2
Ratio of Active to Gross Circulation (%)	89.5	92.4	92.6	92.1	91.3	91.2	89.5

Source : Board of Commissioners of Currency, Singapore

1 Refer to gross circulation less amounts held by Government treasuries and banks as well as commemorative coins issued by the Board of Commissioners of Currency, Singapore.

15.2 MONEY SUPPLY

(End of Period)

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Money Supply (M1)	11,957.7	22,882.2	23,411.5	25,349.2	27,040.0	27,510.9	27,239.1
Currency in Active Circulation ¹	5,996.7	8,942.1	9,420.3	9,906.5	10,293.1	10,703.8	10,146.2
Demand Deposits of Private Sector	5,961.0	13,940.1	13,991.2	15,442.7	16,746.9	16,807.1	17,092.9
Money Supply (M2)	42,087.6	82,130.3	93,980.6	101,967.3	111,950.8	123,443.4	160,783.9
M1	11,957.7	22,882.2	23,411.5	25,349.2	27,040.0	27,510.9	27,239.1
Quasi-Money	30,129.9	59,248.1	70,569.1	76,618.1	84,910.8	95,932.5	133,544.8
Fixed Deposits	20,898.1	40,321.0	53,622.8	54,908.2	59,987.0	72,704.6	81,294.6
S\$ Negotiable Cert of Deposits	846.8	835.4	596.2	815.1	844.5	633.5	576.5
Savings and Other Deposits	8,385.0	18,091.7	16,350.1	20,894.8	24,079.3	22,594.4	51,673.7
Money Supply (M3) ²	59,123.5	111,369.4	125,835.1	136,736.6	148,494.7	160,766.0	173,581.0
M2	42,087.6	82,130.3	93,980.6	101,967.3	111,950.8	123,443.4	160,783.9
Net Deposits with Non-bank Financial Institutions ³							
Finance Companies	5,092.9	9,301.3	11,863.8	13,273.7	13,192.0	13,969.3	12,797.1
Post Office Savings Bank	11,943.0	19,937.8	19,990.7	21,495.6	23,351.9	23,353.3	-

Source : Monetary Authority of Singapore

1 Exclude commemorative, numismatic and bullion coins issued by the Board of Commissioners of Currency, Singapore and cash held by commercial banks and other financial institutions.

2 The M3 series has been revised to include the Post Office Savings Bank's (POSBank) fixed deposits with MAS.

3 Refer to deposits of finance companies and the POSBank less their deposits with banks. From November 1998, with the acquisition of POSBank by the Development Bank of Singapore, POSBank's data have been incorporated as part of the banking system in M1 and M2 and not as a non-bank financial institution.

15.3

CHANGES IN MONEY SUPPLY AND UNDERLYING FACTORS

(Changes During Year)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Money Supply (M1)	927.2	4,366.6	529.3	1,937.7	1,690.8	470.9	-271.8
Private Sector							
Bank Credit to Private Sector	4,095.2	10,432.3	12,093.6	18,510.5	17,386.4	16,136.6	11,432.5
Quasi Money	4,071.2	2,035.2	11,321.0	6,049.0	8,292.7	11,021.7	37,612.3
Excess of Lending or of Deposits (-)	24.0	8,397.1	772.6	12,461.5	9,093.7	5,114.9	-26,179.8
Public Sector							
Bank Credit to Government	125.6	1,170.6	810.7	2,185.6	1,784.0	1,345.5	7,587.6
Government Deposits with Banks	4,776.7	5,643.6	5,788.7	9,756.3	6,440.2	599.5	201.2
Excess of Lending or of Deposits (-)	-4,651.1	-4,473.0	-4,978.0	-7,570.7	-4,656.2	746.0	7,386.4
Net Foreign Assets of Banking System							
Monetary Authorities ¹	1,628.8	9,773.7	5,860.3	9,702.0	6,815.6	7,441.4	-658.0
Banks	1,995.3	-4,391.4	-1,707.3	-7,903.9	-6,343.6	-9,361.6	17,683.3
Others	1,930.2	-4,939.8	581.7	-4,751.2	-3,218.7	-3,469.8	1,496.3

Source : Monetary Authority of Singapore

Note : With effect from November 1998, figures include Post Office Savings Bank.

1 Refer to the Monetary Authority of Singapore and the Board of Commissioners of Currency, Singapore.

15.4 OFFICIAL FOREIGN RESERVES

(End of Period)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Total Foreign Reserves	33,276.6	77,866.8	85,165.5	97,336.6	107,750.8	119,616.8	124,584.4
Special Drawing Rights	232.7	214.9	224.6	240.1	249.5	287.8	399.6
Reserve Position in the International Monetary Fund	228.3	361.2	381.5	430.3	428.8	564.3	614.5
Gold & Foreign Exchange	32,815.6	77,290.7	84,559.4	96,666.2	107,072.5	118,764.7	123,570.3

Source : Monetary Authority of Singapore

15.5 EXCHANGE RATES

(Average for the Year)

Currency	1988	1993	1994	1995	1996	1997	1998
Singapore Dollar Per							
Ringgit Malaysia	0.7691	0.6277	0.5823	0.5651	0.5605	0.5353	0.4271
US Dollar	2.0124	1.6158	1.5274	1.4174	1.4100	1.4848	1.6736
Sterling Pound	3.5837	2.4271	2.3377	2.2369	2.2017	2.4334	2.7722
Deutschemark	1.1488	0.9781	0.9423	0.9900	0.9377	0.8569	0.9522
French Franc	0.3388	0.2858	0.2754	0.2843	0.2758	0.2546	0.2841
100 Japanese Yen	1.5713	1.4568	1.4951	1.5154	1.2971	1.2277	1.2823
100 Korean Won	0.2750	0.2014	0.1900	0.1838	0.1754	0.1587	0.1204
100 New Taiwan Dollar	7.0387	6.1279	5.7724	5.3382	5.1354	5.1751	5.0004
Hong Kong Dollar	0.2578	0.2089	0.1976	0.1832	0.1823	0.1918	0.2160
Australian Dollar	1.5775	1.0983	1.1166	1.0510	1.1040	1.1025	1.0518

Source : Monetary Authority of Singapore

15.6 ASSETS OF BANKS

(End of Period)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Total	96,441.2	170,250.4	201,952.5	224,578.7	252,723.4	289,572.3	309,974.6
Cash	568.3	578.3	593.5	688.8	811.2	802.2	998.2
Amounts Due from Banks	38,148.1	62,516.6	79,152.9	79,837.0	86,112.6	99,935.3	106,344.3
In Singapore	8,832.6	17,401.5	28,411.2	30,926.6	33,555.1	30,220.6	38,215.6
Outside Singapore ¹	29,315.5	45,115.1	50,741.7	48,910.4	52,557.5	69,714.7	68,128.7
Balances with The Monetary Authority of Singapore	2,370.9	5,198.9	5,564.3	6,471.8	7,095.4	7,702.2	5,430.8
S\$ Negotiable Certificates of Deposit Held	145.8	180.3	71.0	104.9	198.5	212.5	175.0
Investments in Securities & Equities	9,052.6	17,976.0	19,496.4	22,299.0	24,633.3	26,405.8	35,231.8
In Singapore	8,805.4	17,559.8	18,326.6	21,169.8	23,339.4	25,078.3	33,851.3
Outside Singapore	247.2	416.3	1,169.8	1,129.2	1,293.9	1,327.5	1,380.5
Loans & Advances Including Bills Financing	41,848.8	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,636.6
Bills Discounted or Purchased	4,096.9	5,835.8	6,247.8	6,879.2	8,693.4	9,363.5	4,924.5
Payable outside Singapore	1,403.9	1,530.6	1,947.2	2,211.7	2,928.8	3,812.4	1,937.7
Payable inside Singapore	2,693.0	4,305.3	4,300.6	4,667.6	5,764.6	5,551.1	2,986.8
Loans & Advances	37,751.9	72,618.4	84,726.4	102,094.7	118,294.3	133,880.3	146,712.1
All Other Assets	4,306.6	5,346.0	6,100.3	6,203.2	6,884.7	11,270.6	10,157.8

Source : Monetary Authority of Singapore

Note : With effect from November 1998, figures include Post Office Savings Bank.

¹ Include Asian Currency Units.

15.7 LIABILITIES OF BANKS (End of Period)

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Total	96,441.2	170,250.4	201,952.5	224,578.7	252,723.4	289,572.3	309,974.6
Deposits of Non-bank Customers	42,475.3	85,400.8	99,032.2	108,885.5	118,201.5	124,143.0	162,310.4
Demand Deposits	6,636.2	15,765.4	15,787.6	17,537.8	18,862.7	18,297.4	18,427.1
Fixed Deposits	26,507.5	49,877.9	65,083.2	67,389.6	71,802.7	80,089.1	88,658.1
Savings Deposits	9,024.7	16,895.3	16,900.2	23,501.3	27,168.2	25,439.4	54,862.4
Other Deposits	306.9	2,862.1	1,261.2	456.8	368.0	317.2	362.7
S\$ Negotiable Certificates of Deposit Issued	992.7	1,015.7	667.2	920.0	1,043.0	846.0	751.5
Amounts Due to Banks	39,327.6	62,264.7	77,295.1	86,063.1	101,576.8	125,856.1	105,290.6
In Singapore	8,872.9	16,626.7	25,125.5	29,881.0	34,328.6	31,134.2	29,769.6
Outside Singapore ¹	30,454.7	45,638.0	52,169.6	56,182.1	67,248.2	94,721.9	75,521.0
All Other Liabilities	13,645.6	21,569.2	24,958.1	28,710.1	31,902.1	38,727.2	41,622.2

Source : Monetary Authority of Singapore

Note : With effect from November 1998, figures include Post Office Savings Bank.

¹ Include Asian Currency Units.

15.8 BANKS' LOANS AND ADVANCES TO NON-BANK CUSTOMERS BY INDUSTRY (End of Period)

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Total (Including bills financing)	41,848.8	78,454.3	90,974.2	108,974.0	126,987.7	143,243.8	151,636.6
Agriculture, Mining & Quarrying	81.4	105.5	119.8	159.3	132.8	187.6	223.6
Manufacturing	6,698.5	8,353.4	8,856.2	11,003.1	12,248.2	12,472.0	12,249.2
Building & Construction ¹	8,010.2	23,112.6	28,212.8	34,195.6	41,803.5	49,169.6	57,368.5
General Commerce	11,591.1	17,732.6	19,442.6	21,644.0	23,931.8	26,349.5	21,549.1
Transport, Storage & Communications	771.7	1,837.8	1,902.2	2,178.1	2,618.7	3,575.7	4,459.7
Financial Institutions	6,729.3	13,132.5	13,644.4	16,888.6	19,448.3	20,997.4	22,719.8
Professional & Private Individuals	5,180.3	9,352.8	13,786.0	16,889.5	20,256.1	22,775.4	21,766.1
Others	2,786.3	4,826.9	5,010.2	6,015.8	6,548.3	7,716.5	11,300.6

Source : Monetary Authority of Singapore

Notes : All data on bills financing include bills refinanced by the Monetary Authority of Singapore.

With effect from November 1998, figures include Post Office Savings Bank.

¹ Include building and building co-operative societies, building developers, real estate agents and housing loans.

ASSETS AND LIABILITIES OF ASIAN CURRENCY UNITS

(End of Period)

Million US Dollars

	1988	1993	1994	1995	1996	1997	1998
Assets							
Total	280,477.2	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	503,609.9
Loans to Non-bank Customers	66,550.7	136,857.3	145,822.5	173,264.8	180,505.5	173,286.3	131,749.8
Inter-bank Funds	194,755.5	214,276.8	234,338.5	258,769.9	278,743.1	330,685.5	330,193.3
In Singapore	5,254.2	12,716.9	17,106.7	18,591.6	22,357.2	29,846.3	25,930.5
Inter-Asian Currency Units	25,800.6	31,713.5	36,356.6	39,669.5	40,236.8	48,882.9	40,696.6
Outside Singapore	163,700.7	169,846.4	180,875.2	200,508.8	216,149.1	251,956.3	263,566.2
Other Assets	19,171.0	34,968.9	36,184.4	46,198.2	47,621.5	53,221.7	41,666.7
Liabilities							
Total	280,477.2	386,103.0	416,345.4	478,232.9	506,870.2	557,193.5	503,609.9
Deposits of Non-bank Customers	47,453.9	62,669.0	65,787.8	80,603.6	95,373.8	113,683.4	113,077.1
Inter-bank Funds	221,803.6	308,940.1	333,537.9	376,106.6	389,469.6	414,526.2	365,433.9
In Singapore	8,444.2	18,502.5	22,676.4	25,133.5	25,257.4	32,271.9	20,742.4
Inter-Asian Currency Units	25,801.4	31,716.6	36,354.3	39,670.2	40,243.3	48,905.3	40,694.4
Outside Singapore	187,558.0	258,721.1	274,507.2	311,302.9	323,968.9	333,349.0	303,997.1
Other Liabilities	11,219.7	14,493.9	17,019.7	21,522.7	22,026.8	28,984.0	25,098.9

Source : Monetary Authority of Singapore

	1988	1993	1994	1995	1996	1997	1998
Assets							
Total	8,478.8	14,994.4	18,997.7	21,135.5	21,189.4	22,210.6	21,941.9
Cash & Balances with The Monetary Authority of Singapore	318.2	591.1	743.0	849.8	827.0	884.6	414.4
Deposits with Banks & Other Institutions	1,527.9	1,802.3	2,333.6	2,666.1	2,165.9	1,904.2	2,721.8
Securities & Equities	518.4	845.5	942.9	1,089.8	1,139.4	1,201.6	1,705.2
Loans & Advances	5,908.8	11,516.8	14,708.6	16,251.9	16,762.7	17,900.2	16,779.4
Hire Purchase Finance	1,039.7	4,245.8	5,616.1	5,580.2	4,982.4	4,958.8	4,331.6
Housing Loans	1,506.7	1,826.9	2,314.3	2,637.3	3,221.1	3,721.7	3,821.2
Other Loans & Advances	3,362.4	5,444.2	6,778.2	8,034.4	8,559.2	9,219.8	8,626.6
Other Assets	205.5	238.8	269.7	277.9	294.5	320.0	321.1
Liabilities							
Total	8,478.8	14,994.4	18,997.7	21,135.5	21,189.4	22,210.6	21,941.9
Capital & Reserves	1,249.8	1,850.2	2,202.9	2,620.9	3,014.7	3,268.5	3,371.2
Deposits from Individuals & Institutions	5,824.9	10,567.8	13,790.3	15,417.8	15,071.6	15,611.8	15,344.6
Savings Deposits	315.0	350.5	320.5	348.8	371.6	392.7	341.7
Fixed Deposits	5,031.8	9,729.2	12,345.5	13,584.6	13,311.8	15,124.9	14,882.9
Other Deposits	478.1	488.0	1,124.3	1,484.4	1,388.2	94.2	120.0
Other Liabilities	1,404.1	2,576.5	3,004.5	3,096.7	3,103.1	3,330.2	3,226.0

Source : Monetary Authority of Singapore

FINANCE COMPANIES' LOANS AND ADVANCES BY INDUSTRY
(End of Period)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Total	2,610.0	4,096.4	5,115.2	6,402.6	7,177.1	7,784.9	7,642.9
Agriculture, Mining & Quarrying	0.5	0.8	0.4	0.9	0.5	0.1	0.1
Manufacturing	236.5	243.7	228.5	263.3	325.4	419.6	424.1
Building & Construction	852.5	1,096.4	1,243.7	1,508.4	1,799.2	1,886.5	1,904.7
General Commerce	245.4	395.0	442.7	535.0	635.9	637.8	627.3
Transport, Storage & Communications	49.9	272.3	267.3	313.5	318.7	359.2	368.5
Financial Institutions	293.2	589.5	742.7	953.3	1,156.3	1,319.4	1,270.5
Professional & Private Individuals	669.8	1,180.3	1,907.7	2,568.6	2,585.6	2,766.7	2,634.5
Others	262.2	318.3	282.2	259.5	355.5	395.7	413.4

Source : Monetary Authority of Singapore

15.12

ASSETS AND LIABILITIES OF MERCHANT BANKS

(End of Period)

Million Dollars

	1988	1993	1994	1995	1996	1997	1998
Assets							
Total	36,923.8	42,205.3	45,049.4	50,253.1	53,580.6	66,661.2	60,548.2
Amounts Due from Banks	14,670.2	15,828.2	18,590.9	21,678.6	21,796.7	28,222.0	27,632.0
In Singapore	491.4	609.0	997.6	715.2	771.9	1,221.3	1,771.2
Outside Singapore ¹	14,178.8	15,219.2	17,593.3	20,963.4	21,024.8	27,000.7	25,860.8
Loans & Advances to Non-bank Customers	12,503.7	11,545.8	13,138.8	15,258.2	17,348.9	21,777.5	19,324.3
Securities & Equities	8,250.3	13,547.4	10,880.2	10,550.1	11,678.3	14,339.0	9,662.9
Other Assets	1,499.7	1,283.9	2,439.4	2,766.3	2,756.7	2,322.8	3,928.9
Liabilities							
Total	36,923.8	42,205.3	45,049.4	50,253.1	53,580.6	66,661.2	60,548.2
Capital & Reserves	4,809.7	5,777.4	5,704.7	6,089.9	6,646.0	8,193.7	7,600.3
Amounts Due to Banks	21,565.0	27,473.3	28,668.5	30,543.6	34,571.8	41,111.3	30,363.7
In Singapore	710.6	471.2	399.0	657.5	481.5	974.2	1,083.2
Outside Singapore ¹	20,854.4	27,002.1	28,269.5	29,886.1	34,090.3	40,137.1	29,280.5
Borrowings from Non-bank Customers	7,481.5	6,711.3	7,453.2	8,779.6	9,030.0	13,814.9	17,751.6
Other Liabilities	3,067.7	2,243.4	3,223.0	4,840.0	3,332.9	3,541.2	4,832.6

Source : Monetary Authority of Singapore

Notes : Data include operations of Asian Currency Units of merchant banks.

Provision of corporate financial advisory services, underwriting and operations in the gold market are not reflected in the data.

¹ Include Asian Currency Units.

15.13

DOMESTIC INTEREST RATES
(End of Period)

	Per Cent Per Annum						
	1988	1993	1994	1995	1996	1997	1998
Banks ¹							
Prime Lending Rate	6.13	5.34	6.49	6.26	6.26	6.96	5.90
Deposit Rates							
3 Months	2.95	2.26	3.62	3.41	3.41	4.10	1.72
6 Months	3.33	2.51	3.89	3.67	3.67	4.20	2.08
12 Months	4.03	2.79	4.23	4.01	3.99	4.41	2.51
Savings Deposit Rate	2.83	1.59	2.93	2.72	2.72	3.08	1.43
Finance Companies							
Deposit Rates ²							
Up to 3 Months	3.41	2.54	3.85	3.18	3.20	4.00	1.85
12 Months	4.48	3.25	4.52	4.01	3.98	4.40	2.71

Source : Monetary Authority of Singapore

¹ Refer to the average quoted by 10 leading banks.² Refer to the average quoted by 10 leading finance companies.

15.14

CONTRIBUTIONS AND WITHDRAWALS OF CENTRAL PROVIDENT FUND

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Amount							
Contributed	4,985.1	10,427.0	11,278.5	13,536.1	14,623.0	15,873.8	16,000.4
Withdrawn	4,010.2	10,943.9	7,292.0	7,252.7	10,529.6	11,456.5	13,610.4
Due to Members (End of Period)	32,529.3	52,334.3	57,649.2	66,035.4	72,566.6	79,657.4	85,276.8

Source : Central Provident Fund Board

Note : Large amount withdrawn in 1993 and 1996 was due to members who withdrew their funds under the Investment Schemes (in 1993) and for the purchase of the Singapore Telecom shares (in 1993 & 1996).

	1988	1993	1994	1995	1996	1997	1998
Million Dollars							
Total	4,010	10,944	7,292	7,253	10,530	11,457	13,610
Housing Schemes ¹							
Public Housing	1,860	1,822	1,875	2,782	3,000	3,460	4,797
Residential Properties	916	1,688	1,626	1,809	2,059	2,327	3,039
Reached 55 Years of Age ²	574	928	1,079	1,112	1,205	1,070	1,286
Leaving Singapore & Malaysia Permanently ³	152	178	202	241	310	350	395
Death	52	73	84	88	109	116	151
Medisave Scheme	170	250	276	296	316	339	349
Others ^{1,4}	287	6,006	2,151	925	3,532	3,794	3,595
Number							
Housing Schemes ⁵							
Public Housing	59,469	49,477	54,241	59,720	55,178	53,544	99,534
Residential Properties	8,670	21,121	18,631	18,482	17,773	17,867	17,670
Reached 55 Years of Age ²	24,397	49,483	43,060	137,829	101,757	117,592	64,928
Leaving Singapore & Malaysia Permanently ³	5,011	5,110	5,859	7,799	8,841	8,218	8,744
Death	3,813	4,802	6,101	6,207	10,545	12,446	15,084

Source : Central Provident Fund Board

1 Refer to net amount withdrawn (gross amount withdrawn less amount refunded) by members in the year.

2 Include first and subsequent withdrawals. In 1995, the increase in the number of withdrawals was due to the withdrawal of the government top-up under Sotus II and CPF top-up scheme.

3 Include Malaysians leaving Singapore permanently.

4 Include withdrawals by persons who are physically/mentally incapacitated and under the various CPF schemes - Minimum Sum, MediShield, Home Protection, Dependents' Protection, Education, Non-Residential Properties, Investment and DelGro Corporation Ltd shares. Amount withdrawn in 1993 increased largely because of Singapore Telecom shares offer.

5 Refer only to members who joined the scheme in the year.

	Volume (Million)	Value (Million \$)
Mainboard (S\$ trades)	35,938.1	74,479.4
Multi-industry	5,751.1	8,834.0
Manufacturing	6,574.1	13,199.6
Commerce	2,149.5	1,982.1
Transport/Storage/Communications	3,926.1	11,079.0
Finance	5,173.5	23,278.9
Construction	1,686.5	861.3
Properties	6,908.4	12,999.1
Hotels/Restaurants	302.8	204.4
Services	882.2	1,221.7
Debentures, Bonds & Loan Stocks	2,583.8	819.3

Source : The Stock Exchange of Singapore

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Revised	2,350.0	2,500.2	2,510.1	2,523.7	2,509.7	2,577.2	2,787.7					
Revised	2,107.9	2,186.9	2,146.9	2,223.0	2,301.4	2,392.0	2,188.7					
Amount of Loans (\$m)												
Given Out	659.2	828.2	924.2	1,022.7	1,097.3	1,122.0	1,129.2					
Revised including interest	618.8	801.7	900.1	973.1	1,041.6	1,051.4	1,043.1					

15.17 SES SECTORAL INDICES

(3 January 1997=1,000)
(End of Period)

Industry	1997	1998
Multi-industry	565.8	783.4
Manufacturing	892.9	847.9
Commerce	588.8	474.6
Transport/Storage/Communications	942.8	792.4
Finance	799.7	832.0
Construction	437.0	374.9
Properties	561.4	483.1
Hotels/Restaurants	720.8	533.6

Source : The Stock Exchange of Singapore

15.18 PLEDGES AT PAWNSHOPS

	1988	1993	1994	1995	1996	1997	1998
Pledges (' 000)							
Received	2,250.0	2,602.2	2,610.1	2,653.7	2,709.7	2,677.5	2,783.7
Redeemed	2,107.9	2,286.9	2,346.9	2,323.0	2,394.4	2,292.0	2,265.7
Amount of Loans (\$m)							
Given Out	659.5	856.2	954.2	1,022.7	1,097.3	1,133.0	1,159.2
Redeemed including Interest	648.6	801.7	909.1	973.1	1,041.6	1,021.4	1,043.1

Source : Registry of Pawnbrokers

15.19 LIFE INSURANCE POLICIES

	1987	1992	1993	1994	1995	1996	1997
Thousand							
Policies in Force (End of Period)	565	1,537	1,823	2,126	2,454	2,792	3,117
New Policies	139	335	381	391	417	440	453
Policies Matured or Discontinued	37	61	96	88	90	101	129
Million Dollars							
Policies in Force							
Amount Insured (End of Period)	28,612	88,786	103,893	125,382	146,426	169,868	187,986
Premiums	539	1,712	2,070	2,547	3,016	3,538	4,202
New Policies							
Amount Insured	7,904	21,358	24,474	27,237	28,866	34,940	37,835
Premiums	151	397	485	578	584	657	837
Policies Matured or Discontinued							
Amount Insured	2,050	5,825	8,322	6,817	8,944	11,498	19,717
Premiums	37	79	126	101	118	135	173

Source : Monetary Authority of Singapore

Million Dollars

	1987	1992	1993	1994	1995	1996	1997
Revenue							
Total	2,511	6,802	8,823	11,220	13,911	17,130	21,353
Balance of Revenue Account at Beginning of Year	1,721	4,542	5,662	7,332	9,483	12,006	14,835
Premiums	515	2,042	2,493	3,020	3,523	4,215	5,505
Net Interest, Dividends & Rents	116	265	327	409	476	559	680
Miscellaneous	159	-47	340	459	429	350	333
Expenditure							
Total	2,511	6,802	8,823	11,220	13,911	17,130	21,353
Claims on Death, Disability & Maturity	99	333	379	439	522	622	1,035
Surrenders	63	85	119	161	191	262	323
Cash Bonuses & Annuities	7	28	39	49	55	63	82
Management Expenses							
Commission	137	409	523	647	697	788	856
Salaries	22	59	66	78	92	107	126
Others	30	104	116	157	162	177	199
Miscellaneous	89	122	248	206	186	274	1,258
Balance of Revenue Account at End of Year	2,063	5,662	7,332	9,483	12,006	14,837	17,474

Source : Monetary Authority of Singapore

ASSETS OF LIFE INSURANCE FUNDS
(End of Period)

Million Dollars							
	1987	1992	1993	1994	1995	1996	1997
Total	2,239	6,290	8,249	10,481	13,228	16,303	19,199
Land & Buildings	84	237	312	497	884	1,174	1,565
Loans	519	1,074	1,204	1,621	2,089	2,519	2,892
On Mortgages	292	433	580	818	1,021	1,293	1,274
On Policies	201	390	470	582	713	866	1,082
Others	26	251	153	220	355	360	536
Investments	1,139	3,905	5,164	6,124	7,404	9,000	10,462
Government & Statutory Authorities	519	1,424	1,418	1,222	1,231	896	990
Debentures & Shares ¹	621	2,481	3,745	4,902	6,173	8,104	9,472
Cash & Deposits	425	838	1,290	1,915	2,496	3,168	3,768
Miscellaneous (including Outstanding Premiums) ²	73	236	279	324	355	442	512

Source : Monetary Authority of Singapore
1 Include other investments.
2 Include furniture.

Million Dollars

	1987	1992	1993	1994	1995	1996	1997
Net Premiums ¹							
Total	443	831	968	1,099	1,221	1,306	1,352
Marine, Aviation or Transit	64	113	128	138	148	153	156
Others	379	719	840	961	1,073	1,153	1,196
Fire	69	100	105	111	121	130	140
Motor Vehicles	166	349	397	458	497	492	488
Miscellaneous	144	270	339	392	455	531	568
Net Claims ²							
Total	218	419	491	509	525	582	626
Marine, Aviation or Transit	26	53	50	48	43	51	47
Others	193	367	441	461	482	531	579
Fire	19	30	39	37	34	43	43
Motor Vehicles	108	208	247	264	277	300	321
Miscellaneous	66	129	156	160	171	188	215

Source : Monetary Authority of Singapore

1 Refer to gross premiums less premiums paid for re-insurance in and out of Singapore.

2 Refer to gross claims paid less recoveries from re-insurance placed in and out of Singapore.

REVENUE AND EXPENDITURE ACCOUNTS OF GENERAL INSURANCE FUNDS

Million Dollars

	1987	1992	1993	1994	1995	1996	1997
Revenue							
Total	1,362	2,543	2,926	3,298	3,597	3,999	4,384
Balance of Revenue Account at Beginning of Year	125	425	547	661	758	862	982
Reserves for Unexpired Risks at Beginning of Year	192	326	358	439	488	545	582
Loss Reserves at Beginning of Year	434	755	831	932	1,003	1,108	1,194
Net Premiums Written	443	831	968	1,099	1,221	1,306	1,352
Net Interest, Dividends & Rents	47	76	77	94	94	103	127
Miscellaneous	120	130	146	73	33	75	147
Expenditure							
Total	1,362	2,543	2,926	3,298	3,597	3,999	4,384
Net Claims Settled, Loss Reserves at End of Year	696	1,253	1,422	1,515	1,640	1,792	1,927
Management Expenses							
Commission	70	127	143	150	161	171	183
Others	107	201	225	272	297	332	338
Miscellaneous	71	54	38	112	81	111	263
Balance of Revenue Account at End of Year	217	550	661	760	871	1,009	1,074
Reserves for Unexpired Risks at End of Year	202	358	437	489	547	584	599

Source : Monetary Authority of Singapore

Million Dollars

	1987	1992	1993	1994	1995	1996	1997
Total	1,123	2,252	2,606	2,931	3,291	3,610	3,787
Land & Buildings	39	108	120	135	194	202	230
Loans	16	15	14	42	53	66	79
Investments	469	860	979	1,185	1,306	1,428	1,338
Government & Statutory Authorities	215	379	350	346	320	273	259
Debentures & Shares	254	482	629	839	986	1,155	1,079
Cash & Deposits	458	923	1,119	1,155	1,276	1,435	1,636
Miscellaneous	142	345	375	414	462	479	504

Source : Monetary Authority of Singapore

PUBLIC FINANCE

For the Year of Assessment 1998, the corporate income tax rate is 20 per cent. There are various tax incentives in the form of tax exemption and concessionary tax rates to promote capital investment, export of services, development of financial and consultancy services, research and development and overseas ventures.

The Government has concluded comprehensive agreements for the avoidance of double taxation with countries which have permanent establishments in Singapore. These most general efforts have been made to ensure that the Government's income tax is not levied on the same income in two different countries.

A 5 per cent Goods and Services Tax (GST) has been introduced since 1 April 1994 to broaden the revenue base and to shift the burden from indirect taxes to indirect taxes. The tax is imposed on almost all goods and services supplied in Singapore except the sale and lease of residential properties and certain financial services which are exempt. International services and exports of goods are zero-rated (i.e. GST is charged at zero per cent).

Government revenue is credited to and current expenditure paid out of the Consolidated Revenue Account.

Development Fund

The Development Fund is established by the Development Fund Act.

The Development Fund is the Government Financial Statements cover the period from 1 April of the year to 31 March of the following year. Data are obtained from ministries and captured into the government's accounting system which produces the actual figures for the Development Fund.

Government Revenue and Expenditure

The main revenue collecting agencies are the Customs and Excise Department and the Inland Revenue Authority of Singapore (IRAS). The former is responsible for the collection of import and excise duties on liquor, tobacco, petroleum motor vehicles, film hire and entertainment duties. The IRAS is responsible for the collection of income tax, property tax, goods and services tax, estate and stamp duties. It also carries out the collection of tax duty levy for the land and all such dues are promptly collected.

Residents of Singapore pay income tax at progressive rates on the income of the preceding year after appropriate deductions have been made. Residents in this context refer to persons having stayed in Singapore for a period of 6 months or more during the reference year. For the Year of Assessment 1998, the tax rates range from 7% to 28% and a one-off tax rebate is given. This one-off tax rebate is given in addition to the 2500 rebate granted to offset the Goods and Services Tax (GST). Deductions include allowances for personal relief, earned income, maintenance of wife, children and dependants, delivery and hospitalisation expenses for a new born fourth child, life insurance premiums, contributions to the Central Provident Fund (CPF) or other approved pension or provident funds, payments to top up an individual's or his parents' retirement account under the CPF Minimum Sum Scheme, course fees and foreign maid levy. Special rebates are also available for newborn second, third and fourth children. Non-resident individuals are not entitled to personal reliefs and are normally taxed at a flat rate (15 per cent on employment income and from the Year of Assessment 1997, 26 per cent on other income).

Government Revenue and Expenditure

The main revenue-collecting agencies are the Customs and Excise Department and the Inland Revenue Authority of Singapore (IRAS). The former is responsible for the collection of import and excise duties on liquor, tobacco, petroleum, motor vehicles, film hire and entertainment duties. The IRAS is responsible for the collection of income tax, property tax, goods and services tax, estate and stamp duties, duties on sweepstakes and lotteries. It also ensures that liabilities of all persons for tax, duty, levy or fee are speedily and correctly assessed, and that all such dues are promptly collected.

Residents of Singapore pay personal income tax at progressive rates on the income of the preceding year after appropriate deductions have been made. Residents in this context refer to persons having stayed in Singapore for a period of 6 months or more during the reference year. For the Year of Assessment 1998, the tax rates range from 2% to 28% and a one-off tax rebate is given. This one-off tax rebate is given in addition to the \$500 rebate granted to offset the Goods and Services Tax (GST). Deductions include allowances for personal relief, earned income, maintenance of wife, children and dependants, delivery and hospitalisation expenses for a new born fourth child, life insurance premiums, contributions to the Central Provident Fund (CPF) or other approved pension or provident funds, payments to top up an individual's or his parents' retirement account under the CPF Minimum Sum Scheme, course fees and foreign maid levy. Special rebates are also available for newborn second, third and fourth children. Non-resident individuals are not entitled to personal reliefs and are normally taxed at a flat rate (15 per cent on employment income and from the Year of Assessment 1997, 26 per cent on other income).

For the Year of Assessment 1998, the corporate income tax rate is 26 per cent. There are various tax incentives in the form of tax exemptions and concessionary tax rates to promote capital investments, export of services, development of financial and consultancy services, research and development and overseas ventures.

The government has concluded comprehensive agreements for the avoidance of double taxation with countries which have trading and other interests in Singapore. There are currently 36 such agreements in force.

A 3 per cent Goods and Services Tax (GST) has been introduced since 1 April 1994 to broaden the revenue base and to shift the reliance from direct taxes to indirect taxes. The tax is imposed on almost all goods and services supplied in Singapore except the sale and lease of residential properties and certain financial services which are exempt. International services and exports of goods are zero-rated (i.e. GST is charged at zero per cent).

Government revenue is credited to and current expenditure paid out of the Consolidated Revenue Account.

Development Fund

The Development Fund is established by the Development Fund Act.

The Development Fund in the Government Financial Statements cover the period from 1 April of the year to 31 March of the following year. Data are obtained from ministries and captured into the government's accounting system which produces the actual figures for the Development Fund.

16 PUBLIC FINANCE (cont'd)

The sources of funds for the Development Fund are:

- (i) moneys appropriated from time to time from the Consolidated Fund;
- (ii) proceeds of any loan raised for the purposes of the fund and appropriated to such purposes by the law raising the loan;
- (iii) interest and other incomes from investments of the fund and profits arising from realisation of any such investments; and
- (iv) re-payments of any loans made from the fund or payments of interest on such loans.

The Fund may be used for:

- (i) construction, improvement, acquisition or replacement of capital assets (eg buildings, vehicles, aircraft, machinery, rolling-stock, roads) required in respect of or in connection with the economic development or general welfare of Singapore;
- (ii) acquisition of land and of any right or interest in or over land and in respect of the use of any invention; and
- (iii) grants and loans to, or investments in any public authority or corporation for any of the purposes mentioned in (i) and (ii) above.

16.1 GOVERNMENT FINANCE

Million Dollars

	1993	1994	1995	1996	1997	1998
Deficit (-) or Surplus	16,789.2	12,341.7	14,825.9	21,275.1	17,780.9	23,163.5
Total Revenue and Grants	32,576.2	32,348.6	38,982.3	50,022.9	61,151.4	59,725.2
Revenue ¹	32,576.2	32,348.6	38,982.3	50,022.9	61,151.4	59,725.2
Grants	-	-	-	-	-	-
Expenditure & Lending minus						
Repayments	15,787.0	20,006.9	24,156.4	28,747.8	43,370.5	36,561.7
Expenditure ²	14,018.5	15,670.0	17,419.0	20,680.9	30,541.7	25,588.3
Lending minus Repayments	1,768.5	4,336.9	6,737.4	8,066.9	12,828.8	10,973.4
Total Financing	-16,789.2	-12,341.7	-14,825.9	-21,275.1	-17,780.9	-23,163.5
Total Net Borrowing	9,479.6	4,429.9	7,054.8	10,861.6	11,411.9	22,537.9
Use of Cash Balances	-26,268.8	-16,771.6	-21,880.7	-32,136.7	-29,192.8	-45,701.4
Use of Foreign Exchange	-16,642.8	-14,217.5	-11,340.0	-21,716.7	-27,258.9	-42,128.8
Use of Domestic Cash Balances	-9,626.0	-2,554.1	-10,540.7	-10,420.0	-1,933.9	-3,572.6

Source : Ministry of Finance

- 1 Revenue refers to receipts credited to the Consolidated Revenue Account, Development Fund Account and Sinking Fund Account, including investment income, capital receipts and investment adjustments.
- 2 Expenditure refers to the outlays made out from the Consolidated Revenue Account, Development Fund Account and Sinking Fund Account.

16.2 GOVERNMENT OPERATING REVENUE

Million Dollars

	1993	1994	1995	1996	1997	1998
Total ¹	19,527.2	23,280.3	24,781.6	28,038.3	30,612.7	28,212.5
Tax Revenue	15,453.7	18,605.0	19,578.6	21,919.5	24,441.4	22,154.1
Income Tax	7,190.1	8,603.2	8,766.1	9,539.0	11,464.3	10,966.0
Corporate & Personal						
Income Tax	6,748.9	8,055.4	8,138.3	8,904.0	9,520.4	9,798.2
Contributions by Statutory						
Boards	441.2	547.8	627.8	635.0	1,943.9	1,167.8
Assets Taxes	1,676.4	1,750.1	1,838.9	1,629.5	2,403.4	1,849.5
Taxes on Motor Vehicles ²	1,884.6	1,965.5	1,817.5	2,443.5	1,765.8	1,547.5
Customs & Excise Duties	1,667.5	1,560.8	1,597.5	1,646.4	1,676.5	1,611.9
Betting Taxes	823.4	884.5	981.6	1,151.4	1,256.7	1,266.6
Stamp Duty	983.3	1,275.0	1,364.3	1,834.5	1,694.5	1,080.8
Goods & Services Tax ³	-	1,110.7	1,647.4	1,788.3	1,989.2	1,688.7
Others	1,228.4	1,455.2	1,565.3	1,886.9	2,191.0	2,143.1
Fees & Charges	3,017.9	3,690.8	3,665.0	4,055.9	4,030.5	3,354.9
Other Receipts ⁴	1,055.6	984.5	1,538.0	2,062.9	2,140.8	2,703.5

Source : Ministry of Finance

- 1 Operating revenue refers to receipts credited to the Consolidated Revenue Account, Development Fund Account and Sinking Fund Account, but excludes Investment Income and Capital Receipts.
- 2 Taxes on motor vehicles comprise additional registration fees, road tax, special tax on heavy-oil engine, passenger vehicle seating fees and non-motor vehicle licences, but exclude import duties on motor vehicles which are classified under Customs and Excise Duties.
- 3 Goods and Services Tax was implemented on 1 April 1994.
- 4 Other Receipts exclude repayment of direct loans and advances but include Interest on Loans.

16.3

GOVERNMENT OPERATING EXPENDITURE

Million Dollars

	1993	1994	1995	1996	1997	1998
Total ¹	9,144.0	9,699.8	10,883.7	12,253.6	15,159.0 ²	14,236.4
Security	4,405.4	4,412.6	5,245.9	6,215.6	6,667.3	7,189.8
Social & Community Services	3,388.0	3,811.1	4,119.9	4,387.8	5,268.2	5,254.4
Education	2,171.3	2,422.8	2,677.7	2,848.4	3,352.6	3,327.4
Health	634.5	724.9	685.0	701.8	979.2	934.2
Environment	222.0	249.7	273.8	289.5	303.9	319.1
Public Housing	109.3	125.0	164.0	150.0	194.5	166.5
Others	250.9	288.7	319.4	398.1	438.0	507.2
Economic Services	432.9	573.6	688.3	910.7	962.9	976.0
National Development	273.2	325.3	357.1	268.8	264.4	236.0
Communications	37.7	44.9	76.4	277.3	311.4	317.7
Trade & Industry	88.8	165.1	214.2	315.8	336.5	334.7
Labour	33.2	38.3	40.6	48.8	50.6	87.6
General Services	606.1	563.8	720.3	739.5	760.6	816.2
Pensions	311.6	338.7	109.3	-	-	-

Source : Ministry of Finance

- 1 Government operating expenditure refers to Expenditure on Manpower, Other Operating Expenditure (excluding expenses on investment and agency fees on land sales), Grants-in-Aid and Pensions (up to first quarter 1995).
- 2 Figure for 1997 includes one-off compensation of \$1.5 billion paid to Singapore Telecom for early termination of its exclusive telecommunication privileges.

16.4 GOVERNMENT DEVELOPMENT EXPENDITURE

Million Dollars									
	1993	1994	1995	1996	1997	1998			
Total ¹	3,410.3	4,418.3	4,671.3	6,920.7	10,705.9	10,557.1			
Security	410.6	488.7	379.6	786.5	1,216.0	1,314.2			
Social & Community Services	1,456.1	1,713.6	2,044.7	3,134.9	2,823.3	4,270.4			
Education	662.8	753.5	779.6	646.4	909.2	1,377.0			
Health	115.8	202.9	326.9	356.0	266.4	231.4			
Environment	190.4	219.2	282.7	520.6	649.2	907.3			
Public Housing	395.9	440.2	498.1	1,021.2	717.7	1,475.3			
Others	91.2	97.8	157.4	590.7	280.8	279.4			
Economic Services	1,190.8	1,754.4	1,816.7	1,986.2	3,201.3	4,228.6			
National Development	586.3	390.5	375.5	174.1	117.2	113.3			
Communications	332.1	824.3	788.1	787.6	1,261.5	1,734.5			
Trade & Industry	103.7	312.1	386.7	501.3	1,161.8	1,566.1			
Labour	0.5	3.2	1.7	0.9	3.0	5.0			
Research & Development	168.2	224.3	264.7	522.3	657.8	809.7			
General Services	352.8	461.6	430.3	1,013.1	3,465.3	743.9			

Source : Ministry of Finance

1 Government development expenditure excludes loans to statutory boards, industrial and commercial enterprises.

16.5 SOURCES AND USES OF DEVELOPMENT FUND

Million Dollars							
	1988	1993	1994	1995	1996	1997	1998
Balance (Beginning of Financial Year)	39,690	47,238	44,431	36,351	25,770	24,073	23,037
Sources							
Total	8,434	5,053	3,070	5,596	18,333	24,597	32,929
Consolidated Revenue Account	-	-	-	-	12,331	17,729	25,096
Consolidated Loan Account	3,098	-	-	-	-	-	-
Others	5,336	5,053	3,070	5,596	6,002	6,868	7,833
Uses							
Total	5,188	7,860	11,150	16,177	20,030	25,632	17,734
Government Development Expenditure	3,635	3,895	3,971	5,962	9,128	8,963	7,207
Loans to Statutory Boards & Enterprises	1,552	3,966	7,179	9,215	10,902	16,669	10,527
Others	-	-	-	1,000	-	-	-

Source : Accountant-General's Department

Note : Data refer to the financial year which begins in April of the current year and ends in March of the following year.

16.6 GOVERNMENT DEBT BY INSTRUMENT

(End of Period)

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Total	41,830.7	69,822.0	75,344.4	86,507.6	94,830.7	102,371.9	115,183.4
Domestic Debt	41,589.9	69,810.4	75,339.7	86,507.6	94,830.7	102,371.9	115,183.4
Registered Stocks & Bonds	36,972.5	56,851.7	56,501.9	59,701.9	67,853.9	73,305.7	80,667.4
Treasury Bills	2,360.0	4,990.0	5,000.0	5,750.0	5,990.0	6,920.0	8,540.0
Advance Deposits	2,257.4	7,968.7	13,837.8	21,055.7	20,986.8	22,146.2	25,976.0
External Debt ¹	240.8	11.6	4.7	-	-	-	-
UK Special Aid	51.3	9.9	4.7	-	-	-	-
World Bank	59.6	1.7	-	-	-	-	-
Asian Development Bank	48.3	-	-	-	-	-	-
Capital Market Loan	51.6	-	-	-	-	-	-
Others	30.0	-	-	-	-	-	-

Source : Accountant-General's Department
The Monetary Authority of Singapore
1 Figures were computed at market rates.

16.7 GOVERNMENT DEBT BY MATURITY

(End of Period)

							Million Dollars		
				1993	1994	1995	1996	1997	1998
Domestic Debt									
(excluding Advance Deposits)				61,841.7	61,501.9	65,451.9	73,843.9	80,225.7	89,207.4
1 year maturity or less				9,090.0	9,850.0	9,700.0	10,998.2	12,358.4	15,089.2
More than 1 year maturity				52,751.7	51,651.9	55,751.9	62,845.7	67,867.3	74,118.2
External Debt ¹									
1 year maturity or less				1.7	4.7	-	-	-	-
More than 1 year maturity				9.9	-	-	-	-	-

Source : Accountant-General's Department
The Monetary Authority of Singapore
1 Figures were computed at market rates.

16.8 REVENUE COLLECTED BY CUSTOMS AND EXCISE DEPARTMENT

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Total	1,147	1,721	1,602	1,630	1,682	1,698	1,646
Import & Excise Duties							
Liquors	241	281	302	313	327	359	337
Tobacco	250	340	327	348	394	405	419
Petroleum	351	585	565	563	587	615	589
Motor Vehicles	226	416	375	369	340	289	269
Others	45	58	3	2	3	2	3
Entertainment Duties	17	16	9	5	5	5	4
Film Hire Duty	5	8	4	-	-	-	-
Licence Fees	7	11	12	12	16	15	15
Anti-Dumping Duty ¹	-	-	-	10	2	2	1
Miscellaneous Receipts	6	6	5	8	9	7	10

Source : Customs and Excise Department

¹ Duty collected with effect from 27 January 1995 for selected items.

16.9 REVENUE COLLECTED BY INLAND REVENUE AUTHORITY

	Million Dollars						
	1988	1993	1994	1995	1996	1997	1998
Total	4,400	10,270	13,081	13,985	15,279	16,857	15,628
Income Tax ¹	2,861	6,798	8,057	8,148	8,893	9,533	9,731
Property Tax ²	807	1,644	1,706	1,776	1,564	2,356	1,809
Goods & Services Tax ³	-	-	1,110	1,649	1,761	1,959	1,722
Estate Duty	16	46	39	59	76	55	45
Stamp Duty	348	972	1,282	1,356	1,843	1,699	1,063
Betting, Sweepstakes & Private Lotteries ⁴	342	810	887	998	1,144	1,255	1,259
Others ⁵	25	-	-	-	-	-	-

Source : Inland Revenue Authority of Singapore.

¹ Include compounding fees and court attendance fees.

² Include compounding fees and surcharges on property tax, search and valuation fees, Auctioneers, Appraisers and House Agent Licence fees and court attendance fees.

³ Goods & Services tax was implemented on 1 April 1994.

⁴ Include duty on Toto sales.

⁵ Include Skills Development Levy. With effect from June 1991, exclude Skill Development Levy as Inland Revenue Authority is no longer collecting this item.

16.10 TAXPAYERS, ASSESSED INCOME AND GROSS TAX ASSESSED, 1997

	Total	Individuals	Companies	Trusts	Clubs & Associations
Taxpayers (No)	498,728	470,389	25,375	825	2,139
Resident	491,558	464,237	24,359	825	2,137
Non-resident	7,170	6,152	1,016	-	2
Assessed Income (\$m)	62,491	31,599	30,725	35	132
Resident	58,369	31,459	26,743	35	132
Non-resident	4,122	140	3,982	-	-
Gross Tax Assessed (\$m)	10,025	2,871	7,111	9	34
Resident	9,248	2,842	6,363	9	34
Non-resident	777	29	748	-	-

Source : Inland Revenue Authority of Singapore
Note : Resident individuals whose chargeable income for Year of Assessment 1997 not exceeding \$16,722 need not pay income tax due to one-off 10% rebate plus \$550 GST rebate.

16.11 ASSESSED INCOME AND GROSS TAX ASSESSED ON INDIVIDUALS BY ASSESSED INCOME GROUP, 1997

	Assessed Income Group (\$)					
	Total	6,000 & below	6,001 - 8,000	8,001 - 10,000	10,001 - 15,000	15,001 - 20,000
Taxpayers (No)	470,389	2,182	504	417	653	490
Resident	464,237	-	-	-	-	48
Non-resident	6,152	2,182	504	417	653	442
Assessed Income (\$m)	31,599	5	4	4	8	9
Resident	31,459	-	-	-	-	1
Non-resident	140	5	4	4	8	8
Gross Tax Assessed (\$m)	2,871	1	1	1	2	2
Resident	2,841	-	-	-	-	-
Non-resident	30	1	1	1	2	2

	Assessed Income Group (\$)					
	20,001 - 30,000	30,001 - 50,000	50,001 - 100,000	100,001 - 200,000	200,001 - 1,000,000	1,000,001 & above
Taxpayers (No)	59,006	207,806	136,680	44,245	17,871	535
Resident	58,415	207,125	136,191	44,093	17,834	531
Non-resident	591	681	489	152	37	4
Assessed Income (\$m)	1,581	7,996	9,276	6,033	5,709	974
Resident	1,567	7,970	9,242	6,013	5,696	970
Non-resident	14	26	34	20	13	4
Gross Tax Assessed (\$m)	46	254	527	704	1,079	254
Resident	43	248	521	700	1,076	253
Non-resident	3	6	6	4	3	1

Source : Inland Revenue Authority of Singapore

Note : See note to Table 16.10.

16.12

ASSESSED INCOME AND GROSS TAX ASSESSED ON COMPANIES BY ASSESSED INCOME GROUP, 1997

	Assessed Income Group (\$)					
	Total	10,000 & below	10,001 - 20,000	20,001 - 30,000	30,001 - 60,000	60,001 - 100,000
Taxpayers (No)	25,375	5,957	2,692	1,800	3,076	2,353
Resident	24,359	5,820	2,597	1,744	2,941	2,261
Non-resident	1,016	137	95	56	135	92
Assessed Income (\$m)	30,724	26	40	45	134	188
Resident	26,742	25	39	44	128	180
Non-resident	3,982	1	1	1	6	8
Gross Tax Assessed (\$m)	7,111	7	10	12	35	48
Resident	6,363	7	10	12	33	46
Non-resident	748	-	-	-	2	2

	Assessed Income Group (\$)					
	100,001 - 300,000	300,001 - 500,000	500,001 - 1,000,00	1,000,001 - 3,000,000	3,000,001 - 5,000,000	5,000,001 & above
Taxpayers (No)	4,027	1,411	1,457	1,452	359	791
Resident	3,865	1,342	1,400	1,380	322	687
Non-resident	162	69	57	72	37	104
Assessed Income (\$m)	720	553	1,046	2,517	1,383	24,072
Resident	690	525	1,004	2,387	1,239	20,481
Non-resident	30	28	42	130	144	3,591
Gross Tax Assessed (\$m)	185	142	266	633	341	5,432
Resident	177	135	256	602	310	4,775
Non-resident	8	7	10	31	31	657

Source : Inland Revenue Authority of Singapore

Note : See note to Table 16.10.

goods. Clothing materials, furniture, consumer durables etc. as well as luxury services are priced monthly. For items with infrequent price fluctuations or whose prices, school fees, utilities charges, bus fares, they are priced quarterly or yearly or as and when their prices are revised. A total of 350 items are selected for regular pricing including durables, vehicles and services.

In Singapore, the Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by consumers for a basket of goods and services commonly consumed by households. The latest series is based on the list of items and weighting pattern derived from the Household Expenditure Survey conducted from October 1995 to September 1997. The expenditure weights of 2,643 households with monthly expenditure of \$20 to \$8,300 were used as the weighting pattern. These households constituted the central 90 per cent of all households surveyed.

The list of items and weighting patterns for the Singapore manufactured products were derived from data collected in the 1990 Census of Industrial Production, while those for the exported and imported products were derived from exports and imports statistics for 1990. The weights for the Domestic Supply Price Index were made proportionate to the combined value of retained imports and locally manufactured goods sold in the domestic market.

Data are collected monthly by mail from importers, exporters and manufacturers. Indices at commodity division level are published in the Department's "Monthly Digest of Statistics". Details on methodology, commodity coverage, weighting pattern and methods of computation can be found in these publications: Import Price Index (1990 = 100), A Guide to Export Price Index, A Guide to

Consumer Price Index (CPI) (1997) (Singapore Statistical Service) and its related "The Consumer Price Index" (Singapore Statistical Service). The price changes over time of a fixed basket of goods and services commonly consumed by households. The latest series is based on the list of items and weighting pattern derived from the Household Expenditure Survey conducted from October 1995 to September 1997. The expenditure weights of 2,643 households with monthly expenditure of \$20 to \$8,300 were used as the weighting pattern. These households constituted the central 90 per cent of all households surveyed.

The index is compiled monthly by the Singapore Department of Statistics using the base-weighted Laspeyres formula. The index is the simple average of the monthly indices. This yearly index is compared with that of the preceding year to obtain the annual rate of inflation for the year.

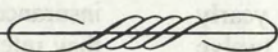
The monthly CPI is published in the Department's "Monthly Digest of Statistics". More detailed CPI data and analysis of consumer price changes are available in the monthly report on the Consumer Price Index. Information on the methodology may also be obtained from the report "The Consumer Price Index, Singapore, based on Household Expenditure Survey 1992/93".

Retail Prices

Retail prices of selected goods are collected regularly from market supermarkets, provision shops, semi-mini markets and other retail outlets located in various housing estates and retail centres. With effect from 1 April 1994, retail prices refer to total prices inclusive of goods and services tax.

The frequency of pricing depends on the price stability of the items. Prices are collected twice every week for perishable food items such as fish, vegetables, meat and

PRICES



Consumer Price Index (CPI)

The Consumer Price Index measures the price changes over time of a fixed basket of goods and services commonly consumed by households. The latest series is based on the list of items and weighting pattern derived from the Household Expenditure Survey conducted from October 1992 to September 1993. The expenditure records of 5,692 households with monthly expenditure of \$820-\$8,300 were used as the weighting pattern. These households constituted the central 90 per cent of all households surveyed.

The index is compiled monthly by the Singapore Department of Statistics using the base-weighted Laspeyres' formula. The yearly index is the simple average of the twelve monthly indices. This yearly index is compared with that of the preceding year to obtain the annual rate of inflation for the year.

The monthly CPI is published in the Department's "Monthly Digest of Statistics". More detailed CPI data and analysis of consumer price changes are available in the monthly report on the Consumer Price Index. Information on the methodology may also be obtained from the report "The Consumer Price Index, Singapore, based on Household Expenditure Survey 1992/93".

Retail Prices

Retail prices of selected goods are collected regularly from markets, supermarkets, provision shops, econ-mini marts and other retail outlets located in various housing estates and retail centres. With effect from 1 April 1994, retail prices refer to total prices inclusive of goods and services tax.

The frequency of pricing depends on the price stability of the items. Prices are collected thrice every week for perishable food items such as fish, vegetables, meat and

poultry. Clothing materials, furniture, consumer durables etc as well as items of services are priced monthly. For items with infrequent price fluctuations eg house rents, school fees, utilities charges, bus fares, they are priced quarterly, yearly or as and when their prices are revised. A total of 3,296 items are selected for regular pricing including brands, varieties and grades.

Wholesale Price Indices

Other price indices consist of the Domestic Supply Price Index and Indices on Singapore manufactured products, imported products and exported products. For imported products, the prices are valued at cif (cost, insurance and freight); for exported products, they refer to fob (free on board) prices; and for locally manufactured products, they are ex-factory prices. The indices are compiled monthly using the base-weighted Laspeyres' formula. The base year for the Domestic Supply Price Index, Singapore Manufactured Products Price Index, Import Price Index and Export Price Index is 1990.

The list of items and weighting patterns for the Singapore manufactured products were derived from data collected in the 1990 Census of Industrial Production, while those for the exported and imported products were derived from exports and imports statistics for 1990. The weights for the Domestic Supply Price Index were made proportionate to the combined value of retained imports and locally manufactured goods sold in the domestic market.

Data are collected monthly by mail from importers, exporters and manufacturers. Indices at commodity division level are published in the Department's "Monthly Digest of Statistics". Details on methodology, commodity coverage, weighting pattern and methods of computation can be found in these publications: Import Price Index (1990 = 100), A Guide to Export Price Index, A Guide to

17.2 CONSUMER PRICE INDEX FOR AGGREGATE DOMESTIC PRODUCT
INCOME GROUPS

17.1

17 PRICES (cont'd)

Singapore Manufactured Products Price Index
and A Guide to Domestic Supply Price Index.

Authority (URA) and Building Materials Price
Index by the Construction Industry
Development Board.

Other Price Indices

Data on selected farm products are
obtained from the Primary Production
Department. The collection and compilation of
data for the Property Price Index and
Commercial Property Rental Index are
undertaken by the Urban Redevelopment

Produce Prices

Prices of rubber are obtained weekly
from the Singapore Commodity Exchange.
Weekly prices for other types of produce are
obtained from the Singapore Chinese Produce
Exchange.

17.1 CONSUMER PRICE INDEX

	Weights ¹	1988	1993	1994	1995	1996	1997	1998
October 1992-September 1993=100								
All Items	10,000	87.8	100.5	103.6	105.4	106.9	109.0	108.8
Food	2,995	94.6	100.3	103.9	106.2	108.5	110.7	110.9
Clothing	606	93.0	100.3	102.6	104.1	104.6	105.3	103.8
Housing	2,341	87.3	100.5	101.8	102.6	103.1	105.5	107.5
Transport & Communications	1,583	79.4	101.0	107.8	108.5	108.9	113.1	106.7
Education	573	79.6	100.5	103.0	107.4	110.6	112.3	116.3
Health	280	80.6	101.0	104.2	105.8	108.3	112.2	117.3
Miscellaneous	1,622	83.1	100.5	102.3	104.8	106.8	106.9	106.2
Percentage Change Over Previous Year								
All Items	10,000	1.5	2.3	3.1	1.7	1.4	2.0	-0.3
Food	2,995	1.4	0.8	3.6	2.3	2.1	2.0	0.2
Clothing	606	3.4	1.2	2.2	1.5	0.5	0.7	-1.5
Housing	2,341	0.3	3.2	1.3	0.7	0.5	2.3	2.0
Transport & Communications	1,583	0.9	2.6	6.7	0.6	0.4	3.9	-5.6
Education	573	4.6	3.3	2.5	4.2	3.0	1.5	3.6
Health	280	2.2	3.7	3.1	1.6	2.3	3.7	4.5
Miscellaneous	1,622	2.2	4.1	1.7	2.5	1.8	0.2	-0.7

1 The weights refer to the consumption pattern of 1992/93 and are used in the computation of the indices for the years 1993-98. Indices for the year 1988 relate to the consumption pattern of 1982/83.

17.2

CONSUMER PRICE INDEX FOR HOUSEHOLDS IN DIFFERENT INCOME GROUPS

Income Group	All Items	Food	Clothing	Housing	Transport & Comm - unications	Education & Stationery	Health	Miscel- laneous
Weights Per 10,000								
Lowest 20%	10,000	3,843	207	3,326	1,072	376	153	1,023
Middle 60%	10,000	3,299	565	2,375	1,348	581	274	1,558
Highest 20%	10,000	1,924	670	1,943	2,866	599	275	1,723
Consumer Price Index (Oct 92-Sep 93=100)								
1996								
Lowest 20%	106.3	108.5	103.9	102.6	104.2	115.1	108.2	109.7
Middle 60%	106.5	108.5	104.6	102.8	105.8	111.1	108.1	107.2
Highest 20%	109.7	108.7	104.8	104.4	117.8	109.9	108.6	105.1
1997								
Lowest 20%	108.3	110.7	104.2	104.2	107.4	116.2	112.5	111.2
Middle 60%	108.3	110.7	105.2	104.5	108.5	112.8	112.3	107.5
Highest 20%	113.3	111.0	105.7	108.3	125.6	112.1	112.1	104.8
1998								
Lowest 20%	109.8	110.7	103.6	106.7	110.0	120.1	118.3	112.4
Middle 60%	108.8	110.9	103.7	106.4	106.9	116.7	117.7	107.1
Highest 20%	108.5	111.5	104.1	110.5	106.6	117.1	116.2	103.3
Percentage Change Over Previous Year								
1997								
Lowest 20%	1.9	2.1	0.3	1.5	3.1	1.0	4.0	1.4
Middle 60%	1.7	2.0	0.6	1.7	2.6	1.5	3.9	0.3
Highest 20%	3.3	2.1	0.8	3.7	6.6	2.1	3.2	-0.3
1998								
Lowest 20%	1.4	-	-0.6	2.5	2.4	3.3	5.2	1.1
Middle 60%	0.5	0.2	-1.4	1.8	-1.5	3.4	4.8	-0.4
Highest 20%	-4.3	0.4	-1.5	2.0	-15.1	4.4	3.7	-1.4

Note : See note to Table 17.1.

17.3

PRICE INDICES OF SELECTED CONSUMER ITEMS

(October 1992-September 1993=100)

	Weights Per 10,000	1988	1993	1994	1995	1996	1997	1998
Utility								
Water Tariff	55	93.3	101.4	102.3	102.3	102.3	118.7	151.1
Electricity Tariff	139	108.3	100.2	98.3	101.5	106.9	109.2	106.8
Gas Tariff	20	82.6	100.0	102.6	113.3	121.6	128.2	128.6
Liquefied Petroleum Gas	34	88.9	100.0	98.5	104.4	105.6	106.1	105.9
Private Road Transport								
Petrol, Premium	216	75.5	99.7	99.2	100.0	101.0	105.5	105.9
Petrol, Intermediate	13	78.1	99.6	98.3	99.2	100.3	105.2	105.6
Other Running Costs	237	74.0	100.2	103.3	103.6	103.0	102.6	99.8
Education								
Primary School								
Miscellaneous Fees	10	66.1	100.4	102.2	104.1	105.6	105.8	105.8
Secondary, Pre-U & JC School &								
Miscellaneous Fees	23	63.0	100.1	105.6	107.0	107.1	107.2	109.0
Health								
Consultation Fees for Adult & Children at Outpatient Dispensary	141	76.7	101.3	105.0	105.8	109.2	115.8	124.5

Note : See note to Table 17.1.

17.4

RETAIL PRICES OF FOOD AND GROCERIES

Dollars

Item	Unit	1988	1993	1994	1995	1996	1997	1998
Rice & Other Cereals								
Thai Rice 100% Fragrant	5 kg pkt	5.14	5.79	6.24	6.35	6.41	7.88	8.16
Instant Noodles	5 pkts	1.77	1.77	1.77	1.79	1.77	1.74	1.72
Ordinary White Bread	400 g	0.67	0.79	0.84	0.86	0.93	0.98	0.98
Vitamin Enriched Bread	400 g	1.15	1.35	1.47	1.50	1.48	1.49	1.49
Plain Butter Cake	500 g	4.30	5.13	5.22	5.28	5.46	5.63	5.63
Meat & Poultry								
Lean Pork	Per kg	6.57	6.13	6.10	6.15	6.78	6.98	6.75
Pork Rib Bones	Per kg	7.30	7.09	7.19	7.20	7.80	8.03	7.76
Fresh Beef	Per kg	12.51	13.56	13.32	13.38	12.63	12.49	12.44
Fresh Mutton	Per kg	10.80	10.41	10.27	10.23	10.29	10.36	10.34
Hen	Per kg	4.02	4.38	4.73	4.46	4.41	4.49	4.41
Duck	Per kg	4.24	5.07	5.23	5.20	5.27	5.38	5.22
Fresh Chicken Wing	Each	0.47	0.48	0.50	0.49	0.48	0.49	0.48
Chicken Extract	½ doz	na	16.78	16.79	16.83	16.83	16.83	16.79
Fish & Other Sea Products								
Kurau (cut)	Per kg	22.72	30.78	34.46	38.03	37.60	38.11	36.29
White Pomfret	Per kg	13.52	16.09	18.59	19.08	18.78	20.03	17.87
Spanish Mackerel (tenggiri)	Per kg	8.03	7.78	8.17	8.31	8.92	9.10	8.29
Flowery Grouper	Per kg	11.25	11.72	12.51	12.80	13.07	13.98	13.06
Gold Banded Scad (kunning)	Per kg	5.15	5.74	5.89	5.59	5.43	5.83	5.52
Sea Bream (kerisi)	Per kg	na	5.44	6.01	6.14	6.51	6.93	6.29
Medium Prawns	Per kg	15.85	14.44	15.79	16.22	16.25	17.34	17.09
Large Prawns	Per kg	21.28	18.60	20.14	21.50	21.20	22.28	21.92
Milk & Eggs								
Fresh Milk	1 litre pkt	na	2.60	2.55	2.57	2.54	2.54	2.55
Condensed Milk	397 g tin	0.97	1.08	1.08	1.03	1.01	1.02	1.02
Milk Powder	2 kg tin	13.98	16.63	16.56	17.09	16.95	17.39	17.00
Hen Eggs	Per 10	1.57	1.36	1.38	1.34	1.58	1.55	1.45

(continued on next page)

Note : Prices between 1988-1992 and 1993-1998 may not be strictly comparable due to changes in specifications.

Item	Unit	1988	1993	1994	1995	1996	1997	1998
Oils								
Deodorised Oil	2 kg bottle	5.31	3.74	3.89	4.21	4.18	4.13	4.22
Corn Oil	2 kg bottle	5.64	5.72	5.80	5.88	5.87	5.91	5.72
Vegetables								
Cabbage	Per kg	1.66	1.77	1.83	1.91	1.88	1.83	1.85
Spinach (bayam)	Per kg	1.74	2.05	1.94	2.02	1.97	1.88	1.87
Small Mustard	Per kg	2.33	2.25	2.07	2.15	2.17	2.04	2.04
Kale	Per kg	3.96	3.04	2.93	3.02	2.78	2.80	2.96
Cauliflower	Per kg	3.99	3.41	3.46	3.52	3.47	3.49	3.48
Long Beans	Per kg	1.89	2.26	2.33	2.52	2.56	2.62	2.60
Tomatoes	Per kg	2.33	2.29	2.38	2.51	2.65	2.63	2.63
Garlics	Per kg	3.23	2.92	2.66	2.97	3.05	3.22	3.47
Carrots	Per kg	2.39	1.98	2.08	2.05	2.00	1.99	1.99
Potatoes	Per kg	1.04	1.04	1.16	1.09	1.13	1.10	1.13
Dried Mushrooms	100g	7.97	8.38	7.46	7.57	7.70	7.55	7.36
Fruits								
Papaya	Per kg	0.86	1.03	1.06	1.10	1.20	1.16	1.25
Bananas (emas)	Per kg	1.23	1.26	1.29	1.30	1.33	1.32	1.32
Watermelon	Per kg	na	1.31	1.39	1.40	1.42	1.37	1.34
Grapes	Per kg	na	6.53	6.68	6.64	6.68	6.78	6.70
Orange	Each	0.38	0.32	0.33	0.32	0.33	0.33	0.33
Apple	Each	0.33	0.35	0.34	0.34	0.34	0.33	0.33
Pear	Each	0.59	0.63	0.63	0.67	0.67	0.66	0.66
Miscellaneous								
Sugar	2 kg pkt	1.68	1.94	1.97	2.01	2.02	2.00	1.93
Coffee Powder	Per kg	11.50	10.77	11.23	11.75	11.75	11.75	11.75
Food Beverage	400 g tin	3.48	3.29	3.29	3.19	3.17	3.21	3.30
Aerated Soft Drinks	330 ml can	0.50	0.54	0.57	0.58	0.55	0.55	0.54
Chocolate	250 g bar	na	3.16	3.16	3.44	3.41	3.55	3.54

17.5

DOMESTIC SUPPLY PRICE INDEX

(1990=100)

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
All Items	10,000	95.9	89.2	87.3	87.4	87.5	86.5	83.8
Food	407	100.2	93.4	95.5	96.7	100.1	101.7	102.5
Live animals	31	106.6	87.9	87.3	89.7	110.1	109.8	102.6
Meat & meat preparations	33	93.6	89.3	92.9	94.2	95.8	95.6	101.1
Dairy produce & eggs	39	85.4	91.7	89.6	91.2	98.2	96.1	98.7
Fish & fish preparations	57	102.0	108.8	112.7	111.4	110.5	114.7	102.5
Cereals & cereal preparations	60	101.2	97.1	96.0	95.5	104.0	108.1	107.5
Vegetables & fruits	75	102.6	96.9	95.9	98.0	100.1	99.3	104.2
Sugar & sugar preparations	27	88.4	75.0	78.8	83.5	81.3	78.1	75.9
Coffee etc & spices	46	129.6	77.1	91.2	93.3	88.9	95.9	107.1
Animal feeding stuff	11	105.1	99.8	98.5	97.8	101.9	101.9	100.4
Miscellaneous food preparations	28	98.2	99.1	100.3	102.5	103.5	106.0	113.2
Beverages & Tobacco	102	92.2	112.4	113.6	113.5	114.1	115.8	121.7
Beverages	55	93.2	107.4	107.9	108.2	107.7	107.2	109.0
Tobacco & manufactures	47	91.0	118.4	120.2	119.8	121.6	125.9	136.5
Crude Materials	133	106.3	94.6	96.7	101.5	101.2	97.4	88.5
Oil seeds, nuts & kernels	7	112.8	89.1	93.1	96.9	100.7	101.8	95.3
Crude rubber incl synthetic	16	151.2	89.3	112.3	139.7	123.4	97.5	82.1
Cork & wood	28	91.4	112.3	119.6	122.7	120.8	118.1	105.4
Textile fibres & waste	7	119.0	90.6	86.5	85.2	84.3	86.9	91.8
Crude fertilizers & minerals	36	81.7	87.1	87.2	83.9	97.2	96.0	82.4
Metallic ores & scrap	22	106.9	81.6	79.8	83.4	74.3	74.1	67.6
Crude materials nec	17	117.0	107.1	91.6	100.1	98.4	98.5	102.2
Mineral Fuels	2,119	75.5	71.7	66.6	68.1	76.5	77.1	58.7
Petroleum & products	2,110	75.5	71.6	66.6	68.1	76.5	77.0	58.5
Gas	9	88.5	87.8	78.7	92.1	95.9	103.8	107.2
Animal & Vegetable Oils	71	144.3	114.1	138.2	152.4	133.9	139.4	172.8
Vegetable oil unprocessed	37	124.8	115.4	143.0	157.5	141.8	144.0	173.9
Other animal & vegetable oils	34	151.6	112.7	133.0	146.7	125.3	134.3	171.5

(continued on next page)

1 The weight for each commodity item is proportional to the value of its total supply or availability in the domestic market in 1990.

17.5

DOMESTIC SUPPLY PRICE INDEX (continued)

(1990=100)

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
Chemicals & Chemical Products	747	111.3	91.8	90.0	90.9	89.0	89.1	87.8
Organic chemicals	133	119.9	80.4	80.4	90.5	81.1	85.3	77.1
Inorganic chemicals	43	112.6	93.0	91.5	86.9	85.8	81.6	84.6
Dyes & colours	54	101.2	96.3	93.4	93.7	91.4	90.2	89.5
Medicinal products	28	114.6	98.1	99.3	102.7	101.5	96.0	102.9
Perfume, toilet preparations	50	93.2	94.7	93.8	93.8	90.8	89.2	90.1
Plastics in primary forms	119	97.7	79.4	87.5	98.0	89.9	90.1	86.2
Plastics in non-primary forms	61	123.1	92.4	90.7	91.0	86.2	80.8	79.3
Chemical products nec	259	97.2	100.8	93.3	86.2	91.6	92.8	94.2
Manufactured Goods	1,457	94.8	93.8	93.5	96.9	94.8	92.9	93.2
Leather products nec	12	89.0	91.0	93.5	103.3	103.4	92.7	71.8
Rubber manufactures nec	37	99.6	100.1	101.9	107.3	109.7	106.9	111.5
Wood & cork manufactures	47	108.4	109.3	109.4	105.8	106.2	106.0	92.2
Paper manufactures	165	102.6	89.0	88.6	101.2	92.9	86.6	86.1
Textile manufactures	225	101.4	86.8	86.8	87.1	85.3	85.4	87.0
Non-metal mineral manufactures	209	80.5	98.8	98.3	99.4	102.7	100.7	94.2
Iron & steel	289	98.8	88.3	85.4	90.4	87.2	85.1	86.6
Non-ferrous metals	149	111.7	90.1	94.7	99.2	94.1	94.6	103.2
Metal manufactures	324	90.6	101.5	100.8	102.1	100.6	99.1	100.4
Machinery &								
Transport Equipment	3,903	105.5	92.8	90.9	87.8	84.8	82.5	84.8
Power generating machinery	267	103.8	95.8	91.4	88.9	86.7	87.3	97.1
Industrial machinery	216	121.6	111.6	113.9	111.4	108.0	106.7	107.4
Metalworking machinery	74	100.1	112.6	116.4	118.8	111.7	106.1	110.0
General industrial machinery	376	92.9	105.3	105.6	105.8	103.7	103.2	104.3
Office & data machines	743	106.1	90.2	82.0	80.2	81.3	78.2	80.1
Telecommunications apparatus	569	104.0	95.1	92.6	92.8	89.8	86.2	85.4
Electrical machinery nec	1,458	108.4	82.4	82.0	76.3	70.3	67.7	70.6
Road vehicles	200	113.6	117.7	120.6	112.9	116.2	114.8	116.5
Miscellaneous Manufactures	1,061	103.7	95.9	95.2	96.4	95.5	95.5	97.6
Prefab building, sanitary, lighting	19	102.2	101.3	101.1	100.3	120.0	120.5	92.2
Furniture, bedding, mattresses	67	101.0	100.5	103.6	104.8	105.5	105.6	108.1
Travel goods	38	97.9	101.7	98.4	98.1	95.8	93.5	99.4
Clothing	122	94.6	98.8	96.6	97.5	97.9	98.6	100.8
Footwear	33	98.6	95.5	93.1	92.2	95.2	102.1	106.5
Scientific instruments	116	104.6	108.9	109.4	107.8	105.8	111.2	118.2
Photographic apparatus	163	104.0	95.3	95.4	97.4	95.7	95.6	100.2
Miscellaneous mfd articles nec	503	107.9	91.3	90.1	92.0	90.3	88.6	89.3

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
All Items	10,000	94.1	83.1	80.2	80.9	80.9	79.2	77.1
Food	349	97.8	94.2	97.0	98.3	97.3	100.2	104.9
Meat & meat preparations	10	97.4	92.6	95.4	98.0	98.0	98.0	98.0
Dairy produce & eggs	53	85.9	95.5	94.1	92.2	91.7	93.9	93.9
Fish & fish preparations	19	99.6	106.6	110.3	120.0	117.8	114.3	106.1
Cereals & cereal preparations	60	94.6	103.5	104.7	105.6	106.0	105.4	106.1
Vegetables & fruits	17	99.0	97.8	98.4	100.3	100.0	100.9	103.7
Sugar & sugar preparations	28	83.9	76.0	80.5	85.8	85.9	80.6	80.4
Coffee etc & spices	88	132.5	84.0	90.7	89.6	86.8	99.8	116.7
Animal feeding stuff	17	93.0	97.7	97.7	97.7	97.7	97.7	98.1
Miscellaneous food preparations	57	93.7	102.2	104.6	108.2	107.1	107.1	110.9
Beverages & Tobacco	102	89.6	122.4	127.1	128.3	130.5	133.2	138.5
Beverages	63	92.4	108.1	110.8	111.2	111.3	110.9	112.8
Tobacco & manufactures	39	84.3	145.4	153.3	156.1	161.5	169.3	180.1
Crude Materials	421	117.2	90.0	98.0	107.7	106.3	94.5	80.7
Crude rubber incl synthetic	123	150.9	91.5	121.7	156.2	135.2	103.3	82.2
Cork & wood	55	97.7	103.9	108.8	110.1	110.4	110.8	110.4
Crude fertilizers & minerals	150	77.8	86.4	84.4	82.9	97.6	93.0	72.1
Metallic ores & scrap	68	107.7	84.3	83.3	83.4	79.9	75.4	71.5
Crude materials nec	25	96.3	90.0	80.1	78.3	79.8	75.4	84.6
Mineral Fuels	1,552	75.3	70.9	62.3	62.6	72.7	73.5	64.3
Petroleum & products	1,530	75.1	70.5	61.9	62.0	72.3	72.9	63.5
Gas	22	88.3	98.3	88.5	103.0	106.2	116.0	116.1
Animal & Vegetable Oils	113	117.2	104.8	111.6	118.5	113.5	111.5	121.6
Vegetable oil unprocessed	62	114.3	104.6	110.3	112.4	109.3	109.4	116.7
Other animal & vegetable oils	51	119.0	105.2	113.1	126.0	118.7	114.0	127.6

(continued on next page)

¹ Based on 1990 production value of the commodity item.

17.6

SINGAPORE MANUFACTURED PRODUCTS PRICE INDEX (continued)

(1990=100)

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
Chemicals & Chemical Products	725	119.8	85.2	85.2	92.3	88.1	89.7	85.1
Organic chemicals	140	116.9	66.9	67.7	88.3	82.0	91.6	70.2
Inorganic chemicals	43	110.9	84.3	82.1	83.9	82.1	75.0	71.9
Dyes & colours	60	96.0	98.5	96.1	99.9	101.3	101.7	102.6
Medicinal products	148	111.8	102.5	100.1	99.2	99.1	97.8	102.1
Perfume, toilet preparations	26	97.0	93.7	90.4	91.4	91.2	91.5	92.1
Plastics in primary forms	188	na	72.0	76.1	88.3	77.5	79.4	73.1
Plastics in non-primary forms	32	149.0	91.4	87.7	91.7	87.9	86.5	85.3
Chemical products nec	88	100.9	99.8	99.0	95.0	94.9	95.1	97.8
Manufactured Goods	872	87.0	93.7	92.9	94.0	95.1	93.0	90.7
Rubber manufactures nec	15	97.4	94.6	93.0	88.0	84.0	82.6	85.3
Wood & cork manufactures	37	104.4	100.5	106.6	105.4	106.2	106.5	105.1
Paper manufactures	135	95.5	97.4	93.7	103.3	108.0	105.0	104.5
Textile manufactures	44	106.3	85.2	85.5	82.3	78.4	76.9	76.9
Non-metal mineral Manufactures	144	72.1	99.9	101.4	102.0	107.4	104.4	90.0
Iron & steel	143	91.3	81.3	78.9	79.0	78.8	77.9	77.6
Non-ferrous metals	26	109.5	90.6	83.1	76.7	75.1	75.2	75.2
Metal manufactures	328	86.6	95.3	95.0	95.2	94.5	92.3	92.8
Machinery &								
Transport Equipment	4,980	100.4	80.3	76.5	75.3	73.1	70.4	70.5
Power generating machinery	72	101.9	95.8	97.1	98.5	89.1	86.3	87.0
Industrial machinery	116	107.4	100.9	101.5	102.6	102.4	101.6	99.9
Metalworking machinery	26	92.4	95.5	95.9	96.3	95.6	95.7	96.2
General industrial machinery	250	97.6	94.7	93.1	90.6	91.1	91.6	93.6
Office & data machines	1,810	113.6	65.5	59.2	56.4	51.9	46.5	46.5
Telecommunication apparatus	1,121	103.6	90.2	88.1	90.0	90.3	89.7	89.3
Electrical machinery nec	1,544	93.4	85.3	82.4	80.5	78.8	77.0	77.2
Road vehicles	41	100.8	87.3	85.3	83.0	91.3	94.0	98.4
Miscellaneous Manufactures	886	101.0	92.8	91.3	92.1	91.2	90.6	90.9
Prefab building, sanitary, lighting	6	79.1	109.0	108.1	107.6	106.5	105.7	102.9
Furniture, bedding, mattresses	76	101.4	103.1	107.8	110.6	112.1	112.4	111.7
Travel goods	4	100.0	100.0	100.0	100.9	103.0	101.7	100.3
Clothing	217	90.6	100.9	98.9	98.0	97.7	98.3	100.9
Footwear	6	94.1	97.6	92.6	95.3	95.9	96.9	96.8
Scientific instruments	64	111.1	96.8	92.3	88.2	87.7	84.8	85.2
Photographic apparatus	37	112.0	101.9	102.2	100.8	97.8	95.2	90.9
Miscellaneous mfd articles nec	476	106.5	86.0	84.0	86.0	84.6	83.6	83.6

17.7

IMPORT PRICE INDEX

(1990=100)

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
All Items	10,000	101.1	91.6	90.7	90.6	89.6	88.2	86.6
Food	442	107.8	92.4	96.8	98.7	101.5	106.4	109.8
Live animals	29	107.3	87.9	87.3	89.7	110.1	109.9	102.6
Meat & meat preparations	32	92.9	87.9	91.4	92.8	95.0	94.8	101.8
Dairy produce & eggs	33	85.1	90.6	87.3	91.7	101.5	97.5	102.1
Fish & fish preparations	82	105.7	108.4	109.0	108.3	109.5	115.6	104.1
Cereals & cereal preparations	41	103.8	91.8	89.2	88.2	101.8	106.1	104.7
Vegetables & fruits	103	103.2	95.6	92.6	94.8	98.1	98.1	103.5
Sugar & sugar preparations	18	91.1	77.1	80.2	84.5	82.3	80.3	77.6
Coffee etc & spices	78	155.4	77.9	107.3	111.9	101.4	121.7	143.0
Animal feeding stuff	8	115.6	101.8	99.4	98.1	105.9	106.0	103.0
Miscellaneous food preparations	18	102.1	95.0	95.2	96.7	99.4	103.6	115.4
Beverages & Tobacco	130	97.3	108.3	106.2	103.5	102.6	104.4	113.2
Beverages	49	94.2	113.4	110.8	107.8	105.7	105.2	106.5
Tobacco & manufactures	81	101.2	105.2	103.5	101.0	100.8	103.9	117.2
Crude Materials	267	133.8	94.9	106.7	123.8	115.0	102.5	87.7
Hides, skins undressed	2	135.9	100.0	99.0	114.6	115.6	115.5	114.4
Oil seeds, nuts, kernels	14	117.5	90.7	94.3	97.3	102.6	104.1	97.6
Crude rubber incl synthetic	122	155.0	90.2	115.6	149.9	131.0	104.3	80.9
Cork & wood	47	89.0	113.5	122.2	124.8	122.5	119.2	104.4
Textile fibres & waste	13	118.0	92.2	90.0	89.3	88.7	90.2	92.7
Crude fertilizers & minerals	17	95.2	88.5	90.6	85.3	97.2	99.6	93.4
Metallic ores & scrap	22	99.6	80.2	75.2	79.5	70.3	70.8	64.7
Crude materials nec	30	130.2	102.5	92.1	98.7	97.9	97.1	94.5
Mineral Fuels	1,600	75.7	71.9	67.7	69.5	77.4	77.9	57.3
Petroleum & products	1,598	75.6	71.9	67.7	69.5	77.4	77.9	57.3
Gas	2	88.6	66.7	59.2	70.2	75.3	79.2	89.3
Animal & Vegetable Oils	70	149.5	114.9	141.6	156.8	136.4	142.7	180.1
Vegetable oil unprocessed	38	136.3	116.1	147.2	162.9	145.3	147.9	181.9
Other animal & vegetable oils	32	156.5	113.4	135.0	149.6	125.8	136.5	177.9

(continued on next page)

¹ Based on value of the commodity item imported in 1990.

17.7

IMPORT PRICE INDEX (continued)

(1990=100)

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
Chemicals & Chemical Products	766	112.1	93.7	91.7	91.0	89.4	88.3	88.8
Organic chemicals	123	123.8	90.6	89.7	92.8	84.0	81.8	82.5
Inorganic chemicals	39	112.4	95.5	95.4	90.2	88.6	84.5	89.7
Dyes & colours	43	111.9	94.0	91.5	89.3	84.8	82.5	81.0
Medicinal products	33	114.5	97.2	98.8	102.8	101.7	95.6	103.2
Perfume, toilet preparations	59	93.2	93.9	93.3	93.8	89.9	87.0	87.9
Fertilizers manufactured	5	106.9	81.6	76.6	67.7	66.9	66.9	66.9
Plastics in primary forms	135	100.0	81.9	89.5	98.7	92.7	92.9	89.4
Plastics in non-primary forms	54	122.2	92.2	90.4	89.6	84.4	78.8	77.5
Chemical products nec	275	96.2	100.7	92.5	85.4	90.9	92.1	93.5
Manufactured Goods	1,366	101.8	93.3	92.9	97.1	93.9	92.5	93.9
Leather products nec	14	88.8	90.6	93.2	103.1	103.1	92.7	71.8
Rubber manufactures nec	48	102.5	101.3	102.9	109.3	112.2	109.9	113.8
Wood & cork manufactures	57	111.5	114.4	111.3	106.4	107.0	106.2	86.8
Paper manufactures	118	106.4	85.3	86.0	101.0	86.8	79.3	78.9
Textile manufactures	312	101.0	88.0	87.4	87.9	86.1	86.5	88.3
Non-metal mineral manufactures	142	89.2	98.0	95.9	97.4	98.9	98.2	98.5
Iron & steel	277	105.8	90.5	87.6	94.1	90.3	87.7	90.4
Non-ferrous metals	202	115.4	84.7	88.6	94.2	89.4	89.4	96.6
Metal manufactures	196	95.8	108.3	107.7	110.3	107.9	107.3	109.5
Machinery & Transport								
Equipment	4,404	105.7	95.4	93.9	90.7	87.5	84.9	87.1
Power generating machinery	324	104.0	97.1	92.7	90.1	89.0	89.7	100.2
Industrial machinery	343	112.9	112.9	115.0	113.4	111.0	110.0	111.2
Metalworking machinery	79	102.0	114.5	118.7	120.8	113.5	107.6	111.9
General industrial machinery	454	93.6	108.2	108.5	109.6	106.3	105.2	106.6
Office & data machines	757	105.1	93.0	85.1	83.0	84.1	80.8	83.1
Telecommunications apparatus	795	102.9	96.1	93.9	93.3	89.8	85.0	82.6
Electrical machinery nec	1,388	110.0	81.3	81.9	75.2	68.2	65.5	69.0
Road vehicles	264	115.1	121.8	123.9	115.9	119.6	118.0	118.8
Miscellaneous Manufactures	955	105.3	97.6	97.0	96.4	95.4	96.2	99.2
Prefab building, sanitary, lighting	18	106.9	98.6	98.4	97.2	121.1	122.1	88.9
Furniture, bedding, mattresses	28	100.7	97.2	96.9	96.5	95.7	95.7	102.5
Travel goods	35	96.7	101.8	98.3	97.8	95.1	92.8	99.3
Clothing	161	98.9	96.5	95.1	95.4	95.8	96.9	98.5
Footwear	33	100.7	94.7	92.3	91.2	94.8	101.8	106.8
Scientific instruments	150	105.8	109.0	109.7	108.1	105.4	111.3	119.4
Photographic apparatus	224	104.1	94.8	94.6	96.0	94.3	94.1	98.3
Miscellaneous mfd articles nec	306	111.6	94.3	93.8	91.9	89.5	88.4	89.9

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
All Items	10,000	100.0	86.4	82.9	81.5	80.7	79.5	78.0
Food	287	115.8	91.7	97.2	99.0	97.9	104.1	111.6
Meat & meat preparations	11	85.0	90.2	89.9	80.9	81.5	80.8	81.4
Dairy produce & eggs	16	93.5	89.0	86.6	87.6	90.6	92.5	93.1
Fish & fish preparations	74	112.4	102.4	104.9	102.5	100.9	105.7	106.3
Cereals & cereal preparations	21	102.1	97.5	97.2	97.7	105.0	104.1	106.4
Vegetables & fruits	43	105.5	93.5	82.3	85.4	90.7	89.4	87.3
Sugar & sugar preparations	7	86.8	91.1	92.8	92.9	91.2	92.0	96.0
Coffee etc & spices	79	166.1	80.4	104.0	109.7	101.4	119.5	144.1
Animal feeding stuff	11	106.4	84.5	82.3	81.6	90.1	85.5	80.7
Miscellaneous food preparations	25	101.7	94.0	96.5	103.6	101.5	104.9	113.8
Beverages & Tobacco	144	96.2	99.3	97.5	98.8	99.9	99.9	105.3
Beverages	56	97.5	98.4	95.6	98.3	101.0	100.8	100.7
Tobacco & manufactures	88	94.8	99.9	98.6	99.1	99.1	99.3	108.3
Crude Materials	302	135.8	91.4	105.9	125.5	111.9	99.5	87.1
Hides, skins undressed	3	123.1	87.9	84.3	79.0	77.4	77.9	74.5
Oil seeds, nuts, kernels	11	112.4	87.1	85.6	81.9	88.4	102.9	95.7
Crude rubber incl synthetic	141	159.9	91.1	116.2	151.4	131.9	103.8	80.9
Cork & wood	49	82.6	112.9	125.0	128.5	120.4	123.5	119.5
Paper making material	8	118.6	56.4	87.0	131.2	69.1	59.1	55.2
Textile fibres & waste	9	na	103.5	105.8	102.7	102.2	107.9	122.1
Crude fertilizers & minerals	9	106.7	87.1	87.6	86.1	87.4	87.9	89.0
Metallic ores & scrap	37	122.1	71.6	73.4	85.8	69.7	68.4	58.7
Crude materials nec	35	105.3	91.2	89.0	90.8	92.8	91.8	93.1
Mineral Fuels	1,821	74.8	72.9	62.9	61.9	71.8	69.9	56.1
Petroleum & products	1,808	74.6	72.7	62.8	61.7	71.7	70.0	56.2
Gas	13	87.8	94.8	81.6	85.4	91.4	61.1	41.9
Animal & Vegetable Oils	77	116.1	104.9	112.2	124.0	117.1	119.9	141.1
Vegetable oil unprocessed	37	112.3	104.2	112.9	122.5	123.9	124.5	139.2
Other animal & vegetable oils	40	126.7	105.5	111.6	125.5	110.8	115.6	142.9

(continued on next page)

1 Based on value of the commodity item exported in 1990.

17.8 EXPORT PRICE INDEX (continued)

(1990=100)

Item	Weights ¹	1988	1993	1994	1995	1996	1997	1998
Chemicals & Chemical Products	690	113.7	86.2	85.1	87.2	83.3	81.5	79.9
Organic chemicals	214	102.1	81.9	78.2	79.2	73.7	66.2	61.9
Inorganic chemicals	29	105.9	92.1	92.9	92.1	89.8	91.1	105.9
Dyes & colours	47	95.2	83.0	81.3	80.6	79.3	77.6	83.0
Medicinal products	39	117.5	100.1	94.6	89.2	84.4	88.3	94.9
Perfume, toilet preparations	42	106.9	93.1	88.5	87.9	87.3	87.8	88.1
Fertilizers manufactured	6	87.1	96.0	88.7	82.9	85.0	87.9	100.7
Plastics in primary forms	169	100.0	71.2	76.6	87.0	78.6	81.2	71.9
Plastics in non-primary forms	23	145.6	91.3	92.4	96.3	95.1	92.4	93.0
Chemical products nec	121	109.1	106.3	102.7	100.7	103.0	101.5	104.0
Manufactured Goods	772	102.9	92.0	90.4	91.4	90.3	88.9	90.6
Leather products nec	6	na	116.3	109.5	110.7	110.2	112.7	121.7
Rubber manufactures nec	32	100.7	103.6	98.1	94.6	94.8	97.1	106.4
Wood & cork manufactures	49	114.5	110.7	107.1	102.1	98.7	97.2	75.2
Paper manufactures	60	95.7	96.8	99.0	103.9	100.3	96.6	103.5
Textile manufactures	173	101.7	84.3	82.5	80.7	78.0	76.1	75.5
Non-metal mineral manufactures	70	91.1	101.7	100.4	101.7	103.7	103.4	103.3
Iron & steel	125	104.8	87.1	83.3	86.8	84.8	83.8	89.5
Non-ferrous metals	112	116.4	84.8	82.8	86.7	85.9	82.9	84.9
Metal manufactures	145	95.8	94.3	95.7	96.4	97.8	97.6	102.7
Machinery & Transport								
Equipment	5,031	103.9	87.7	83.6	79.7	76.6	75.8	77.5
Power generating machinery	181	98.7	99.7	102.9	97.7	96.0	96.2	104.6
Industrial machinery	270	124.5	99.9	98.4	98.9	97.9	96.7	98.3
Metalworking machinery	43	96.9	103.1	104.8	103.1	101.2	102.1	98.2
General industrial machinery	372	100.2	95.8	95.4	93.6	93.9	95.7	102.4
Office & data machines	1,709	112.9	74.3	66.8	61.5	56.8	52.5	52.5
Telecommunication apparatus	1,187	108.3	91.0	87.7	83.7	83.2	84.0	86.7
Electrical machinery nec	1,131	96.4	95.1	92.9	90.3	84.3	85.8	86.4
Road vehicles	138	101.2	101.0	87.9	79.6	78.9	81.9	85.9
Miscellaneous Manufactures	876	99.6	95.0	94.4	91.4	90.0	88.9	89.4
Prefab building, sanitary, lighting	8	105.6	94.9	90.1	90.1	89.2	89.9	87.2
Furniture, bedding, mattresses	35	97.9	99.1	101.5	101.6	101.5	101.8	97.6
Clothing	288	92.3	98.1	100.3	96.3	95.1	93.2	92.9
Footwear	15	99.5	97.3	98.3	91.8	90.0	90.0	90.8
Scientific instruments	125	106.0	103.7	104.0	100.6	103.9	106.4	115.9
Photographic apparatus	137	109.8	91.4	89.0	85.8	84.8	84.4	88.1
Miscellaneous mfd articles nec	268	102.9	88.6	85.4	83.2	79.1	76.6	73.0

17.9 BUILDING MATERIALS PRICE INDEX (1985=100)

Section	Weights ¹	1988	1993	1994	1995	1996	1997	1998
All Items	10,000	102.9	118.2	118.2	119.9	120.8	119.4	115.9
Timber & Wood Products	585	109.4	122.6	126.7	127.2	126.9	126.9	126.1
Concrete Ingredients								
(Granite)	872	83.4	91.0	95.6	95.4	102.5	99.4	91.8
Paints	292	113.3	120.1	121.7	126.0	124.9	125.0	125.4
Cement	1,338	90.5	149.6	136.3	136.2	141.7	138.6	127.6
Bricks & Concrete Blocks	2,076	84.0	110.9	114.6	115.7	115.5	115.1	114.0
Tiles	952	113.3	110.5	113.0	113.7	111.7	111.7	111.7
Iron & Steel Products	1,764	125.7	106.4	103.6	105.2	102.5	100.7	100.6
Cables	646	115.5	121.2	117.1	123.1	121.2	120.6	116.0
Sanitary & Plumbing								
Fixtures	69	109.3	102.6	106.2	107.4	107.5	107.6	107.8
Others	1,406	108.0	133.4	138.6	143.1	145.9	144.3	138.5

Source : Construction Industry Development Board (with effect from October 1992)

Note : Prices used are ex-factory price of manufactured building material and CIF (Cost Insurance Freight) price of imported building materials.

¹ Based on the 1984 distribution pattern of building materials.

17.10 PRICE INDICES OF SELECTED FARM PRODUCTS (1997=100)

Farm Product	1988	1993	1994	1995	1996	1997	1998
Pigs	103.6	87.0	88.4	88.8	112.9	100.0	96.7
Chickens	75.1	98.8	107.7	100.3	102.4	100.0	95.4
Ducks	109.3	97.6	100.4	99.6	101.8	100.0	96.6
Hen Eggs	107.6	91.7	96.5	85.2	110.1	100.0	90.4
Fresh Fish ¹	82.4	85.4	90.8	92.0	101.2	100.0	84.8
Fresh Prawns	na	87.2	93.0	96.4	99.1	100.0	91.5
Leafy Vegetables	130.1	133.9	125.0	121.5	104.7	100.0	104.1
Orchid Flowers	na	na	na	na	na	100.0	91.8

Note : Prices used for the respective indices are auction prices for pigs, fresh fish and prawns, wholesale prices for chickens and ducks and ex-farm prices for hen eggs, leafy vegetables and orchid flowers.

¹ Figures prior to 1990 include prawns and squids.

17.11 PRODUCE PRICES

	1988	1993	1994	1995	1996	1997	1998
Rubber (Cents per kg, fob)							
Ribbed Smoked Sheet							
Int 2	232.86	133.32	174.26	227.73	199.09	149.08	120.18
Int 3	230.49	132.22	173.26	227.05	199.09	149.02	120.18
Int 4	226.31	126.45	167.57	221.80	193.84	144.39	115.93
Thin Pale Crepe							
Int 1	304.58	200.42	224.99	286.17	259.84	212.56	174.12
Int 9	310.58	206.42	230.99	292.17	265.84	218.55	180.12
SSR 20	220.94	131.46	175.56	223.54	188.90	150.39	116.20
SSR 50	219.17	129.46	173.56	221.54	186.90	148.39	114.20
Pepper (\$ per 100 kg, fob)							
Black Lampung	665.89	200.52	286.54	357.04	326.96	625.18	843.18
White Muntok Genuine	938.80	348.05	449.57	519.83	503.91	914.01	1,154.51
Coffee AP1 (\$ per 100 kg, fob)	424.65	184.46	402.27	425.50	289.79	327.27	386.35
Crude Coconut Oil (\$ per 100 kg, fob)							
(in Drums)	124.52	84.43	102.50	112.14	120.83	110.58	116.94
Tin (RM/kg, fob)	18.46	13.14	14.19	15.35	15.34	15.54	21.18

Source : Singapore Commodity Exchange

Chinese Produce Exchange

Note : Int = International

SSR = Singapore Specified Rubber

AP1 = After Polished Grade 1

RM = Ringgit Malaysia

17.12

PRIVATE PROPERTY PRICE INDEX BY TYPE OF PROPERTY

(1990=100)

Type of Property	Weights ¹	1988	1993	1994	1995	1996	1997	1998
All Properties	10,000	76.7	153.2	216.2	254.9	283.6	259.8	193.0
Residential	8,357	78.9	163.4	234.8	273.8	305.0	278.2	205.1
Detached	1,114	81.8	188.0	325.9	384.4	397.2	363.2	245.1
Semi-detached	990	84.3	188.1	284.7	323.7	337.4	317.0	234.7
Terrace Houses	1,500	81.4	173.9	247.5	287.1	298.8	263.0	195.2
Private Flats	1,513	79.5	152.7	196.9	233.6	268.5	240.5	179.5
Condominium Units	3,240	74.9	147.6	200.1	233.3	283.3	261.8	198.8
Commercial	1,232	68.2	91.6	111.6	142.8	149.7	137.1	111.7
Offices	586	61.2	92.5	117.3	163.4	172.2	157.2	125.2
Shops	646	74.5	90.7	106.4	124.1	129.3	119.0	99.5
Industrial	411	57.1	129.3	151.1	207.3	251.7	253.3	192.4
Flatted Factories	354	na	129.2	153.5	210.0	251.5	256.0	197.8
Warehouses	57	na	130.3	136.4	190.1	252.8	235.6	158.4

Source : Urban Redevelopment Authority

Note : Data from 1992 are compiled from Caveats lodged with Registry of Land Titles and Deeds.

¹ Based on transaction values in 1990.

17.13

COMMERCIAL PROPERTY RENTAL INDEX BY TYPE OF PROPERTY

(1990=100)

Type of Property	Weights ¹	1993	1994	1995	1996	1997	1998
Office Space							
Whole of Central Region	10,000	74.0	74.9	96.3	106.9	101.9	88.5
Central Area	8,469	74.4	75.3	97.5	106.1	101.3	88.6
Downtown Core	6,049	71.1	71.8	97.2	103.9	99.7	86.4
Orchard	1,389	77.2	77.6	95.2	109.3	107.4	99.1
Rest of Central Area	1,031	89.3	92.5	102.6	114.6	102.4	87.2
Fringe Area	1,531	72.2	72.6	89.7	111.6	105.3	87.9
Shop Space							
Whole of Central Region	10,000	82.2	78.8	75.0	68.0	65.3	56.5
Central Area	9,227	83.2	79.3	76.0	68.5	65.7	56.8
Downtown Core	1,536	82.3	90.6	83.9	79.4	75.5	65.9
Orchard	6,795	79.6	74.4	71.4	64.1	62.8	54.1
Rest of Central Area	896	112.4	97.0	97.4	82.5	71.2	61.2
Fringe Area	773	70.3	72.1	63.3	62.3	60.3	53.6

Source : Urban Redevelopment Authority

Note : Data exclude HDB properties and other public sector properties.

¹ Based on rental values in 1990.

Every child in Singapore undergoes at least ten years of general education. A fundamental feature of Singapore's education system is the bilingual policy which ensures that each child learns both English and his mother tongue, so as to maintain an awareness of his cultural heritage whilst learning the skills to function in a modern, industrialised economy.

The Ministry of Education has taken on the challenge to develop and expand our students' creative potential and instill in them the desire for continual learning. In addition, Information Technology will be used widely as teaching and learning resources to develop skills in communication and independent learning. National Education is also taught to foster strong bonds among students and develop in them a sense of responsibility and commitment to family, community and country.

Primary Education

At the Primary level, pupils go through a four-year foundation stage (from Primary One to Four), and a two-year orientation stage (from Primary Five to Six). At the foundation stage, the emphasis is basic literacy and numeracy skills. Eighty per cent of curriculum time is devoted to giving pupils a working knowledge of English and a good grounding in the mother tongue and Mathematics. Civics and Moral Education will be taught in the mother tongue. Pupils will also have Music, Art and Crafts and Science, and participate in Physical Education and Extra-Curricular Activities. Science will be taught from Primary 3 onwards and Social Studies from Primary 4 onwards.

At the end of Primary Four, pupils are placed in different language streams according to their abilities. At the end of primary schooling, all pupils will take the Primary School Leaving Examination (PSLE), the

purpose of which is to assess pupils' ability and place them in the appropriate secondary school course to suit their learning pace and aptitude.

Secondary Education

Secondary education may take four or five years, depending on the ability of the child. Pupils in the Special and Express courses sit for the General Certificate of Education 'Ordinary' Level (GCE 'O' Level) Examination at the end of their fourth year. Pupils in the Normal Course may take the Normal (Academic) or Normal (Technical) course, both of which lead to the General Certificate of Education 'Normal' Level (GCE 'N' Level) Examination at the end of their fourth year. Those who do well may do a fifth year of study in preparation for the GCE 'O' Level.

Post Secondary Education

On completing secondary education, pupils can enter a junior college for a two-year pre-university course or a centralised institute for a three-year course. At the end of the pre-university course, pupils sit for the General Certificate of Education 'Advanced' Level (GCE 'A' Level) Examination, the results of which determine their eligibility for tertiary education.

Pupils interested in technical and commercial studies can join the polytechnics for diploma courses or the Institute of Technical Education's technical institutes for Industrial Technician Certificate, National Technical Certificate Grade 2, Certificate in Business Studies or Certificate in Office Skills Courses. Polytechnic graduates who do well may also pursue degree courses at the universities. ITE graduates who perform well may pursue diploma courses at the Polytechnics.

Institute of Technical Education

The Institute of Technical Education, Singapore (ITE), is an integral part of Singapore's education and training system. As a post-secondary institute, it accords emphasis and attention to both pre-employment training for school leavers and Continuing Education and Training (CET) for working adults.

ITE provides pre-employment training to school leavers through 2 main approaches, namely, full-time institutional training in an ITE institute and apprenticeship training in partnership with companies. Full-time institutional training is offered to GCE 'O' and GCE 'N' school leavers in 10 ITE institutes. Technical courses pursued under full-time training lead to the award of the Industrial Technician Certificate (ITC) and the National Technical Certificate Grade 2 (NTC-2), while Business Studies courses lead to the award of the Certificate in Business Studies (CBS) and the Certificate in Office Skills (COS).

The apprenticeship system provides an attractive avenue for school leavers to earn as they learn. Training is conducted both on-the-job and off-the-job. The latter is conducted either in ITE institutes or Approved Training Centres run by companies or industry associations. Most apprenticeship programmes lead to the NTC-level certification. Other apprenticeship courses available are Certificate in Health Care (In-patient and Out-patient), Certificate in Travel Services, Certificate in Retailing (Sales and Customer Service), CBS and COS.

ITE's Continuing Education and Training refers to its skills training programmes and academic education programmes. Skills training covers 3 broad-based programmes leading to the Certificate of Competency (CoC) and NTC-level certification for working adults who wish to acquire new skills or upgrade their existing skills. These are

the Modular Skills Training (MOST), Training Initiative for Mature Employees (TIME) and Adult Co-operative Training Scheme (ACTS) programmes. MOST is opened to workers with at least a PSLE education or equivalent. TIME is targeted at mature workers aged 40 years and above. ACTS is for working adults between 20 and 40 years old.

Two national worker education programmes, namely, the Basic Education for Skills Training (BEST) and Worker Improvement through Secondary Education (WISE) programmes are offered by ITE for working adults to achieve functional competencies in English Language and Mathematics and to lay the foundation for skills training and further academic education. ITE also offers continuing education programmes for working adults to upgrade their general education on a part-time basis to the GCE 'N', 'O' and 'A' levels.

Higher Learning

The institutions of higher learning in Singapore are the National University of Singapore, the Nanyang Technological University, the Singapore Polytechnic, the Ngee Ann Polytechnic, the Temasek Polytechnic and the Nanyang Polytechnic.

The National University of Singapore (NUS) was established in August 1980 with the merger of the University of Singapore (founded in 1962) and Nanyang University (founded in 1956).

The University has eight faculties and one faculty-level school, namely, Architecture, Building and Real Estate; Arts and Social Sciences; Business Administration; Dentistry; Engineering; Law; Medicine; Science and the School of Computing.

All faculties offer courses leading to first degrees as well as higher degrees. There are also seven postgraduate schools for Arts and Social Sciences, Built Environment, Business, Dental Studies, Engineering, Medical Studies and Science.

Research is accorded top priority at the University. NUS has established specialist research institutes and centres. These include the East Asia Institute, the Institute of Systems Science, National University Medical Institutes, Institute of High Performance Computing, Tropical Marine Science Institute, Logistics Institute-Asia, Institute of Engineering Science, American Studies Centre, Bioinformatics Centre, Bioprocessing Technology Centre, Centre for Information-Enhanced Medicine, Centre for Management of Innovation and Technopreneurship, Centre for Remote Imaging, Sensing and Processing and Centre for Wireless Communication. There are six research institutes which are affiliated to the University, namely, the Institute of Molecular and Cell Biology, the Institute of Micro-electronics, the Institute of Molecular Agrobiology, the Data Storage Institute, the Institute for Materials Engineering and Research, and the Kent Ridge Digital Labs.

The Nanyang Technological University (NTU) was established on 1 July 1991. It has its origin in the former Nanyang Technological Institute (NTI) which was set up in 1981. In its main campus in Yunnan Garden, there are six schools, namely, the Schools of Accountancy and Business, Applied Science, Civil and Structural Engineering, Electrical and Electronic Engineering, Mechanical and Production Engineering and Communication Studies.

NTU places top priority in relating its professional courses to the requirements of industry and business. Apart from the undergraduate courses, NTU offers graduate programmes leading to the award of higher

degrees as well as postgraduate diplomas. In order to facilitate research and advanced training, various research institutes and centres are set up at the University.

The National Institute of Education (NIE), formed in July 1991 by the merging of the former Institute of Education and the College of Physical Education, became part of NTU on the same day. Located at the University's branch campus in Bukit Timah, NIE provides professional training for teachers as well as the study of Science, Physical Education, the Humanities and Fine Arts in its four schools, respectively the Schools of Education, Science, Physical Education and Arts.

NIE offers the Bachelor of Arts and Bachelor of Science with Diploma In Education courses. It also offers the Postgraduate Diploma in Education programmes for university graduates and the two-year Diploma in Education and Diploma in Physical Education programmes for holders of GCE 'A' level and Diploma qualifications. In addition to the initial teacher-training courses, NIE conducts a variety of in-service training programmes. Facilities are also available at NIE for higher degree studies leading to the degrees of Master and Doctor of Philosophy.

The Open University: Since 1994, the Singapore Institute of Management has been appointed by the Ministry of Education to run the Open University Degree Programme (OUDP). The undergraduate programmes are accredited and examined to the standards maintained by the Open University in the United Kingdom (UKOU). Open University degrees are recognised and accepted on par with other British degrees by employers in Singapore. The Ministry of Education will consider emplacing Education Officers on the graduate salary scale upon successful completion of relevant degree programme with the OUDP.

The OUDP offers courses leading to Bachelor of Arts in English Language and Literature, Bachelor of Arts (English with Economics, Management Psychology), Bachelor of Arts (Psychology with Economics or Management), Bachelor of Science in Mathematics, Bachelor of Science (Mathematics with Economics, Management or Psychology), Bachelor of Science in Computer Science, Bachelor of Science (Computer Science with Economics, Management or Psychology), Bachelor of Science (Psychology with Economics or Management) and Bachelor of Science (Honours) in Technology with Electronics.

Polytechnics: There are four polytechnics offering a wide range of courses at diploma and advanced diploma levels. They are the Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic and

Nanyang Polytechnic. Each of the polytechnics specialises in specific fields, in addition to various basic engineering, general business and management and computing courses. The specialised fields include maritime studies, publishing, information technology and design, library studies, health sciences, optometry, nursing, sonography, police studies and security management and insurance practice. Some of the courses are conducted on a part-time basis for the working adults.

Expenditure on Education

Education has been a major item of public expenditure, accounting for about 24.5 per cent of the total government recurrent expenditure. A substantial proportion of the cost of education is subsidised by the State.

18.1

ENROLMENT IN EDUCATIONAL INSTITUTIONS

	1993	1994	1995	1996	1997	1998
Total	527,774	537,338	557,062	574,591	595,444	605,772
Primary Schools	261,402	251,005	261,553	269,590	280,108	288,311
Secondary Schools	155,296	173,934	180,982	184,726	187,415	178,795
Pre-University ¹	23,958	22,857	21,690	22,032	22,419	23,692
Institute of Technical Education ²	14,955	12,492	9,476	8,233	9,906	13,337
Polytechnics ³	40,494	43,595	47,761	51,138	53,676	55,316
National Institute of Education	1,878	1,602	1,604	2,276	2,422	3,350
Universities ⁴	29,791	31,853	33,996	36,596	39,498	42,971

Source : Ministry of Education

Note : Figures for primary, secondary and pre-university exclude private schools.

1 Include Pre-U Centres, Centralised Institutes and Junior Colleges. Pre-U Centres were phased out in 1997.

2 Refer to average enrolment of full-time students.

3 Refer to full-time and part-time diploma and advanced diploma students in Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic and Nanyang Polytechnic.

4 Refer to full-time and part-time undergraduate and postgraduate students in National University of Singapore and Nanyang Technological University.

18.2

STUDENTS AND TEACHERS IN EDUCATIONAL INSTITUTIONS, 1998

	Instituti- ons ¹	Students			Teachers		
		Total	Males	Females	Total	Males	Females
Total	376	605,772	320,663	285,109	29,966	11,904	18,062
Primary Schools	193	288,311	149,785	138,526	11,406	2,436	8,970
Secondary Schools	147	178,795	93,882	84,913	9,141	3,288	5,853
Pre-University ²	16	23,692	10,745	12,947	1,705	698	1,007
Institute of Technical Education ³	13	13,337	9,482	3,855	1,280	937	343
Polytechnics ⁴	4	55,316	31,503	23,813	3,446	2,296	1,150
National Institute of Education	1	3,350	1,009	2,341	377	206	171
Universities ⁵	2	42,971	24,257	18,714	2,611	2,043	568

Source : Ministry of Education

Notes : Figures for primary, secondary and pre-university exclude private schools.

Figures for institutions of higher learning include part-time students and teachers.

1 A school conducting both primary and secondary classes is treated as one primary and one secondary school.

2 Include Centralised Institutes and Junior Colleges.

3 Include 3 Vocational Training Centres. Data refer to full-time teaching staff and students.

4 Include Singapore Polytechnic, Ngee Ann Polytechnic, Temasek Polytechnic and Nanyang Polytechnic.

5 Include National University of Singapore and Nanyang Technological University.

18.3

ENROLMENT IN GOVERNMENT AND GOVERNMENT-AIDED PRIMARY SCHOOLS BY LEVEL AND AGE

	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	259,117	261,402	251,005	261,553	269,590	280,108	288,311
Level							
Primary 1	41,147	38,055	43,684	53,117	48,082	51,520	49,793
Primary 2	40,285	41,736	38,319	43,847	53,407	48,242	51,803
Primary 3	40,061	40,878	42,030	38,577	44,054	53,623	48,512
Primary 4	39,308	40,000	41,113	42,209	38,775	44,214	53,770
Primary 5	38,832	42,153	40,221	41,269	42,338	38,904	44,280
EM1	-	6,368	6,784	7,187	7,561	7,203	8,507
EM2	-	32,182	30,277	30,439	31,071	28,389	31,948
EM3	-	3,603	3,160	3,643	3,706	3,312	3,825
Primary 6	42,622	50,488	45,638	42,534	42,934	43,605	40,153
EM1	-	5,542	6,078	6,384	6,744	6,933	6,556
EM2	-	36,163	30,623	28,553	28,889	29,390	26,656
EM3	-	8,783	8,937	7,597	7,301	7,282	6,941
Primary 7	8,076	-	-	-	-	-	-
Primary 8	8,786	8,092	-	-	-	-	-
Age (in years)							
Under 7	40,899	37,583	43,222	52,655	47,515	50,868	49,074
7 & Under 8	40,146	41,543	37,926	43,467	53,060	47,851	51,353
8 & Under 9	40,048	40,553	41,719	38,083	43,685	53,251	48,067
9 & Under 10	39,052	39,675	40,775	41,912	38,237	43,821	53,413
10 & Under 11	38,301	41,730	39,895	40,970	42,077	38,397	43,918
11 & Under 12	42,828	41,445	41,880	40,012	41,060	42,144	38,435
12 & Under 13	10,112	11,183	3,628	2,887	2,600	2,493	2,529
13 & Under 14	7,256	7,397	1,821	1,418	1,189	1,069	1,186
14 & Over	475	293	139	149	167	214	336

Source : Ministry of Education

Notes : EM1 refers to the stream where pupils learn English and the mother tongue at higher level (Higher Chinese, Higher Malay or Higher Tamil formerly known as CL1, ML1 and TL1).

EM2 refers to the stream where pupils learn English and the mother tongue (Chinese, Malay or Tamil formerly known as CL2, ML2 and TL2).

EM3 refers to the stream where pupils learn English and the mother tongue (Chinese, Malay or Tamil) at basic proficiency level.

18.4

**ENROLMENT IN GOVERNMENT AND GOVERNMENT-AIDED SECONDARY
SCHOOLS AND JUNIOR COLLEGES BY LEVEL AND AGE**

	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	200,185	179,254	196,791	202,672	206,758	209,834	202,487
Level							
Secondary 1	36,720	36,680	54,587	43,500	40,888	41,614	42,284
Special	2,103	2,739	3,671	4,127	3,980	4,049	4,139
Express	20,701	20,729	25,265	22,128	21,292	21,244	21,635
Normal (Academic)	13,916	13,212	17,063	9,985	8,932	9,344	9,673
Normal (Technical)	-	-	8,588	7,260	6,684	6,977	6,837
Secondary 2	38,803	36,436	36,776	53,968	43,768	40,965	41,639
Special	2,092	2,682	2,873	3,527	4,091	3,880	3,912
Express	23,249	20,716	21,433	25,326	22,311	21,507	21,478
Normal (Academic)	13,462	13,038	12,470	17,173	10,673	9,475	9,929
Normal (Technical)	-	-	-	7,942	6,693	6,103	6,320
Secondary 3	40,730	35,728	36,970	37,366	53,395	44,617	41,811
Special	2,057	2,515	2,805	2,937	3,523	3,870	3,815
Express	24,833	21,020	21,116	21,835	25,554	23,398	22,194
Normal (Academic)	13,840	12,193	13,049	12,594	16,935	11,019	10,031
Normal (Technical)	-	-	-	-	7,383	6,330	5,771
Secondary 4	41,501	35,306	35,433	36,238	36,283	50,478	42,548
Special	2,136	2,582	2,480	2,753	2,778	3,410	3,730
Express	25,416	20,877	20,935	20,670	21,257	24,270	22,199
Normal (Academic)	13,949	11,847	12,018	12,815	12,248	15,974	10,873
Normal (Technical)	-	-	-	-	-	6,824	5,746
Secondary 5	10,349	11,146	10,168	9,910	10,392	9,741	10,513
Normal (Academic)	10,349	11,146	10,168	9,910	10,392	9,741	10,513
Pre-University 1	2,844	1,373	1,047	611	409	325	444
Pre-University 2	2,273	1,573	1,128	926	539	305	272
Pre-University 3	1,997	1,916	1,482	1,033	882	516	298
Junior College 1	13,941	10,213	9,566	10,051	10,575	11,197	11,983
Junior College 2	11,027	8,883	9,634	9,069	9,627	10,076	10,695
Age (in years)							
Under 12	16	20	22	43	42	35	36
12 & Under 13	29,251	29,537	38,239	39,268	37,713	38,796	39,872
13 & Under 14	34,262	32,969	38,992	40,451	40,981	39,174	40,042
14 & Under 15	39,509	35,308	39,225	39,931	40,930	41,332	39,267
15 & Under 16	39,230	33,913	35,312	38,897	39,389	40,420	40,725
16 & Under 17	29,343	26,211	23,212	24,390	27,577	27,821	22,969
17 & Under 18	20,222	15,650	17,117	15,472	16,238	18,805	16,219
18 & Under 19	6,282	4,266	3,654	3,474	3,134	2,936	2,938
19 & Under 20	1,804	1,144	837	649	650	425	371
20 & Over	266	236	181	97	104	90	48

Source : Ministry of Education

18.5 PRIVATE REGULAR SCHOOLS, STUDENTS AND TEACHERS

							Number	
	1988	1993	1994	1995	1996	1997	1998	
Schools	4	4	4	4	4	3	3	
Students	1,723	1,607	1,282	1,085	1,059	1,118	1,032	
Primary	153	132	92	95	98	90	94	
Secondary	484	538	549	566	598	690	646	
Pre-university	1,086	937	641	424	363	338	292	
Teachers	73	60	56	57	56	50	48	

Source : Ministry of Education

18.6 ENROLMENT AT PRIMARY, SECONDARY AND PRE-UNIVERSITY LEVELS IN PRIVATE REGULAR SCHOOLS BY LEVEL

Level								Number
	1988	1993	1994	1995	1996	1997	1998	
Total	1,723	1,607	1,282	1,085	1,059	1,118	1,032	
Primary	153	132	92	95	98	90	94	
Primary 1	10	8	6	6	5	6	10	
Primary 2	19	8	8	10	10	5	8	
Primary 3	17	7	12	10	16	12	9	
Primary 4	18	18	10	16	19	17	14	
Primary 5	17	23	17	13	13	24	21	
Primary 6	72	68	39	40	35	26	32	
Secondary	484	538	549	566	598	690	646	
Secondary 1	217	190	156	117	101	66	61	
Secondary 2	101	153	163	120	77	77	54	
Secondary 3	86	114	137	144	133	98	124	
Secondary 4	80	81	93	185	287	449	407	
Pre-university	1,086	937	641	424	363	338	292	

Source : Ministry of Education

		1993	1994	1995	1996	1997	1998	Number
FULL-TIME								
Polytechnics		12,945	13,961	15,290	15,792	16,480	17,332	
Males		7,234	7,637	8,337	8,528	8,750	9,167	
Females		5,711	6,324	6,953	7,264	7,730	8,165	
National Institute of Education		1,366	1,012	1,034	1,659	1,565	2,388	
Males		328	302	296	458	478	693	
Females		1,038	710	738	1,201	1,087	1,695	
Universities		7,708	8,039	8,217	8,401	8,688	9,159	
Males		3,812	3,991	3,752	3,843	4,030	4,429	
Females		3,896	4,048	4,465	4,558	4,658	4,730	
PART-TIME								
Polytechnics		1,168	624	779	986	963	620	
Males		904	467	605	794	784	495	
Females		264	157	174	192	179	125	
National Institute of Education		51	52	70	46	47	42	
Males		24	23	29	22	23	20	
Females		27	29	41	24	24	22	
Universities		-	-	217	385	387	377	
Males		-	-	187	348	330	317	
Females		-	-	30	37	57	60	

Source : National University of Singapore
Nanyang Technological University
National Institute of Education

Singapore Polytechnic
Ngee Ann Polytechnic
Temasek Polytechnic

Nanyang Polytechnic

Note : Data refer to academic year.

Figures exclude direct entry to second and subsequent years.

- Figures for polytechnics refer to diploma students only.
- National Institute of Education figures exclude higher degrees and BA/BSc with Dip Ed which are included under universities.
- Figures for universities refer to undergraduates.

ENROLMENT IN INSTITUTIONS OF HIGHER LEARNING BY SEX

Source :	National University of Singapore	Singapore Polytechnic	Nanyang Polytechnic
	Nanyang Technological University	Ngee Ann Polytechnic	
	National Institute of Education	Temasek Polytechnic	

- 1 Figures for polytechnics refer to diploma students only.
2 National Institute of Education (NIE) figures exclude higher degrees and BA/BSc with Dip Ed which are included under universities.
NIE figures for 1998 include students admitted in January 1999.
3 Figures for universities refer to undergraduates.

	1993	1994	1995	1996	1997	1998
FULL-TIME						
Polytechnics	8,558	9,555	10,158	11,171	11,848	12,807
Males	4,885	5,469	5,518	6,149	6,360	6,850
Females	3,673	4,086	4,640	5,022	5,488	5,957
National Institute of Education	1,126	1,236	1,024	912	1,432	1,465
Males	259	312	311	246	351	456
Females	867	924	713	666	1,081	1,009
Universities	7,248	7,514	7,926	8,218	8,679	9,331
Males	3,565	3,889	4,003	4,022	4,276	4,455
Females	3,683	3,625	3,923	4,196	4,403	4,876
PART-TIME						
Polytechnics	782	732	850	934	1,071	1,097
Males	617	588	688	728	855	898
Females	165	144	162	206	216	199
National Institute of Education	32	20	50	50	55	44
Males	4	17	22	20	27	23
Females	28	3	28	30	28	21

Source : National University of Singapore
 Nanyang Technological University
 National Institute of Education

Singapore Polytechnic
 Ngee Ann Polytechnic
 Temasek Polytechnic

Nanyang Polytechnic

- Figures for polytechnics refer to diploma students only.
- National Institute of Education figures exclude higher degrees and BA/BSc with Dip Ed which are included under universities.
- Figures for universities refer to undergraduates. There are no graduates from part-time university first degree courses.

Type of Course	Number						
	1993	1994	1995	1996	1997	1998	
MALES	23,264	24,867	27,000	28,412	29,681	30,081	
Applied Arts ¹	238	292	335	504	479	594	
Business & Administration ²	2,038	2,388	2,648	2,962	2,907	2,871	
Legal Studies	26	37	53	62	84	88	
Science & Related Technologies	660	638	715	732	737	780	
Health Sciences	85	171	232	276	300	331	
Information Technology	915	1,346	1,812	2,136	2,534	3,102	
Architecture & Building ³	800	935	1,045	1,112	1,085	964	
Engineering Sciences	18,180	18,667	19,702	20,235	21,057	20,848	
Services ⁴	239	276	310	208	317	325	
Mass Communication	83	117	148	185	177	171	
Library Science	-	-	-	-	4	7	
FEMALES	15,534	17,355	19,156	20,702	21,954	23,142	
Applied Arts ¹	278	318	377	501	594	709	
Business & Administration ²	6,216	6,748	7,087	7,755	7,740	7,765	
Legal Studies	62	111	176	182	203	218	
Science & Related Technologies	1,220	1,212	1,280	1,457	1,535	1,726	
Health Sciences	715	1,207	1,508	1,632	1,661	1,762	
Information Technology	997	1,064	1,293	1,433	1,675	1,922	
Architecture & Building ³	1,008	964	904	935	926	936	
Engineering Sciences	4,737	5,406	6,179	6,396	7,106	7,523	
Services ⁴	54	64	72	87	95	104	
Mass Communication	247	261	280	324	385	424	
Library Science	-	-	-	-	34	53	

Source : Singapore Polytechnic
Ngee Ann Polytechnic

Temasek Polytechnic
Nanyang Polytechnic

Note : Cover full-time and part-time polytechnic diploma courses.

1 Include Digital Media Design and Media Production.

2 Include Accountancy.

3 Include Real Estate.

4 Include Maritime Transportation, Nautical Studies and Police Studies.

Type of Course							Number
	1993	1994	1995	1996	1997	1998	
MALES	13,727	14,325	14,711	15,624	16,251	17,186	
Humanities & Social Sciences ¹	1,310	1,404	1,413	1,495	1,514	1,499	
Natural, Physical & Mathematical Sciences ²	1,191	1,245	1,186	1,170	1,151	1,109	
Medicine	522	531	547	553	564	584	
Dentistry	101	98	95	89	84	81	
Health Sciences	23	22	22	29	37	54	
Law	353	334	333	335	297	300	
Information Technology	911	991	1,054	1,031	958	960	
Accountancy	852	820	806	833	853	839	
Business & Administration	1,234	1,312	1,354	1,367	1,249	1,165	
Architecture & Building ³	478	481	467	453	426	431	
Engineering Sciences ⁴	6,724	7,032	7,359	8,159	8,996	10,039	
Mass Communication	28	55	75	110	122	125	
FEMALES	12,078	12,864	13,934	14,750	15,477	15,907	
Humanities & Social Sciences ¹	3,660	3,923	4,265	4,282	4,328	4,288	
Natural, Physical & Mathematical Sciences ²	1,679	1,782	1,824	1,941	2,007	2,040	
Medicine	249	221	215	208	225	250	
Dentistry	40	46	52	53	58	57	
Health Sciences	79	93	160	164	171	177	
Law	410	415	387	360	355	329	
Information Technology	578	612	691	712	683	555	
Accountancy	1,246	1,344	1,426	1,476	1,517	1,512	
Business & Administration	2,515	2,608	2,680	2,731	2,770	2,669	
Architecture & Building ³	572	546	566	646	669	746	
Engineering Sciences ⁴	981	1,128	1,430	1,854	2,364	2,935	
Mass Communication	69	146	238	323	330	349	

Source : National University of Singapore
Nanyang Technological University

Note : Cover full-time and part-time first degree courses.

- 1 Include Arts with Diploma in Education.
- 2 Include Science with Diploma in Education.
- 3 Include Real Estate.
- 4 Include part-time first degree course.

18.12

GRADUATES FROM POLYTECHNIC DIPLOMA COURSES BY TYPE OF COURSE

Type of Course	1993	1994	1995	1996	1997	1998
MALES	5,502	6,057	6,206	6,877	7,215	7,748
Applied Arts ¹	27	46	66	101	93	96
Business & Administration ²	407	482	631	690	831	861
Legal Studies	-	-	-	19	6	20
Science & Related Technologies	142	191	149	184	209	199
Health Sciences	-	-	35	35	70	74
Information Technology	223	223	269	451	522	581
Architecture & Building ³	222	157	232	227	314	325
Engineering Sciences	4,400	4,820	4,699	4,997	5,024	5,427
Services ⁴	70	123	98	140	101	109
Mass Communication	11	15	27	33	45	56
FEMALES	3,838	4,230	4,802	5,228	5,704	6,156
Applied Arts ¹	65	73	86	88	100	137
Business & Administration ²	1,645	1,727	2,101	2,120	2,130	2,355
Legal Studies	-	-	-	49	39	53
Science & Related Technologies	421	374	390	365	381	452
Health Sciences	-	-	244	400	453	449
Information Technology	382	372	299	337	347	441
Architecture & Building ³	267	312	320	270	282	260
Engineering Sciences	986	1,273	1,277	1,497	1,862	1,898
Services ⁴	1	16	17	18	27	22
Mass Communication	71	83	68	84	83	89

Source : Singapore Polytechnic
Ngee Ann Polytechnic

Temasek Polytechnic
Nanyang Polytechnic

Note : Cover full-time and part-time polytechnic diploma courses.
Data refer to academic year.

- 1 Include Digital Media Design and Media Production.
- 2 Include Accountancy.
- 3 Include Real Estate.
- 4 Include Maritime Transportation and Nautical Studies.

18.13

GRADUATES FROM UNIVERSITY FIRST DEGREE COURSES BY TYPE OF COURSE

Type of Course	Number					
	1993	1994	1995	1996	1997	1998
MALES	3,565	3,889	4,003	4,022	4,276	4,455
Humanities & Social Sciences ¹	481	512	503	525	583	583
Natural, Physical & Mathematical Sciences ²	404	374	466	467	453	442
Medicine	95	99	93	97	107	106
Dentistry	14	23	20	24	20	24
Health Sciences	10	14	12	9	9	8
Law	92	87	94	75	90	70
Information Technology	264	294	306	362	370	377
Accountancy	295	271	289	262	227	264
Business & Administration	282	413	365	358	448	461
Architecture & Building ³	132	136	140	142	135	141
Engineering Sciences	1,496	1,666	1,715	1,701	1,806	1,952
Mass Communication	-	-	-	-	28	27
FEMALES	3,683	3,625	3,923	4,196	4,403	4,876
Humanities & Social Sciences ¹	1,173	1,133	1,317	1,529	1,517	1,653
Natural, Physical & Mathematical Sciences ²	588	566	596	575	637	705
Medicine	61	66	48	53	40	42
Dentistry	11	6	8	13	10	12
Health Sciences	40	39	46	59	60	69
Law	93	99	100	106	97	103
Information Technology	215	196	193	194	218	296
Accountancy	396	378	395	433	453	487
Business & Administration	708	733	788	848	808	869
Architecture & Building ³	144	182	156	136	163	153
Engineering Sciences	254	227	276	250	333	413
Mass Communication	-	-	-	-	67	74

Source : National University of Singapore
Nanyang Technological University

Note : Cover full-time first degree courses. There are no graduates from part-time first degree courses.

Data refer to academic year.

- 1 Include Arts with Diploma in Education.
- 2 Include Science with Diploma in Education.
- 3 Include Real Estate.

18.14 ENROLMENT IN POLYTECHNIC ADVANCED DIPLOMA COURSES BY TYPE OF COURSE

Type of Course	Number					
	1993	1994	1995	1996	1997	1998
Total	1,696	1,373	1,605	2,024	2,041	2,093
Business & Administration ¹	215	217	385	668	550	543
Science & Related Technologies	32	12	55	74	40	18
Health Sciences	-	89	172	186	143	133
Information Technology	493	266	205	257	340	453
Architecture & Building ²	178	235	211	168	104	56
Engineering Sciences	778	531	540	596	727	807
Services ³	-	-	14	46	69	64
Others	-	23	23	29	68	19

Source : Singapore Polytechnic
Ngee Ann Polytechnic

Temasek Polytechnic
Nanyang Polytechnic

Note : Cover full-time and part-time post diploma, advanced diploma, management diploma, specialist diploma and postgraduate diploma courses.

1 Include Accountancy.

2 Include Real Estate.

3 Include Maritime Transportation.

18.15 ENROLMENT IN HIGHER DEGREE COURSES BY TYPE OF COURSE

Type of Course	Number					
	1993	1994	1995	1996	1997	1998
Total	4,095	4,805	5,535	6,410	8,047	10,240
Education	111	111	129	104	136	169
Humanities & Social Sciences	346	413	419	445	579	821
Natural, Physical & Mathematical Sciences	298	363	438	526	746	781
Medicine	392	403	317	341	387	447
Health Sciences ¹	11	13	11	12	15	32
Law	56	93	132	127	128	115
Information Technology	217	281	366	595	658	934
Business & Administration ²	1,055	1,177	1,233	1,218	1,437	1,707
Architecture & Building ³	170	176	207	212	300	416
Engineering Sciences	1,439	1,773	2,280	2,794	3,598	4,742
Mass Communication	-	2	3	36	63	76

Source : National University of Singapore
Nanyang Technological University

National Institute of Education

Note : Cover full-time and part-time postgraduate diploma and higher degree courses offered by National University of Singapore and Nanyang Technological University and higher degree courses offered by National Institute of Education.

1 Include Dentistry.

2 Include Accountancy.

3 Include Real Estate.

18.16 GRADUATES FROM POLYTECHNIC ADVANCED DIPLOMA COURSES BY TYPE OF COURSE

Type of Course	Number					
	1993	1994	1995	1996	1997	1998
Total	924	795	843	654	956	1,228
Business & Administration ¹	242	118	167	39	259	436
Science & Related Technologies	19	14	12	-	47	18
Health Sciences	-	47	61	116	177	139
Information Technology	240	200	186	116	97	135
Architecture & Building ²	-	44	104	88	86	65
Engineering Sciences	402	372	313	257	248	302
Services ³	21	-	-	15	42	68
Others	-	-	-	23	-	65

Source : Singapore Polytechnic
Ngee Ann Polytechnic

Temasek Polytechnic
Nanyang Polytechnic

Note : Cover full-time and part-time post diploma, advanced diploma, management diploma, specialist diploma and postgraduate diploma courses.

Data refer to academic year.

- 1 Include Accountancy.
- 2 Include Real Estate.
- 3 Include Maritime Transportation.

18.17 GRADUATES FROM HIGHER DEGREE COURSES BY TYPE OF COURSE

Type of Course	Number					
	1993	1994	1995	1996	1997	1998
Total	592	950	1,103	1,488	1,795	2,165
Education	13	16	20	17	21	21
Humanities & Social Sciences	24	56	114	141	132	159
Natural, Physical & Mathematical Sciences	47	47	72	73	96	141
Medicine	84	120	114	125	149	151
Health Sciences ¹	1	7	6	2	3	3
Law	24	24	32	65	82	91
Information Technology	90	98	107	109	236	181
Business & Administration ²	149	241	267	448	424	550
Architecture & Building ³	34	42	39	49	39	44
Engineering Sciences	126	299	332	459	611	812
Mass Communication	-	-	-	-	2	12

Source : National University of Singapore
Nanyang Technological University

National Institute of Education

Note : Cover full-time and part-time postgraduate diploma and higher degree courses offered by National University of Singapore and Nanyang Technological University and higher degree courses offered by National Institute of Education.

Data refer to academic year.

- 1 Include Dentistry.
- 2 Include Accountancy.
- 3 Include Real Estate.

18.18 STUDENTS ADMITTED TO OPEN UNIVERSITY, 1998

	Total	Sex		Age Group (Years)			Number
		Males	Females	Below 30	30-39	40 & Over	
Total	1,114	765	349	590	407	117	
Arts	188	60	128	63	77	48	
Science	926	705	221	527	330	69	

Source : Singapore Institute of Management

18.19 INTAKE OF TRAINEES UNDER THE FULL-TIME INSTITUTIONAL TRAINING AND APPRENTICESHIP PROGRAMMES AND TRAINEES WHO COMPLETED THE PROGRAMMES, 1998

Type of Training/Level	Intake of Trainees			Trainees who Completed the Programmes			Number
	Total	Males	Females	Total	Males	Females	
Total	12,762	8,849	3,913	6,234	3,650	2,584	
Engineering							
Industrial Technician Certificate	1,788	1,523	265	929	823	106	
Business Studies							
Certificate in Business Studies	769	187	582	608	122	486	
Certificate in Office Skills	2,560	499	2,061	2,127	367	1,760	
Technical Skills							
National Technical Certificate (Incl Certificate of Vocational Training)	7,474	6,610	864	2,472	2,310	162	
Service Skills							
Certificate in Service Skills ¹	171	30	141	98	28	70	

Source : Institute of Technical Education

Note : The Full-time Institutional Training and Apprenticeship Programmes are offered to school leavers with GCE 'O' and 'N' level qualifications.

1 Includes Travel Services (General), Retailing (Sales & Customer Service), Health Care (In-Patient/Out-Patient) and Computer Operations.

18.20

TRAINING PLACES TAKEN UP BY WORKERS UNDER THE SKILLS TRAINING PROGRAMMES AND WORKERS WHO COMPLETED THE PROGRAMMES, 1998

Type of Training/Level	Training Places Taken Up			Workers who Completed the Programmes		
	Total	Males	Females	Total	Males	Females
Total	36,742	18,119	18,623	23,888	15,012	8,876
Engineering						
Industrial Technician Certificate	523	491	32	287	267	20
Business Studies						
Certificate in Business Studies	7,059	1,026	6,033	963	50	913
Certificate in Office Skills	6,573	460	6,113	2,423	150	2,273
Technical Skills						
National Technical Certificate (incl						
Certificate of Vocational Training)	16,089	13,335	2,754	14,743	11,799	2,944
Certificate of Competency	3,998	821	3,177	2,777	670	2,107
Service Skills						
Certificate in Service Skills	219	69	150	259	76	183
Others						
(incl Continuing Training, customised, theory only and Certificate of Endorsement courses)	2,281	1,917	364	2,436	2,000	436

Source : Institute of Technical Education

Note : Most of the Skills Training Programmes are offered in modules of 6 months' duration. A worker may attend more than one module a year.

18.21

TRAINING PLACES TAKEN UP BY WORKERS UNDER THE CONTINUING ACADEMIC EDUCATION PROGRAMMES AND WORKERS WHO COMPLETED THE PROGRAMMES, 1998

Type of Programme	Training Places Taken Up			Workers who Completed the Programmes		
	Total	Males	Females	Total	Males	Females
Total	49,982	18,531	31,451	32,519	11,190	21,329
Basic Education for Skills Training (BEST)	22,148	7,110	15,038	15,449	4,755	10,694
Worker Improvement through Secondary Education (WISE)	16,028	6,199	9,829	8,734	2,860	5,874
Continuing Education (Secondary & Pre-University)	11,806	5,222	6,584	8,336	3,575	4,761

Source : Institute of Technical Education

Note : The BEST and WISE Programmes are offered in modules of 6 months' duration. A worker may attend more than one module a year.

Thousand Dollars

	1988	1993	1994	1995	1996	1997	1998
Total	1,604,473	2,902,886	3,318,956	3,443,857	3,771,955	4,449,754	5,731,763
Recurrent Expenditure	1,461,858	2,210,329	2,486,241	2,682,419	2,997,158	3,347,775	3,785,970
Primary Schools	446,713	590,326	633,966	694,703	764,064	829,887	1,007,789
Secondary Schools & Junior Colleges ¹	486,227	664,452	759,658	831,401	944,274	1,019,209	1,141,125
Institute of Technical Education	72,857	103,100	105,648	109,670	112,899	124,332	125,166
Tertiary	388,999	727,482	861,674	900,171	999,364	1,133,984	1,192,903
National University of Singapore & Nanyang Technological University	259,014	431,554	502,999	520,289	546,120	656,619	682,268
National Institute of Education	16,773	33,335	38,392	40,922	59,620	48,131	55,949
Polytechnics	113,212	262,593	320,283	338,960	393,624	429,234	454,686
Others ²	67,062	124,969	125,295	146,474	176,557	240,363	318,987
Development Expenditure	142,615	692,557	832,715	761,438	774,797	1,101,979	1,945,793

Source : Ministry of Education

Note : Data refer to the financial year which begins in March and ends in April of the following year.

1 Include Centralised Institutes.

2 Include Headquarters, Institute of Southeast Asian Studies, Open University and Science Centre Board.

	Dollars							
	1988	1993	1994	1995	1996	1997	1998	
Primary Schools	1,692	2,254	2,523	2,653	2,837	2,960	2,865	
Secondary Schools ¹	2,364	3,412	3,488	3,723	4,153	4,469	4,516	
Junior Colleges ²	2,858	5,178	5,832	6,363	6,727	7,052	6,489	
Institute of Technical Education	3,802	5,212	7,511	9,547	11,646	8,942	7,384	
Polytechnics	4,803	6,990	7,584	7,776	8,406	8,856	8,466	
Universities ³	14,248	15,450	16,355	17,241	18,450	19,926	16,462	

Source : Ministry of Education

Note : Data refer to the financial year which begins in March and ends in April of the following year.

1 Exclude Independent schools.

2 Include Centralised Institutes.

3 Include National University of Singapore, Nanyang Technological University and National Institute of Education.

The health services provided by the Government are very comprehensive. The Ministry of Health is responsible for the overall policy on health matters, the development of public health standards, the development of health programmes and preventive measures and the provision of treatment and hospital facilities in the public sector. In addition, the Ministry monitors family planning and population policy.

The Ministry of Health's services to the general public are in respect of the areas, namely, Public Health Services, Hospital Services and Medical Support Services.

Public Health Services

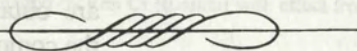
The Public Health Services include Family Health Service (FHS), School Health Service (SHS) and Dental Service. The Family Health Service offer outpatient and maternal and child health (MCH) services through a network of 17 Polyclinics and 1 Government Officials' Clinic. MCH services concentrate on preventive health care for women of childbearing age and pre-school children and implementing immunisation programmes for pre-school children. Health screening and immunisation for school children are undertaken by the School Health Service.

Statistics on immunisation are collected from the Polyclinic vaccination records kept by SHS and compulsory immunisation Registry by private practitioners. Data on patient attendance at primary health care clinics are obtained from the Polyclinic Patient Management System.

The Dental Service provides curative and preventive dental treatment at 101 dental clinics located at the various hospitals, family planning and child health clinics and schools. Data on attendance at dental clinics are obtained from the administrative and patient registration records of the clinics.

There are 10 public sector hospitals of which 6 are general hospitals providing pre-natal, obstetric and emergency services and 4 multi-disciplinary treatment, 1 community hospital and 4 specialist hospitals-centres providing specialist treatment in ophthalmology, gynaecology, psychiatry, dermatology and venereology and infectious diseases. In addition, there are 15 private hospitals catering to the medical needs of the

HEALTH



Medical Support Services

These are provided by the Radiology and Radiotherapy Department, Pathology Department, Blood Transfusion Service, Rehabilitation Services (including physiotherapy, occupational therapy and speech therapy), Medical Social Services and Pharmaceutical Services.

Medical Personnel

Data on medical personnel refer to the number of doctors, dentists, pharmacists, nurses and midwives registered respectively under the Medical Registration Act, the Dentists Registration Act, the Pharmacists Registration Act, the Nurses and Midwives Act. Separate computerised management systems for each of these personnel groups are maintained by the Ministry of Health and the statistics pertaining to these health personnel are derived from the registers.

The health services provided by the government are very comprehensive. The Ministry of Health is responsible for the overall policy on health matters, the maintenance of public health standards, the development of health programmes and preventive measures and the provision of treatment and hospital facilities in the public sector. In addition, the Ministry monitors family planning and population policies.

The Ministry of Health's services to the general public are in respect of three main areas, namely, Public Health Services, Hospital Services and Medical Support Services.

Public Health Services

The Public Health Services include Family Health Service (FHS), School Health Service (SHS) and Dental Service. The Family Health Service offer outpatient and maternal and child health (MCH) services through a network of 17 Polyclinics and 1 Government Officials' Clinic. MCH services concentrate on preventive health care for women of childbearing age and pre-school children, and implementing immunisation programmes for pre-school children. Health screening and immunisation for school children are undertaken by the School Health Service.

Statistics on immunisation are collected from the Polyclinics vaccination records kept by SHS and compulsory notifications of immunisation to the Central Immunisation Registry by private practitioners. Data on patient attendances at primary health care clinics are obtained from the Polyclinic Patient Management System.

The Dental Service provides curative and preventive dental treatment at 102 dental clinics located at the various hospitals, family/maternal and child health clinics and schools. Data on attendances at dental clinics are obtained from the administrative and patient registration records of the clinics.

Hospital Services

There are 10 public sector hospitals, of which, 5 are general hospitals providing accident and emergency services and multi-disciplinary treatment, 1 community hospital and 4 specialist hospitals/centres providing specialist treatment in obstetrics and gynaecology, ophthalmology, psychiatry, dermatology and venerealology and infectious diseases. In addition, there are 13 private hospitals catering to the medical needs of the people.

Data on government hospital beds, patient admissions and outpatient attendances are obtained from administrative records and the computerised patient registration systems of the hospitals. For the private hospitals, the data are compiled from special returns prescribed by the Ministry of Health and from the Central Claims Processing System.

Medical Support Services

These are provided by the Radiology and Radiotherapy Departments, Pathology Department, Blood Transfusion Service, Rehabilitation Services (including physiotherapy, occupational therapy and speech therapy), Medical Social Services and Pharmaceutical Services.

Medical Personnel

Data on medical personnel refer to the number of doctors, dentists, pharmacists, nurses and midwives registered respectively under the Medical Registration Act, the Dentists Registration Act, the Pharmacists Registration Act, the Nurses and Midwives Act. Separate computerised manpower registers for each of these personnel groups are maintained by the Ministry of Health and the statistics pertaining to these health personnel are derived from the registers.

19.1 HOSPITALS AND GOVERNMENT CLINICS

								Number	
			1988	1993	1994	1995	1996	1997	1998
Hospitals			21	23	24	22	25	23	23
Public Sector ¹			10	13	13	12	12	10	10
Private Sector ²			11	10	11	10	13	13	13
Hospital Beds			9,730	10,430	10,407	10,498	10,668	11,276	11,389
Public Sector ¹			7,893	8,640	8,346	8,326	8,511	9,091	9,277
Private Sector ²			1,837	1,790	2,061	2,172	2,157	2,185	2,112
Government Dental Clinics ³			191	185	185	195	199	193	102
Family Health Services ⁴									
Outpatient			21	20	21	20	20	20	18
Maternal & Child Health			20	18	19	15	15	1	-

Source : Ministry of Health

Note : The number of hospitals in public sector includes medical institutions.

1 Include Government Hospitals and Government Restructured Hospitals.

2 Chronic Sick Unit in Woodbridge Hospital was managed by Ren Ci Hospital with effect from 1 September 1994.

3 Include dental clinics in schools.

4 Integrated with effect from 1 July 1992. Community Health Clinics and Maternal & Child Health Clinics were renamed Family Health Services in May 1993.

19.2 HOSPITAL ADMISSIONS AND PUBLIC SECTOR OUTPATIENT ATTENDANCES^{*}

	Number						
	1988	1993	1994	1995	1996	1997	1998
Hospital Admissions	337,723	342,591	343,052	357,709	373,413	369,456	366,336
Public Sector Hospitals ¹	265,380	259,446	257,843	266,142	277,785	275,339	283,508
Private Sector Hospitals	72,343	83,145	85,209	91,567	95,628	94,117	82,828
Public Sector Outpatient Attendances							
Specialist Outpatient Clinics	1,386,350	1,869,061	1,963,901	2,071,310	2,233,262	2,343,765	2,424,180
Accident & Emergency							
Departments	485,762	510,556	499,937	520,132	541,833	547,178	518,814
Walk-in Clinics ²	-	-	273	22,402	67,273	69,111	57,745
Family Health Services ³	2,964,035	2,940,694	2,799,248	2,821,586	2,892,141	2,910,366	2,933,348
Dental Clinics	1,132,513	1,051,485	1,054,561	1,086,737	1,081,583	1,051,705	1,036,394
Day Surgeries	22,346	60,047	58,009	62,196	69,199	74,589	78,264

Source : Ministry of Health

Note : The number of hospitals in public sector includes medical institutions.

1 Include Government Hospitals and Government Restructured Hospitals.

2 Started at Tan Tock Seng Hospital with effect from 1 November 1994 and at Singapore General Hospital with effect from 10 August 1995.

3 Community Health Clinics and Maternal & Child Health Clinics were renamed Family Health Services in May 1993.

19.3 REGISTERED HEALTH PERSONNEL

	1988	1993	1994	1995	1996	1997	1998	Number
Doctors	3,162	4,146	4,301	4,495	4,661	4,912	5,148	
Public	1,551	2,013	2,051	2,124	2,177	2,312	2,416	
Private	1,496	1,967	2,082	2,194	2,302	2,380	2,489	
Not in active practice	115	166	168	177	182	220	243	
Dentists ¹	593	743	767	791	835	878	914	
Public	164	172	176	163	176	187	180	
Private	411	543	568	602	626	666	696	
Not in active practice	18	28	23	26	33	25	38	
Pharmacists	526	720	773	815	858	944	998	
Public	75	140	150	167	175	177	204	
Private	421	497	525	553	578	593	610	
Not in active practice	30	83	98	95	105	174	184	
State Registered Nurses	6,588	8,461	9,148	9,536	10,141	10,867	11,491	
Public	3,871	4,835	5,148	5,373	5,724	6,144	6,441	
Private	1,847	2,431	2,589	2,736	2,881	2,973	2,936	
Not in active practice	870	1,195	1,411	1,427	1,536	1,750	2,114	
State Enrolled Nurses	2,369	2,666	2,575	2,762	3,052	3,365	3,621	
Public	1,665	1,547	1,394	1,548	1,727	1,918	2,028	
Private	432	649	656	693	735	807	800	
Not in active practice	272	470	525	521	590	640	793	
Midwives	569	522	507	499	487	473	456	
Public	343	266	255	245	228	215	212	
Private	92	107	106	104	103	100	91	
Not in active practice	134	149	146	150	156	158	153	

Source : Ministry of Health

Note : Registered health personnel in the public sector refer to Government,
Government Restructured Hospitals and University personnel.

1 Refer to those with professional degrees only.

19.4 VISITS TO GOVERNMENT DENTAL CLINICS

	Number						
	1988	1993	1994	1995	1996	1997	1998
Dental Clinics	1,132,513	1,051,485	1,054,561	1,086,737	1,081,583	1,051,705	1,036,394
School	813,119	791,741	790,164	813,405	797,231	795,158	788,556
Hospital	183,160	168,959	174,435	175,882	187,980	38,122	24,868
Community	136,234	90,785	89,962	97,450	96,372	100,084	89,063
National Dental Centre ¹	-	-	-	-	-	118,341	133,907

Source : Ministry of Health

1 Started functioning with effect from March 1997.

19.5 NOTIFICATIONS OF SPECIFIC NOTIFIABLE DISEASES

	Number						
Notifiable Diseases	1988	1993	1994	1995	1996	1997	1998
Dengue/DHF	245	946	1,239	2,008	3,128	4,300	5,258
Malaria	228	354	277	316	364	421	405
Enteric fever ¹	174	144	151	171	316	112	80
Viral Hepatitis	464	317	258	267	318	345	367
Cholera	19	24	42	14	19	11	31
Poliomyelitis	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	1	-	-
Chicken pox	8,711	43,876	39,558	23,224	49,763	27,723	27,183
Viral Encephalitis	4	2	-	4	1	2	1
Tuberculosis	1,666	1,939	1,836	2,167	2,483	2,772	2,770
Leprosy	39	24	27	34	23	23	19

Source : Ministry of the Environment

Ministry of Health

Note : No cases of plague, smallpox and yellow fever were reported during the period.

1 Refer to typhoid and paratyphoid.

								Per Cent
		1988	1993	1994	1995	1996	1997	1998
BCG								
National		99	98	97	97	97	98	98
Public		57	45	45	42	42	47	50
Private		42	53	52	58	58	51	48
Diphtheria								
National		90	92	95	96	95	96	96
Public		66	75	64	56	68	64	65
Private		24	17	31	44	32	32	31
Poliomyelitis								
National		90	92	92	94	93	96	96
Public		66	70	61	71	70	64	65
Private		24	22	31	29	30	32	31
Measles								
National		82	87	89	90	94	94	96
Public		62	68	66	76	72	66	66
Private		20	19	23	24	28	28	30

Source : Ministry of Health

19.7

VACCINATION AND IMMUNISATION OF SCHOOL CHILDREN

Thousand Doses

	1988	1993	1994	1995	1996	1997	1998
BCG Vaccination	39.0	38.9	34.3	33.0	33.5	35.4	33.0
Diphtheria Tetanus	79.2	81.2	81.5	87.7	84.8	89.7	82.9
Poliomyelitis Immunisation	77.4	81.1	81.3	87.6	84.6	89.5	82.7
Rubella	41.7	45.3	40.7	38.2	39.4	36.4	38.2

Source : Ministry of Health

19.8

STUDENT MEDICAL CHECK-UP

	1988	1993	1994	1995	1996	1997	1998
Thousand							
Total	616.3	660.9	647.2	642.9	648.0	680.1	612.8
New Entrants	40.5	37.8	43.3	53.2	48.0	52.6	48.7
Primary School Leavers and equivalent levels	42.7	49.6	45.3	42.4	43.0	43.5	40.0
Secondary School Leavers and equivalent levels	38.7	36.1	35.8	35.9	35.9	49.3	42.2
Re-examination	485.6	533.7	518.9	507.9	517.1	530.7	475.7
Others ¹	8.8	3.5	3.9	3.6	4.0	4.0	6.2

Source : Ministry of Health

1 Figures from 1988 refer to Institute of Technical Education and Special School Students.

19.9

COMMON DEFECTS OF STUDENTS EXAMINED

	1988	1993	1994	1995	1996	1997	1998
Per 10,000 Males Examined							
Incidence of :							
Defective Vision	3,824	4,432	4,767	4,836	5,040	5,083	5,107
Obesity							
Primary School Entrants	1,189	1,519	1,381	1,227	1,256	1,057	1,131
Primary School Leavers	1,789	2,121	1,442	1,382	1,383	1,410	1,547
Secondary School Leavers	1,320	1,676	1,227	1,069	1,120	1,223	1,203
Scoliosis	494	255	263	191	153	174	213
Asthma	166	552	545	503	866	979	945
Phimosis	426	334	272	256	253	209	135
Per 10,000 Females Examined							
Incidence of :							
Defective Vision	4,151	4,797	4,767	5,035	5,219	5,327	5,395
Obesity							
Primary School Entrants	1,004	1,288	1,377	1,213	1,199	1,087	1,038
Primary School Leavers	1,020	1,545	1,232	1,175	1,217	1,151	1,202
Secondary School Leavers	1,158	1,399	1,255	1,126	1,096	1,218	1,160
Scoliosis	837	537	533	379	314	357	401
Asthma	101	455	406	651	631	688	717
Heart Conditions	182	255	210	273	272	180	188

Source : Ministry of Health

	1988	1993	1994	1995	1996	1997	1998
Donors (Persons)	39,478	41,389	45,855	49,011	48,155	49,156	42,808
Blood Donations Received (No of Units)	57,991	64,126	64,164	69,190	70,814	74,940	65,857
National Blood Centre ¹	36,814	33,969	33,648	33,542	34,036	35,682	32,894
Apheresis Donations	-	2,028	2,881	3,989	3,837	4,986	4,832
Mobile	16,684	22,167	22,324	28,210	27,056	31,080	25,111
Red Cross	4,493	2,607	2,563	2,674	4,097	3,167	2,530
National University Hospital Blood Centre ²	-	4,926	5,331	4,764	5,625	5,011	5,322
Manulife Static Site ³	-	457	298	-	-	-	-
Blood Transfusions Given (No of Units)	52,617	54,076	53,525	57,067	58,790	60,779	53,980
Public Sector Hospitals ⁴	44,811	44,738	44,737	47,179	47,564	49,417	45,108
Private Sector Hospitals	7,806	9,338	8,788	9,888	11,226	11,362	8,872

Source : Ministry of Health

Notes : One unit of blood is approximately 430 millilitres.

Figures exclude blood bank in Mt Alvernia Hospital.

- Figures from 1991 include Apheresis donations. Apheresis is a specialised blood component donation process in which cell-separator machines draw out whole blood, separate specified components by centrifugation and return the rest of the blood to the donor.
- Blood collections from NUH Blood Centre were included in the National blood collection programme with effect from 1 November 1989.
- Started functioning from 27 October 1992 and closed on 31 December 1994.
- Include Government Hospitals and Government Restructured Hospitals.

The Ministry of the Environment has been decreasing the number of hawkers and food stalls over the years because of concerns of several markets and food centres for development.

Market Food Centre
Street Food
Show Case
Restaurant

The Ministry of the Environment issues licences to hawkers and operators of food establishments. It ensures that all licensed hawkers observe proper food hygiene practices and that all food sold in Singapore is safe for consumption. To motivate hawkers to keep their premises clean and hygienic, a grading scheme has been introduced.

HAWKERS

AND

FOOD ESTABLISHMENTS

	1980	1981	1982	1983	1984	1985	1986
Total	10,104	10,246	10,402	10,560	10,718	10,876	11,034
Management Authority							
Housing & Development Board	14,361	14,387	14,413	14,439	14,465	14,491	14,517
Jurong Town Corporation	1,107	1,107	1,107	1,107	1,107	1,107	1,107
Port of Singapore Authority	76	76	76	76	76	76	76
Singapore Tourism Board	20	20	20	20	20	20	20
Private Market	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Type of Goods Sold							
Market Produce	1,107	1,107	1,107	1,107	1,107	1,107	1,107
Cooked Food	1,107	1,107	1,107	1,107	1,107	1,107	1,107
Pieces & Supplies	1,107	1,107	1,107	1,107	1,107	1,107	1,107
Others	1,107	1,107	1,107	1,107	1,107	1,107	1,107

Source: Ministry of the Environment

20 HAWKERS AND FOOD ESTABLISHMENTS

The Ministry of the Environment issues licences to hawkers and operators of food establishments. It ensures that all licensees observe proper food hygiene practices and that all food sold in Singapore is safe for consumption. To motivate licensees to keep their premises clean and hygienic, a grading scheme has been introduced.

Licensed Hawkers

The number of licensed hawkers in various types of premises managed by the

Ministry of the Environment has been decreasing over the years because of clearance of several markets and food centres for re-development.

Licensed Food Establishments

The total number of licensed food establishments has been on the rise over the past decade. Due to the increasing affluence among Singaporeans, there are significant increases in restaurants and snack bars.

20.1

LICENSED HAWKERS BY (a) TYPE OF PREMISES AND (b) TYPE OF GOODS SOLD (End of Period)

	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	6,095	4,286	4,142	3,955	3,868	3,867	3,698
Type of Premises							
Market/Food Centre	5,817	4,157	4,020	3,840	3,765	3,772	3,614
Street Pitch ¹	54	-	-	-	-	-	-
Show Case	28	14	13	11	8	6	4
Itinerant ²	196	115	109	104	95	89	80
Type of Goods Sold							
Market Produce	2,532	1,698	1,594	1,504	1,490	1,471	1,437
Cooked Food	2,939	2,140	2,097	2,001	1,958	1,909	1,808
Piece & Sundries	624	448	451	450	420	487	453

Source : Ministry of the Environment

Note : Exclude private markets/food centres of Statutory Boards.

1 Phased out by 1989.

2 Hawkers selling ice-cream, cakes or/and bread.

20.2

LICENSED HAWKERS BY (a) MANAGEMENT AUTHORITY AND (b) TYPE OF GOODS SOLD (End of Period)

	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	18,194	15,516	15,499	15,526	15,411	15,168	14,864
Management Authority							
Housing & Development Board	16,917	15,169	15,162	15,125	14,950	14,608	14,200
Jurong Town Corporation	230	215	210	208	210	207	190
Port of Singapore Authority	76	72	72	59	58	57	58
Singapore Tourism Board	29	-	-	-	-	-	-
Private Market	942	60	55	134	193	296	416
Type of Goods Sold							
Market Produce	9,541	7,837	7,814	7,668	7,503	7,279	7,064
Cooked Food	6,309	5,675	5,675	5,745	5,753	5,667	5,577
Piece & Sundries	2,344	2,004	2,010	1,979	1,962	1,926	1,807
Others	-	-	-	134	193	296	416

Source : Ministry of the Environment

20.3 LICENSED FOOD ESTABLISHMENTS (End of Period)

	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	7,820	9,082	9,265	9,199	9,512	9,743	10,172
Restaurants	921	1,488	1,578	1,704	1,807	1,942	2,065
Eating Houses	1,742	1,523	1,491	1,467	1,465	1,436	1,471
Snack Bars	708	991	1,108	1,231	1,348	1,469	1,665
Canteens	1,533	1,614	1,614	1,639	1,689	1,653	1,615
School	420	397	399	405	417	409	399
Others	1,113	1,217	1,215	1,234	1,272	1,244	1,216
Coffee Shops	237	134	119	105	92	83	73
Food Factories	1,352	1,445	1,441	1,203	1,236	1,174	1,199
Supermarkets	143	168	163	179	184	192	191
Others	1,184	1,719	1,751	1,671	1,691	1,794	1,893

Source : Ministry of the Environment

20.2		LICENSED HAWKERS BY (a) MANAGEMENT AUTHORITY AND (b) TYPE OF GOODS SOLD (End of Period)												
		1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
Total		18,104	17,316	17,989	17,320	17,411	17,168	16,804						
Management Authority														
Housing & Development Board	16,917	17,169	17,163	17,123	16,930	16,608	16,300							
Town & Country Corporation	330	313	310	308	310	307	190							
Port of Singapore Authority	76	72	73	69	68	67	28							
Singapore Tourism Board	29	-	-	-	-	-	-							
Private Market	942	66	52	134	129	386	416							
Type of Goods Sold														
Miscellaneous Products	9,241	7,837	7,814	7,804	7,501	7,179	7,064							
Cooked Food	6,109	6,072	5,872	5,745	5,753	5,667	5,777							
Fruit & Vegetables	1,214	1,004	1,010	1,070	1,062	1,036	1,007							
Others	-	-	-	134	107	206	416							

COMMUNITY SERVICES

The Ministry of Community Development (MCD) provides a wide range of community services, which include: (i) the care, protection and rehabilitation of children and youth, and (ii) assistance programmes for the aged, the destitutes, the disabled, families with problems and victims of civil calamities. It also promotes neighbourliness, racial harmony and social cohesion among the people through a network of effective grassroots organisations.

In addition, the MCD promotes the establishment of child care centres to meet the needs of working mothers for alternative child care arrangements for their children.

Grassroots organisations

Grassroots organisations include Residents' Committees, Community Centre/Club Management Committees, Women's Executive Committees, Senior Citizens' Executive Committees and Constituency Sports Clubs. These provide ample opportunities for residents to participate in the affairs of their communities and to interact with one another to promote better communication and closer rapport between the Government and the people.

Volunteers

"Volunteers", in the MCD context, refer to individuals who are providing services in community and welfare programmes without receiving full market rates of remuneration or allowances.

Services for Senior Citizens

The MCD plans, coordinates and monitors the implementation of a range of services for senior citizens. The main services under the Aged Programme include community-based services and residential care services.

Data on residential homes for the aged are obtained from the Government welfare homes, sheltered housing/community homes as well as voluntary and commercial nursing homes. With effect from 1 Jan 1993, the nursing homes are administered by the Private Hospitals and Medical Clinics Act which is under the purview of Ministry of Health.

Child Care Programme

The main objectives of the child care programme are to promote and develop child care centres and to supervise centres in accordance to the Child Care Centres Act (Cap 37A) and Regulations (Cap 3A Section 19). The MCD encourages individuals, organisations and employers in the public and private sectors to set up child care facilities. Most centres provide full-day and half-day care services for children between the ages of two and seven years.

Public Assistance

Public assistance (PA) is provided to help the financially distressed regain their independence. It is not intended as an unemployment, retirement or disability support. PA recipients are categorised as follows :

- (i) aged destitutes;
- (ii) the disabled, the mentally ill and the chronically sick who are rendered unfit to work;
- (iii) widows or deserted wives with dependent children;
- (iv) orphans; and
- (v) residents of residential institutions who require assistance to pay for their upkeep.

21.1 GRASSROOTS ORGANISATIONS

(End of Period)

								Number
	1988	1993	1994	1995	1996	1997	1998	
Residents' Committees (RC)	363	412	436	444	454	477	490	
Citizens' Consultative Committees (CCC)	76	81	81	81	81	82	83	
CCC Area Committees	49	47	51	57	59	63	63	
Community Centres/Club Management Committees (CCMC)	112	108	108	110	115	111	104	
Women's Executive Committees (WEC)	81	90	88	93	98	102	97	
Senior Citizens' Executive Committees	74	96	195	219	237	243	252	
Constituency Sports Clubs	70	81	81	81	81	83	83	

Source : People's Association
Singapore Sports Council

21.2

VOLUNTEERS BY VOLUNTEER GROUP AND TYPE OF SERVICE

(End of Period)

								Number
	1988	1993	1994	1995	1996	1997	1998	
Community Service								
Total	16,815	19,898	22,024	23,068	23,872	25,045	25,682	
RC/Block Representatives ¹	7,868	9,687	10,176	10,518	10,869	11,072	11,202	
CCC/CCC Area-Committees ¹	2,447	2,707	2,763	2,897	2,964	3,434	3,586	
Community Resource Volunteers	50	85	72	72	72	69	69	
Community Centre/Club Management Committees	2,036	2,185	2,257	2,282	2,418	2,772	2,742	
Women's Executive Committees	932	1,178	1,194	1,295	1,410	1,469	1,502	
Senior Citizen's Executive Committees	1,028	1,389	2,859	3,245	3,473	3,480	3,792	
Youth Executive Committees	1,400	1,454	1,440	1,531	1,451	1,527	1,516	
Constituency Sports Club Members	1,054	1,213	1,263	1,228	1,215	1,222	1,273	
Welfare Service								
Total	884	1,342	1,329	502	563	368	549	
Welfare Service Boards/Committees	99	69	69	74	165	64	31	
Befrienders for the Aged Destitutes ²	131	128	128	65	64	20	55	
Volunteer Probation Officers	264	366	404	349	315	266	316	
Befrienders for Senior Citizens ³	375	758	707	-	-	-	-	
Volunteers in Children Homes/Hostels ⁴	15	21	21	14	14	10	136	
Groups of Volunteers in Children Homes/Hostels ⁵	-	-	-	-	5	8	11	

Source : Ministry of Community Development

1 RC = Residents' Committees.

CCC = Citizens' Consultative Committees.

2 Woodlands Home for the Aged was closed in May 1997. From 1997 onwards, figures refer to Pelangi Home and Woody Lodge.

3 From 1995, the Befrienders for Senior Citizens came under the Voluntary Welfare Organisations.

4 Figure for 1998 includes individual volunteers from 11 groups.

5 Refer to volunteering services provided on a group basis.

21.3 ENROLMENT IN CHILD CARE CENTRES BY TYPE OF PROGRAMME AND ORGANISATION

								Number	
	1988	1993	1994	1995	1996	1997	1998		
Total	8,044	21,853	22,945	25,800	28,575	31,242	33,001		
Full-Day Programme	6,652	19,571	20,863	23,506	26,051	28,408	29,804		
People's Association	696	1,040	1,126	1,174	1,399	1,406	1,322		
NTUC	863	1,732	1,902	2,057	2,227	2,333	2,472		
Voluntary	2,586	6,517	6,998	7,617	7,910	8,271	9,082		
Workplace ¹	835	1,430	1,489	1,560	1,820	2,071	2,373		
Private	1,671	8,852	9,348	11,098	12,695	14,327	14,555		
Half-Day Programme	1,393	2,282	2,082	2,294	2,524	2,834	3,197		

Source : Ministry of Community Development

Notes : Data for 1990-1993 were as at 1 December while those for other years were as at 31 December.

NTUC = National Trades Union Congress.

¹ Include 12 centres set up by employers at workplace but run by private operators and 4 workplace centres run by NTUC Childcare Co-operative Ltd.

21.4 PUBLIC ASSISTANCE RECIPIENTS BY CATEGORY (End of Period)

								Number	
	1988	1993	1994	1995	1996	1997	1998		
Total	2,867	2,220	2,132	1,958	2,008	1,960	2,070		
Aged Destitutes	2,565	1,915	1,852	1,695	1,707	1,659	1,687		
Medically Unfit for Work	83	87	76	86	106	103	150		
Abandoned/Distressed Wives & Orphans	54	73	61	57	58	54	63		
Handicapped & Disabled	118	104	101	98	115	121	147		
Widows with Children under 12 years old	47	41	42	22	22	23	23		

Source : Ministry of Community Development

21.5

RESIDENTS IN OLD FOLKS' HOMES BY TYPE OF ORGANISATION AND SEX
(End of Period)

								Number
		1988	1993	1994	1995	1996	1997	1998
Total		3,730	4,037	4,196	4,371	4,795	5,203	5,393
Males		1,789	1,801	1,851	1,913	1,946	2,181	2,297
Females		1,941	2,236	2,345	2,458	2,849	3,022	3,096
Government Welfare Home ¹		749	766	720	703	582	743	805
Males		615	637	607	603	487	631	672
Females		134	129	113	100	95	112	133
Sheltered Housing/ Community Homes		na	449	442	488	529	538	510
Males		na	189	184	192	205	206	191
Females		na	260	258	296	324	332	319
Voluntary Nursing Homes ²		2,065	1,833	1,905	1,945	2,398	2,593	2,688
Males		847	646	682	697	836	905	952
Females		1,218	1,187	1,223	1,248	1,562	1,688	1,736
Commercial Nursing Homes		916	989	1,129	1,235	1,286	1,329	1,390
Males		327	329	378	421	418	439	482
Females		589	660	751	814	868	890	908

Source : Ministry of Community Development
Ministry of Health

1 Figures include only those aged 60 years and above.

Woodlands Home for the Aged was closed in May 1997. From 1997 onwards, figures refer to Pelangi Home and Woody Lodge.

2 Data prior to 1993 include certain Sheltered Housing/Community Homes.

CULTURE AND

CULTURE AND RECREATION

RECREATION

Television Corporation of Singapore (TCS)

TCS is Singapore's largest terrestrial broadcaster, owning and managing two 24-hour channels - TCS 5 and 8, which provide English and Mandarin mass entertainment and information programmes respectively. In March 1999, TCS launched its third channel - Channel NewsAsia.

Mediacity (www.mediacity.com.sg), TCS' internet website, offers the latest entertainment and information in both English and Mandarin. Apart from internet, TCS' 1-On-ONE service delivers a video-on-demand service offering some 300 hours of local programming

TCS is also establishing a growing global presence through TCS International, which, apart from marketing and distribution, also manages Xin Shi, Singapore's first satellite channel. Set up in October 1995, Xin Shi broadcast 18 hours of Mandarin programmes daily to cable households in Taiwan. Its current subscription is 3.877 million, reaching 94 per cent of all cable households in Taiwan.

Singapore Television Twelve Pte Ltd

Singapore Television Twelve Pte Ltd (STV12) operates two free-to-air channels, Premiere 12 and Prime 12. Viewers can expect worldclass documentaries, critically-acclaimed films and arts programmes, foreign language films, an extensive coverage of local and international sporting events, educational shows for children, info-ed series as well as home grown productions commissioned by STV12. More information can be obtained on STV12's website at <http://www.stv12.com.sg>.

Radio Corporation of Singapore

Radio Corporation of Singapore (RCS) owns and operates the nation's largest radio network, comprising twelve national and three international radio stations. Its 12 local stations collectively reach 2.4 million listeners weekly, each offering music and information to specific segments of the population. The three international stations provide overseas listeners with a mix of Singapore news, current affairs and entertainment programmes. All RCS stations can now be heard 'live' via the internet at <http://rsc.com.sg>.

NTUC Radio Heart

NTUC Voice Co-operative Society Limited was restructured in October 1997 to NTUC Media Co-operative Ltd. NTUC Radio Heart, which runs 2 radio stations FM91.3 and FM100.3, is the broadcast media for the co-operative. It broadcasts 24 hours daily in 4 languages over 2 frequencies FM91.3 and FM100.3.

SAFRA Radio

SAFRA Radio launched its English radio station, Power 98FM in October 1994, followed by a Chinese station, Dongli 88.3FM in June 1995. Both 24-hour stations play popular hits and new releases, targeted at reaching those aged between 18 and 35. The stations also provide in-depth news bulletins, features and interviews with celebrities and news-makers as well as the latest results of key sporting events. More information about Power 98FM and Dongli 88.3FM is available at websites <http://power98.com.sg> and <http://fm883.com.sg> respectively.

Rediffusion

Rediffusion (Singapore) Pte Ltd, a commercial audio broadcasting station under Government franchise since 1949, provides direct sound broadcasts via cable to subscribers on two networks. One network broadcasts Mandarin programmes daily from 6 am to 12 midnight and the other carries 24 hours of non-stop English/Chinese cultural programmes. The monthly rental is \$10.00 per set.

Cinema

Data on cinema attendances are compiled by the Singapore Department of Statistics from returns submitted by cinema organisations. Prior to April 1994, they were obtained from the Customs and Excise Department. Total attendances are based on the number of tickets sold.

Library

The National Library Board provides essential library facilities as well as a variety of cultural, educational and recreational programmes for the community. Membership is opened to Singaporeans and permanent residents free of charge and to foreigners at an annual subscription of \$10.00.

In addition to the Central Community Library at Stamford Road, there are 14 Community Libraries, one Regional Library and 38 Children's Community Libraries. They provide books and materials for loan, audio-visual services, and reference and information services.

The National Reference Library at Stamford Road provides books and collections of special interest for reference and research, as

well as periodicals, newspapers, maps, etc. It has a comprehensive collection of reference materials and information published in Singapore. The National Reference Library also provides reference and enquiry services, both for on-site and remote users. On-site facilities include a Student Reference Centre, a Multimedia Centre and a General Reference Centre.

The computerised National Library Network is a centralised system, which links all the libraries under the National Library Board. The computerised functions include cataloguing, acquisitions, serials, legal deposit, enquiries, loans and the on-line public access catalogue. Data on library membership, loans and collections are generated on a regular basis by the computer system. The NLLine provides an electronic link via the Internet to information and services from the National Library Board.

Sports Facilities

The Singapore Sports Council (SSC) is responsible for the promotion of both competitive and recreational sports in Singapore. Through the "Sports for All" policy, it promotes a wide range of sports activities and programmes.

The SSC also provides a wide range of sports facilities for the public. Apart from the National Stadium and the Singapore Indoor Stadium, the SSC maintains and operates a number of stadiums, multi-purpose fields, sports halls, netball courts, squash courts, tennis courts, swimming pools and fitness parks and corners.

Cultural and Sports Courses

The People's Association (PA), a statutory board established on 1 July 1960, is a

community development agency. The PA organises and promotes group participation in social, cultural, educational, youth, sports, recreational and other wholesome activities to nurture inter-racial understanding at its community centres and community clubs. The community centres and community clubs conduct regular sports and cultural courses.

The Arts

Data on arts activities are compiled by the National Arts Council (NAC) from designated performing venues, arts groups and impresarios, newspapers and magazines. Prior to the implementation of goods and services tax in April 1994, pertinent data were also provided by the Customs & Excise Department. Popular entertainment shows (such as pop and rock concerts) are not included in the statistics.

Definitions

Performing Arts: Refer to folk, traditional, classical and contemporary forms, of dance, music, theatre and other performances. Traditional arts performances such as lion and dragon dances are excluded as they are usually performed for closed religious and ceremonial audiences. Performances classified as 'others' include multi-media and multi-discipline performances (eg cultural performances staged at Community Centres/Clubs and parks).

Visual Arts: Refer to public exhibitions of abstract or representational arts objects such as paintings, sculpture, pottery, ceramics, creative photography and installation art. Commercial applied arts like graphic and fashion design, film and video, jewellery design and handicraft are excluded.

22.1

TELEVISION LICENCES, CABLE VISION SUBSCRIBERS, REDIFFUSION SUBSCRIBERS AND CINEMAS (End of Period)

	1988	1993	1994	1995	1996	1997	1998
Television Licences ¹ (No)	554,133	639,139	645,529	652,970	681,597	600,382	704,296
Cable Vision Subscribers (No)	-	22,214	25,671	24,027	57,580	104,027	144,000
Rediffusion Subscribers (No)	62,940	33,423	29,200	27,017	24,903	22,132	19,013
Cinemas (No)	46	103	107	108	131	135	133
Seating Capacity ('000)	48	59	55	49	51	53	46
Attendances ('000)	22,251	19,977	17,857	18,128	17,258	17,347	16,397

Source : Singapore Broadcasting Authority
Singapore Cable Vision Ltd
Rediffusion (Singapore) Pte Ltd
Department of Statistics (with effect from April 1994)

1 Data prior to 1998 were based on cumulation of 12 months' figures. From 1998, data are as at end of the period.

22.2

RADIO AND TELEVISION TRANSMISSION

	1988	1993	1994	1995	1996	1997	1998
Radio (RCS, NTUC ¹ & SAFRA ²)	653	1,542	2,081	2,158	2,277	2,590	2,828
Television (TCS)	156	212	275	336	491	488	483

Source : Radio Corporation of Singapore
NTUC Media Co-operative Ltd
SAFRA Radio
Television Corporation of Singapore

1 Operated with effect from January 1991.

2 Operated with effect from October 1994.

22.3

NATIONAL LIBRARY MEMBERSHIP, BOOK COLLECTIONS AND LOANS OF BOOKS

	1988	1993	1994	1995	1996	1997	1998
	Thousand						
Membership ¹	442.2	862.8	935.8	1,035.0	1,254.5	1,318.8	1,559.8
Persons Aged 12 years and Over ²	308.4	680.8	745.7	827.0	1,006.7	985.6	1,268.9
Children Under 12 Years ³	133.8	182.0	190.0	208.0	247.8	333.2	290.9
Book Collections	2,769.4	2,855.8	2,969.3	3,134.1	4,123.5	4,846.1	5,162.7
English	1,606.3	1,788.8	1,861.2	1,949.7	2,706.2	3,210.7	3,236.4
Chinese	739.4	663.6	675.7	736.7	891.5	1,084.5	1,371.1
Malay	335.6	327.1	341.9	352.5	411.6	415.0	412.4
Tamil	88.0	76.3	90.5	95.2	114.2	136.0	142.8
Loan of Books	7,438.2	9,076.3	9,738.3	12,429.2	14,209.5	22,500.1	23,323.1
Persons Aged 12 Years and Over ²	3,488.1	4,295.3	4,782.3	5,965.2	6,664.7	10,717.7	11,852.8
Children Under 12 Years ³	3,950.2	4,781.0	4,956.0	6,464.0	7,544.8	11,782.4	11,470.3

Source : National Library Board

- 1 Members were re-registered in 1988 as a result of computerisation.
- 2 From 1997 onwards, figures refer to persons aged 13 years and over.
- 3 From 1997 onwards, figures refer to children under 13 years.

22.4

DAILY NEWSPAPER CIRCULATION

	1988	1993	1994	1995	1996	1997	1998
	Number						
Total	743,334	977,846	1,029,043	1,005,307	1,008,176	1,024,532	1,054,802
English	340,401	481,392	513,506	499,996	503,805	516,531	530,628
Chinese	354,840	433,871	450,539	441,758	440,321	442,257	454,651
Malay	42,458	57,676	59,751	58,078	56,211	56,907	59,690
Tamil	5,635	4,907	5,247	5,475	7,839	8,837	9,833

22.5 VISITORS TO PLACES OF INTEREST

	1988	1993	1994	1995	1996	1997	1998
Thousand							
National Museum	322.5	243.2	273.0	293.0	251.8	262.6	242.5
Singapore Art Museum ¹	-	-	-	-	104.8	159.6	183.5
Asian Civilisations Museum ²	-	-	-	-	-	47.7	85.9
Singapore Science Centre	690.2	533.9	529.3	542.9	427.9	637.5	469.4
Singapore Zoological Gardens	1,104.3	1,486.7	1,433.6	1,438.5	1,509.0	1,410.6	1,319.4
Sentosa ³	2,606.8	4,040.0	4,102.0	3,868.0	4,100.0	3,497.0	3,309.4
Chinese/Japanese Gardens ³	629.5	286.6	286.0	243.0	251.6	247.6	216.5
Jurong Bird Park ³	980.7	1,549.6	1,512.7	1,513.6	1,510.9	1,107.9	817.6

Source : National Heritage Board
Singapore Science Centre
Singapore Zoological Gardens

Sentosa Development Corporation
Singapore Leisure Industries Pte Ltd
Jurong Bird Park

1 Opened in January 1996.

2 Opened in April 1997.

3 Figures refer to financial years from April to March of the following year.

22.6 UTILISATION OF SPORTS FACILITIES

	1988	1993	1994	1995	1996	1997	1998
Attendances ('000)							
Swimming	6,523,324	5,695,235	5,459,531	5,743,594	6,801,879	6,446,163	6,819,658
Bookings (Number)							
Tennis	141,291	140,642	121,737	108,327	99,902	108,432	99,639
Badminton	71,687	117,203	154,655	150,157	149,193	155,399	181,858
Squash	98,536	49,078	47,679	44,360	41,519	35,459	35,433
Netball	203	2,675	3,426	3,614	4,613	5,133	5,044
Soccer	10,099	8,350	10,158	10,757	9,874	9,911	9,108
Hockey	664	1,036	1,287	1,553	1,801	1,777	2,098
Rugby	113	114	247	301	345	474	420
Athletics	627	920	571	592	641	649	694
Golf (Persons)	11,505	12,759	9,807	5,791	4,762	4,657	3,910

Source : Singapore Sports Council

Note : Data refer to sports facilities provided by Singapore Sports Council.

SPORTS AND CULTURAL COURSES CONDUCTED BY COMMUNITY CENTRES/CLUBS

Type of Course							Number
	1988	1993	1994	1995	1996	1997	1998
Classes							
Sports Courses	1,700	2,264	2,323	2,371	2,540	2,243	2,795
Ball Games	320	220	192	136	133	75	67
Board / Intellectual Games	6	-	-	-	11	2	-
Keep Fit	340	408	375	331	313	308	343
Martial Arts	734	891	877	809	824	904	908
Performing Sports	117	134	118	109	96	120	108
Water Sports	180	611	761	986	1,163	834	1,369
Others	3	-	-	-	-	-	-
Cultural Courses	4,887	6,672	6,750	6,700	5,700	4,018	4,492
Dance	2,667	3,097	3,031	2,900	2,300	1,596	1,679
Drama	41	416	423	500	300	270	318
Music	2,179	2,173	2,192	2,100	2,000	1,350	1,659
Vocal ¹	-	977	1,102	1,200	1,100	797	836
Others	-	9	2	-	-	5	-
Participants							
Sports Courses	40,522	35,420	35,015	35,327	38,788	36,631	40,872
Ball Games	3,656	2,101	2,145	1,372	1,670	994	806
Board / Intellectual Games	73	-	-	-	84	14	-
Keep Fit	6,889	5,804	5,291	6,217	4,767	4,518	4,979
Martial Arts	23,038	17,914	16,944	15,734	17,067	19,256	18,844
Performing Sports	3,795	4,058	3,327	3,043	2,114	2,933	2,432
Water Sports	3,016	5,543	7,308	8,961	13,086	8,916	13,811
Others	55	-	-	-	-	-	-
Cultural Courses	77,893	90,420	93,392	95,000	99,000	130,052	137,477
Dance	55,134	47,148	46,080	46,000	46,000	62,681	69,559
Drama	660	6,763	7,293	8,000	9,000	9,327	8,056
Music	22,099	14,160	15,301	16,000	18,000	19,768	22,447
Vocal ¹	-	22,225	24,675	25,000	26,000	38,105	37,415
Others	-	124	43	-	-	171	-

Source : People's Association

Note : Prior to 1998, period refers to financial year from April to March of the following year.

From 1998 onwards, period refers to calendar year.

¹ Prior to financial year 1993, Vocal was grouped under Music.

22.8 THE ARTS

Art Form	Number						
	1988	1993	1994	1995	1996	1997	1998
Performing Arts							
Total Performances ¹	1,492	1,915	2,091	2,038	2,823	2,510	3,224
Music	490	670	740	516	844	854	771
Dance	158	112	138	177	339	253	271
Theatre	505	1,071	989	1,187	1,297	1,212	1,516
Others	339	62	224	158	343	191	666
Ticketed Performances	817	1,609	1,532	1,569	1,658	1,511	1,766
Music	290	512	538	348	361	399	398
Dance	62	87	102	106	192	133	164
Theatre	405	968	858	1,010	992	926	1,141
Others	60	42	34	105	113	53	63
Attendances ²	484,125	798,345	845,201	749,556	705,142	754,115	692,593
Music	195,708	382,827	473,098	218,812	223,407	245,158	208,213
Dance	39,585	55,159	59,426	54,080	98,579	84,204	88,761
Theatre	212,379	341,445	299,298	414,891	337,741	391,612	357,141
Others	36,453	18,914	13,379	61,773	45,415	33,141	38,478
Visual Arts Exhibitions							
Number	169	150	208	255	273	346	400
Days	1,377	1,441	2,135	3,265	3,270	4,115	6,225

Source : National Arts Council

1 Include non-ticketed performances.

2 Refer to ticketed performances.

23.1 FIRE OCCURRENCES

MISCELLANEOUS							
Type of Property	1991	1992	1993	1994	1995	1996	1997
Public buildings	4,404	4,430	4,430	4,430	4,430	4,430	4,430
Industrial buildings	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Commercial buildings	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Other buildings	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Source: Singapore Civil Defence Force

MISCELLANEOUS

Buildings, either permanent or temporary, used for residential purpose only. It does not include hotels, boarding houses, hostels, etc.

MISCELLANEOUS							
Type of Property	1991	1992	1993	1994	1995	1996	1997
Public buildings	4,404	4,430	4,430	4,430	4,430	4,430	4,430
Industrial buildings	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Commercial buildings	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Other buildings	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Other	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Source: Police Intelligence Department

Fire Occurrences

The Singapore Civil Defence Force (SCDF) is to protect and save lives and property for a safe and secured Singapore. The data on fire occurrences are compiled by the SCDF.

Definitions

Residential buildings : refers to all buildings, either permanent or temporary, used for residential purpose only. It does not include hotels, boarding houses, hostels, etc.

Public, commercial and industrial buildings : refers to all buildings, either permanent or temporary, used for other than

residential purpose, such as commercial, manufacturing, storage, sales, services and public buildings.

Non-building : refers to all other properties or things other than buildings, such as vehicles, vessels, aircraft, electrical cables, bridges, canal, discarded material, vegetation, etc.

Criminal offences

Singapore's crime statistics are compiled from offences reported to the police during the reference period and not at the time the offences were actually committed.

23.1 FIRE OCCURRENCES

Type of Property	Number						
	1988	1993	1994	1995	1996	1997	1998
Total	4,718	5,724	5,830	5,091	5,508	6,705	6,047
Building	2,951	3,164	3,910	3,831	4,021	4,430	4,604
Residential	2,269	2,419	3,283	3,262	3,287	3,620	3,796
Commercial & Industrial	682	745	627	569	734	810	808
Non-Building	1,767	2,560	1,920	1,260	1,487	2,275	1,443

Source : Singapore Civil Defence Force

23.2 SELECTED CRIMINAL OFFENCES

Type of Offence	1988	1993	1994	1995	1996	1997	1998
Number of Cases Reported							
Robbery	1,674	1,022	812	784	768	741	899
Housebreaking	3,999	3,003	2,459	1,921	1,737	1,526	1,576
Motor Vehicle Theft	3,937	3,148	2,569	2,647	2,467	2,242	2,781
Snatch Theft	1,098	588	447	409	313	315	437
Per 100,000 Population							
Robbery	59	31	24	23	21	20	23
Housebreaking	141	92	73	55	48	41	41
Motor Vehicle Theft	138	97	76	76	68	60	72
Snatch Theft	39	18	13	12	9	8	11

Source : Police Intelligence Department

SINGAPORE DEPARTMENT OF STATISTICS

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SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES

Statistics Singapore Home Page

The Statistics Singapore Home Page was launched by the Singapore Department of Statistics since January 1995. Internet users can access the Home Page by connecting to:

<http://www.singstat.gov.sg>

Key Singapore statistics are available:

- ◆ Current Indicators
which provide the latest monthly, quarterly and annual data for key economic and financial indicators.
- ◆ Facts and Figures
which provide annual key data on Singapore's economy and population.
- ◆ Press Releases
which cover the Economic Survey of Singapore, the Consumer Price Index, the Wholesale Trade Index, Retail Sales and Catering Trade Indices and Industrial Production Index.
- ◆ Publications
which include reports on the Business Expectations Survey, latest issue of the Statistics Singapore Newsletter and feature articles on economic and social topics.

An advance release calendar for key Singapore economic indicators is available.

The Home Page provides a convenient gateway to international statistical websites:

- ◆ Guide to International Statistics
which covers international databases, classifications and links, and statistical terms and definitions.
- ◆ IMF Dissemination Standards Bulletin Board
which provides metadata about Singapore's key indicators in the real, fiscal, financial and external sectors, including dissemination practices and information about pre-release access of current indicators.

SingStat DataShop

The SingStat DataShop is the virtual shopfront for official statistics on Singapore. Users can use cashcard or credit card to purchase softcopies of selected statistical reports or tables.

- | | |
|------------------------------------|-------------------------|
| ◆ Occasional Paper Series | ◆ Consumer Price Index |
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Electronic Transmission of Returns (ETR) System

The ETR system enables business organisations to complete and submit their survey forms through the internet. Using an advanced encryption technology, the ETR ensures that the information transmitted through the net is secured and protected.

With the ETR, respondents do away with the tedious paperwork and manual tasks of mailing or faxing survey forms to the Department.

SINGAPORE DEPARTMENT OF STATISTICS INFORMATION DISSEMINATION SERVICES (continued)

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