

information paper
on
business statistics

**RE-BASING AND REVISION OF THE
WHOLESALE TRADE INDEX
(2000=100)**

Singapore Department of Statistics
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Re-Basing and Revision of the Wholesale Trade Index (2000=100)

Introduction

The Department has been compiling the Wholesale Trade Index (WTI) on a quarterly basis since 1995. The index series consists of two separate components – Domestic WTI and Foreign WTI. The Domestic WTI tracks domestic wholesale sales in Singapore while the Foreign WTI monitors sales overseas. The indices give a quick overview of the domestic/foreign sales performance of major wholesaling activities in Singapore, thus providing useful and timely information on the sector's short term performance in the economy. These indicators are used extensively by the government as well as the business community.

2 The current WTI series is based on reference year 1994. Since 1994, the wholesale trade sector has undergone changes at both the overall and industry levels. Numbering some 26,200 firms in 1994, the sector has expanded to a size of 32,500 establishments in 2000. This represented an average annual growth rate of 3.7 per cent over the 6-year period. The sector's total turnover also grew at an average rate of 8.4 per cent yearly from \$264.9 billion in 1994 to \$430.3 billion in 2000.

3 To reflect changes in the structure of the wholesale trade sector over the years, the index series are revised and updated regularly. This information paper reports the re-basing of the WTI to reference year 2000, the first re-basing exercise since the index was first introduced in 1995. Details on the sampling methodology, derivation of weights and index computation method of the re-based series are presented. The paper also presents a comparison of the old series (1994=100) with the new series (2000=100).

Profile of Wholesale Trade

4 Wholesale trade is a major sub-sector within the commerce sector¹. It represented 60 per cent of the commerce sector in terms of number of establishments in 2000 and absorbed 54 per cent of the overall workforce. It is also

¹ Comprises wholesale trade, retail trade, catering trade and hotels

the most important sub-sector based on turnover, contributing a substantial 93 per cent of the sectoral total in 2000.

5 On average, wholesalers employed 5.9 workers per establishment in 2000, slightly lower than the sectoral average of 6.4 workers. However, the wholesale trade's average turnover of \$13.3 million was significantly higher than that of the commerce sector (\$8.5 million). The sub-sector's average operating surplus of \$254 thousand also made them the second most profitable sub-sector within the commerce sector, after the hotel industry.

Classification of Industries

6 Establishments in Singapore are classified according to the Singapore Standard Industrial Classification (SSIC). At the most detailed industry level, the SSIC contains 5 digits. Under the SSIC, wholesale trade industries are coded as 50xxx.

7 The old WTI series was compiled based on SSIC 1996. The SSIC has since been updated to the 2000 version. As such, the re-based index series is based on the latest SSIC 2000.

Revised Sampling Methodology

8 The data used for the compilation of the WTI are primarily sourced from the Department's Quarterly Wholesale Trade Survey (WTS). The old WTS sample covers wholesale firms with relatively higher turnover within each industry as larger firms are deemed to have a bigger impact on the wholesale trade sector's performance. However, to provide adequate representation of small and medium-sized establishments in the WTI, the sampling methodology has been revised in the re-basing exercise to include stratification by employment size.

9 The population frame used for the sampling process is sourced from the Department's Commercial Establishment Information System (CEIS), which is a centralised depository containing basic information of all establishments in Singapore. Wholesale trade enterprises are first stratified into broad industry groups. Within each industry group, the firms are further stratified into small,

medium and large² strata based on their employment size. The Neyman Allocation Method³ is then used to compute the optimum sample size of each stratum. Based on the recommended sample size, random sampling is conducted to select the firms from the CEIS population frame.

New WTS Sample

10 After the new sample has been selected, survey forms were sent to firms which were previously not covered by the WTS and retrospective data on their quarterly wholesale sales values from 1999 to the latest quarter were collected. Newly-selected firms which were found to have ceased operations or become dormant were replaced by other firms of a similar employment size within the industry.

11 In the final WTS sample, a total of 810 firms were selected. The sample represented 2.7 per cent of the population in 2000 in terms of number, and 70.9 per cent in terms of wholesale turnover.

12 Table 1 shows the comparison between the old and new sample sizes and their respective shares in the population.

Table 1 : Comparison between Old and New Samples

	1994-based	2000-based
Sample size (number of establishments)	737	810
Share of sample size w.r.t. overall population (%)	2.8	2.7
Share of sample sales w.r.t. overall population sales (%)	64.7	70.9

² Small enterprises : less than 10 workers
 Medium enterprises : between 10 to 99 workers
 Large enterprises : 100 or more workers

³ This method minimises the variance of the estimator (turnover in this case) for the total population. The optimum sample size within each stratum is given by the formula below:

$$n_i = n \left(\frac{N_i \sigma_i}{\sum_{i=1}^L N_i \sigma_i} \right)$$

where N_i denotes the population size of the i th stratum;
 σ_i denotes the population variance of the estimator of the i th stratum;
 n denotes the total sample size

Revised Industry Groupings and Weightings in WTI

13 Besides compiling the WTI at the overall sectoral level, the index is also computed separately for major industry groups within the wholesale trade. For industries which are of lesser importance, they are classified under a residual group known as “Other Wholesale Trade”.

14 During the re-basing exercise, the industry groupings were reviewed based on their updated weightage in terms of sales in 2000. For those industries previously grouped in the residual category but have become relatively more important in recent years, they are singled out and classified as separate industry groups in the new index series. They include “Chemicals & Chemical Products” and “Ship Chandlers & Bunkering”. On the other hand, for “Textiles, Wearing Apparel & Personal Effects” whose share has shrunk considerably since 1994, the industry group is re-classified under “Other Wholesale Trade”. In the new series, the industry group “Electronic & Electrical Components & Industrial Machinery” is dis-aggregated into “Industrial & Construction Machinery” and “Electronic Components” so as to obtain product homogeneity in each individual industry group. In total, the 2000-based WTI series consist of 11 industry categories, compared to 9 groupings in the 1994-based series.

15 Table 2 shows the new WTI industry groupings and their weights in terms of domestic sales and foreign sales. The corresponding weights based on 1994 data are also presented for comparison.

16 As compared to 1994, the share of petroleum & petroleum products expanded strongly for both domestic and foreign sales in 2000. This was partly attributed to high oil prices during that year which boosted the sales turnover of this industry. Furthermore, Singapore’s efforts to restructure and upgrade its economy to one based on high-tech and high value-added industries also helped to push up the share of telecommunications & computers between 1994 and 2000. Another group which experienced a substantial growth in their sales share was ship chandlers & bunkering.

17 Conversely, wholesaling of household equipment & furniture and general wholesale trade (eg importers and exporters) have become relatively less important over the past six years.

Table 2 : New Industry Groupings and Their Corresponding Weights in 1994 & 2000

Industry	Total		Domestic		Foreign	
	1994=100	2000=100	1994=100	2000=100	1994=100	2000=100
Total	10,000	10,000	10,000	10,000	10,000	10,000
Total Excluding Petroleum	7,025	5,449	8,091	6,765	6,550	4,801
Food, Beverages & Tobacco	663	476	839	882	583	275
Household Equipment & Furniture	1,201	625	1,138	780	1,227	548
Petroleum & Petroleum Products	2,975	4,551	1,909	3,235	3,450	5,199
Chemicals & Chemical Products*	380	341	340	291	398	366
Electronic Components*	828	912	1,429	1,391	561	676
Industrial & Construction Machinery*	518	400	638	380	465	410
Telecommunications & Computers	400	558	566	687	327	495
Timber, Paints & Construction Materials	486	297	767	460	360	216
General Wholesale Trade	1,177	712	513	409	1,472	861
Ship Chandlers & Bunkering*	205	263	340	469	144	162
Other Wholesale Trade	1,167	865	1,521	1,016	1,013	792

* New groupings

Computation of WTI

18 The Domestic WTI and Foreign WTI are computed using the Laspeyres' formula. The sales indices are first computed at SSIC 5-digit level and then progressively built up using their weights to obtain the overall WTI.

19 In mathematical terms, the Laspeyres' formula is presented as follows:

$$I_{on} = \frac{\sum_i W_i \frac{P_{in} Q_{in}}{P_{io} Q_{io}}}{\sum_i W_i} \times 100$$

where I_{on} is the index for the current period n compared to the base period o (the base year of the WTI is 2000);

$P_{in}Q_{in}$ is the sales of the sample engaged in the i^{th} activity during the current period n ;

$P_{io}Q_{io}$ is the sales of the sample engaged in the i^{th} activity during the base period o ;

$\frac{P_{in}Q_{in}}{P_{io}Q_{io}}$ compares the sales of the i^{th} activity in the current period n against the base period o ;

$\frac{W_i}{\sum_i W_i}$ is the normalised weight assigned to the i^{th} activity, ie its share in terms of turnover with respect to the wholesale trade sector;

\sum_i is the summation over all activities in the wholesale trade sector

20 For time series analysis of the new WTI series from 1995 onwards, the 1994-based values between 1995-1998 have to be converted to the 2000-based values. The relationship between the old series (1994=100) and the new series (2000=100) during the period 1995-1998 can be illustrated as follows:

$$\frac{WTI_{(Period X, 2000=100)}}{WTI_{(2000, 2000=100)}} = \frac{WTI_{(Period X, 1994=100)}}{WTI_{(2000, 1994=100)}}$$

where $WTI_{(Period X, Year Y=100)}$ denotes the index, with base year 2000, during period X . In other words, the ratio of the WTI during two pre-defined periods is the same regardless of the base year.

21 Since the 2000-based WTI in year 2000 is 100, the above relationship can be simplified further to this formula:

$$WTI_{(Period X, 2000=100)} = WTI_{(Period X, 1994=100)} \times \text{Linking Coefficient}$$

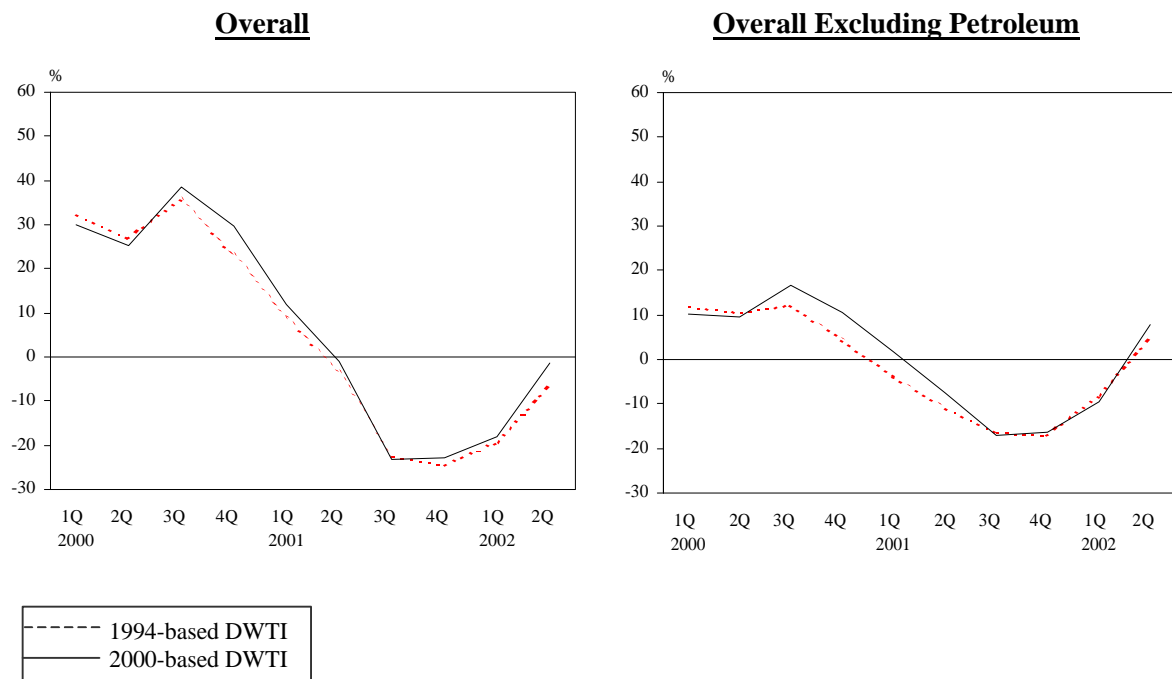
where the Linking Coefficient is the ratio of 100 to the 1994-based WTI in year 2000.

Comparison of the Old and New WTI Series

22 Charts 1 and 2 show the year-on-year movements of the 1994-based and 2000-based Domestic and Foreign Wholesale Trade Index series (DWTI and FWTI) during 1Q2000-2Q2002 respectively. The old and new index series present very similar trends.

23 The overall Domestic WTI displayed strong positive growth throughout 2000, partly due to high oil prices which influenced the sales trend of the wholesale trade sector (Chart 1). The growth moderated in 1Q2001 but the sector started experiencing declining sales from 2Q2001 onwards.

**Chart 1 : 1994-based and 2000-based Domestic WTI, 1Q2000-2Q2002
Per Cent Change over the Corresponding Quarter of the Previous Year**

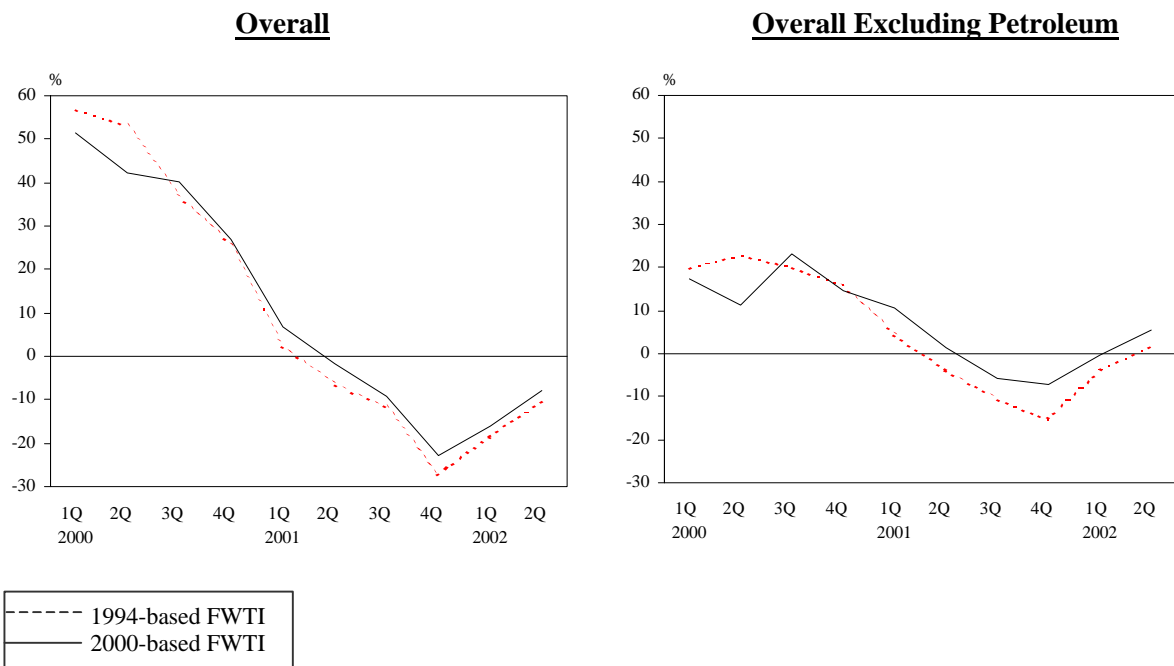


24 Excluding petroleum, the domestic wholesale market also performed well in 2000, but with sales growths of smaller magnitudes compared with the overall domestic WTI. This was followed by a year of dull performance in 2001. This also coincided with the downturn in the economy which also registered negative growth in the same year. Sales, however, started improving in 2Q2002.

25 Similar to its domestic counterpart, the overall Foreign WTI displayed positive growth throughout 2000, partly attributable to high oil prices (Chart 2). The Foreign WTI declined sharply by 23 per cent (based on the new series) in 4Q2001 over the corresponding quarter of 2000. This was mainly attributed to lower sales of petroleum & petroleum products (-36 per cent) and electronic components (-34 per cent). The downtrend in the overall Foreign WTI continued in the next two quarters, though the declines were smaller.

26 The Foreign WTI excluding petroleum also registered a decline (abait a smaller one) in 4Q2001. The growth trend showed an upturn in 2Q2002 (based on new series) over the corresponding quarter, registering its first increase of 5.3 per cent after several quarters of declining sales.

**Chart 2 : 1994-based and 2000-based Foreign WTI, 1Q2000-2Q2002
Per Cent Change over the Corresponding Quarter of the Previous Year**



Conclusion

27 With the re-based series, the Domestic WTI and Foreign WTI reflect the latest structure of the wholesale trade industry and provide current indicators of the short-term performance of the various wholesale trade activities.

28 The 2000-based WTI series will be released with effect from the 3Q2002 index. Summary findings are available at the Department's home page at <http://www.singstat.gov.sg>. The quarterly report can also be purchased through Singstat Datashop@GovMall, which is accessible from the home page.

29 The WTI is also published separately in the Monthly Digest of Statistics and the Yearbook of Statistics. Subscribers to the Department's Time Series Retrieval and Dissemination System (TREND) may download the historical data electronically.

Singapore Department of Statistics
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ANNEXES

WEIGHTS OF WHOLESALE TRADE CATEGORY BY ACTIVITY

SSIC 2000	Description of Activity	Total	Domestic	Foreign
50	Total Wholesale Trade	10,000	10,000	10,000
	Total - Exclude Petroleum & Petroleum Products	5,449	6,765	4,801
	Food, Beverages & Tobacco	476	882	275
50211	Fruits & vegetables	31	80	8
50212	Livestock, meat, poultry, eggs & seafood	87	175	44
50213	Cereals, sugar, oils, sauces, food beverages & daily products	250	400	175
50214	Confectionery and biscuits	13	21	9
50217	Liquor & soft drinks	40	113	3
50218	Cigarettes & other tobacco products	27	34	24
50219	Food, beverages & tobacco nec	28	59	12
	Household Equipment & Furniture	625	780	548
50331	Furniture (including mattresses, cushions)	44	49	41
50332	Furnishings (including curtains, carpets, wall paper)	6	13	2
50333	Lighting & lighting accessories	5	13	2
50334	Crockery, cutlery & kitchen utensils	10	18	6
50335	Household electrical appliances & equipment	35	68	19
50336	Radio, television sets, sound reproducing & recording equipment & supplies except electrical and electronic components	525	619	478
	Petroleum & Petroleum Products	4,551	3,235	5,199
50411	Crude petroleum	2,813	1,291	3,564
50412	Mineral fuels & lubricants	1,684	1,899	1,577
50419	Solid, liquid & gaseous fuels & related products nec	54	45	58
	Chemicals & Chemical Products	341	291	366
50431	Basic industrial chemicals except fertilizers	100	92	104
50432	Chemical fertilizers	23	2	33
50433	Petrochemical products	123	101	135
50439	Chemicals & chemical products nec	95	96	94
	Electronic Components	912	1,391	676
50515	Telecommunications equipment	34	73	15
50516	Electronic components	793	1,172	607
50517	Electrical & wiring accessories	85	146	54
	Industrial & Construction Machinery	400	380	410
50511	Industrial machinery & equipment	322	273	346
50513	Construction equipment (eg concrete mixer)	45	49	44
50514	Lifts, escalators, industrial & office air-conditioning equipment	14	34	4
50519	Industrial, agricultural & construction machinery nec	19	24	16

WEIGHTS OF WHOLESALE TRADE CATEGORY BY ACTIVITY

SSIC 2000	Description of Activity	Total	Domestic	Foreign
	Telecommunications & Computers	558	687	495
50521	Pagers, handphones & other telecommunications apparatus	13	32	4
50522	Office machines & equipment (including accessories)	98	116	89
50523	Computer hardware & peripheral equipment	328	449	268
50524	Computer software	81	34	104
50525	Computer accessories (eg diskettes, computer cards)	38	56	30
	Timber, Paints & Construction Materials	297	460	216
50422	Sawn timber, plywood & related products	59	52	62
50423	Metals & fabricated metals except general hardware	132	157	120
50424	General hardware (eg locks, hinges)	47	110	15
50425	Structural clay and concrete products	22	59	4
50426	Paints (including varnishes and supplies)	6	10	3
50429	Construction materials, hardware, plumbing & heating equipment & supplies nec	31	72	12
	General Wholesale Trade (Including Exporters & Importers)	712	409	861
	Ship Chandlers & Bunkering	263	469	162
50931	Ship chandlers	11	20	8
50932	Ship bunkering	252	449	154
	Other Wholesale Trade	865	1,016	792
	<i>Tropical Produce</i>			
50221	Rubber (including rubber brokers)	97	22	134
50222	Pepper & other spices	18	15	20
50223	Coffee, cocoa & tea	16	7	20
	<i>Textiles, Wearing Apparel, Footwear & Leather Goods</i>			
50311	Textiles	54	71	45
50312	Wearing apparel for adults	29	46	21
50314	Footwear	6	16	1
50315	Bags & luggages	3	7	1
	<i>Personal Effects</i>			
50321	Jewellery	26	56	12
50323	Watches & clocks	22	39	13
50324	Cosmetics & toiletries	35	72	16

WEIGHTS OF WHOLESALE TRADE CATEGORY BY ACTIVITY

SSIC 2000	Description of Activity	Total	Domestic	Foreign
	<i>Sporting & Other Recreational Goods</i>			
50341	Sporting & athletic goods & equipment	11	14	9
50342	Musical instruments, record albums, cassette tapes, laser discs & compact discs (including CD-ROMs, VCDs, DVDs)	7	19	2
50343	Toys and games (including electronic games)	6	12	3
	<i>Medicinal & Pharmaceutical Products</i>			
50361	Western medicine	31	57	19
50362	Non-Western medicine	6	14	2
	<i>Paper, Paper Products & Stationery</i>			
50371	Paper & paper products	54	34	64
50372	Packaging materials	10	16	7
50373	Stationery	10	24	3
50374	Books & magazines	9	14	7
	<i>Other Intermediate Products</i>			
50491	Scrap, junk & waste dealers	27	40	21
	<i>Machinery & Equipment Not Elsewhere Classified</i>			
50391	Optical & photographic equipment & supplies	30	44	23
50591	Professional, scientific & precision equipment	34	62	21
50594	Security & fire-fighting equipment	9	22	2
	<i>Transport Equipment</i>			
50611	Motor vehicles except motorcycles & scooters	19	32	12
50613	Parts & accessories for vehicles	138	150	132
50622	Marine equipment & accessories	27	52	15
50623	Aircraft equipment & supplies (including aeronautical equipment)	11	16	9
	<i>Specific Commodities Not Elsewhere Classified</i>			
50911	Animal feed	78	1	116
50919	Other specific commodities	42	42	42

TABLE 1
DOMESTIC WHOLESALE TRADE INDEX
(2000 = 100)

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Timber, Paints & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Other Wholesale Trade
Weights Period	10,000	6,765	882	780	3,235	291	1,391	380	687	460	409	469	1,016
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	89.7	90.0	100.4	82.3	89.1	120.2	80.1	78.9	92.0	86.3	72.5	96.3	100.2
2000 I	87.0	93.0	94.5	99.9	74.5	86.6	87.1	87.4	102.5	90.3	77.3	96.3	97.8
II	93.0	96.4	98.7	102.6	85.9	95.4	95.7	95.9	91.3	105.1	81.2	92.3	98.3
III	109.8	106.8	107.7	104.9	116.2	100.6	107.5	116.3	102.4	103.2	123.0	112.1	100.1
IV	110.2	103.9	99.1	92.6	123.4	117.4	109.7	100.4	103.8	101.3	118.5	99.4	103.7
2001 I	97.5	94.7	99.3	88.4	103.3	117.8	86.2	86.7	98.0	91.3	97.7	88.0	105.0
II	92.0	89.2	99.8	78.7	97.8	121.7	76.5	80.1	96.1	86.2	61.2	90.3	107.2
III	84.4	88.8	96.8	81.6	75.1	129.9	78.5	76.0	84.4	86.2	67.9	114.8	95.0
IV	84.9	87.1	105.8	80.4	80.3	111.4	79.2	72.8	89.3	81.6	63.1	92.1	93.4
2002 I	79.9	85.6	107.2	71.2	68.0	129.5	79.2	59.6	84.0	81.0	68.6	93.6	89.8
II ^P	90.7	96.3	111.3	72.9	79.0	259.0	80.7	66.6	83.3	82.7	64.8	120.7	103.6

^P Preliminary

TABLE 2
PERCENT CHANGE IN DOMESTIC WHOLESALE TRADE INDEX OVER PREVIOUS QUARTER
(2000 = 100)

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Timber, Paints & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Other Wholesale Trade
Weights Period	10,000	6,765	882	780	3,235	291	1,391	380	687	460	409	469	1,016
2000 I	2.5	-1.1	-5.8	-3.7	13.4	13.8	-0.9	-5.4	3.0	-15.5	21.4	11.8	-3.8
II	6.9	3.7	4.4	2.7	15.3	10.2	9.9	9.7	-10.9	16.4	5.0	-4.2	0.5
III	18.1	10.8	9.1	2.2	35.3	5.5	12.3	21.3	12.2	-1.8	51.5	21.5	1.8
IV	0.4	-2.7	-8.0	-11.7	6.2	16.7	2.0	-13.7	1.4	-1.8	-3.7	-11.3	3.6
2001 I	-11.5	-8.9	0.2	-4.5	-16.3	0.3	-21.4	-13.6	-5.6	-9.9	-17.6	-11.5	1.3
II	-5.6	-5.8	0.5	-11.0	-5.3	3.3	-11.3	-7.6	-1.9	-5.6	-37.4	2.6	2.1
III	-8.3	-0.4	-3.0	3.7	-23.2	6.7	2.6	-5.1	-12.2	0.0	10.9	27.1	-11.4
IV	0.6	-1.9	9.3	-1.5	6.9	-14.2	0.9	-4.2	5.8	-5.3	-7.1	-19.8	-1.7
2002 I	-5.9	-1.7	1.3	-11.4	-15.3	16.2	0.0	-18.1	-5.9	-0.7	8.7	1.6	-3.9
II ^P	13.5	12.5	3.8	2.4	16.2	100.0	1.9	11.7	-0.8	2.1	-5.5	29.0	15.4

^P Preliminary

TABLE 3
PERCENT CHANGE IN DOMESTIC WHOLESALE TRADE INDEX OVER CORRESPONDING PERIOD OF PREVIOUS YEAR
(2000 = 100)

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Timber, Paints & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Other Wholesale Trade
Weights Period	10,000	6,765	882	780	3,235	291	1,391	380	687	460	409	469	1,016
2000	31.1	11.8	-3.2	-1.6	105.3	31.1	23.6	14.5	12.6	7.3	13.0	45.2	7.2
2001	-10.3	-10.1	0.4	-17.7	-10.9	20.2	-19.9	-21.1	-8.1	-13.7	-27.5	-3.7	0.2
2000 I	30.0	10.3	-13.6	3.3	144.3	19.1	16.0	11.8	26.9	12.6	-19.3	84.1	13.9
II	25.3	9.4	-2.6	-4.4	90.0	17.5	25.1	4.9	3.2	12.6	6.3	41.6	7.9
III	38.6	16.6	5.2	6.0	117.6	34.0	27.7	33.1	18.5	11.7	4.1	55.9	6.2
IV	29.8	10.5	-1.2	-10.7	87.8	54.3	24.8	8.7	4.3	-5.2	86.0	15.4	2.0
2001 I	12.1	1.8	5.1	-11.5	38.7	36.0	-1.0	-0.8	-4.4	1.1	26.4	-8.6	7.4
II	-1.1	-7.5	1.1	-23.3	13.9	27.6	-20.1	-16.5	5.3	-18.0	-24.6	-2.2	9.1
III	-23.1	-16.9	-10.1	-22.2	-35.4	29.1	-27.0	-34.7	-17.6	-16.5	-44.8	2.4	-5.1
IV	-23.0	-16.2	6.8	-13.2	-34.9	-5.1	-27.8	-27.5	-14.0	-19.4	-46.8	-7.3	-9.9
2002 I	-18.1	-9.6	8.0	-19.5	-34.2	9.9	-8.1	-31.3	-14.3	-11.3	-29.8	6.4	-14.5
II ^P	-1.4	8.0	11.5	-7.4	-19.2	112.8	5.5	-16.9	-13.3	-4.1	5.9	33.7	-3.4

^P Preliminary

TABLE 4
FOREIGN WHOLESALE TRADE INDEX
(2000 = 100)

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Timber, Paints & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Other Wholesale Trade
Weights Period	10,000	4,801	275	548	5,199	366	676	410	495	216	861	162	792
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	92.3	99.2	118.4	106.6	86.0	155.9	72.9	75.7	102.8	99.3	94.3	88.3	101.2
2000 I	88.2	88.3	91.4	87.7	88.2	79.1	82.0	81.9	93.8	87.7	92.4	99.8	90.5
II	97.2	100.0	109.0	96.7	94.6	92.1	96.5	97.9	91.9	104.4	108.4	93.3	102.8
III	104.1	106.7	102.5	100.5	101.8	100.8	117.4	112.1	104.4	103.5	105.9	112.5	105.3
IV	110.4	105.0	97.1	115.1	115.4	128.0	104.1	108.2	109.9	104.4	93.3	94.4	101.4
2001 I	94.3	97.5	96.0	101.5	91.4	129.0	82.8	76.1	108.1	103.2	99.4	83.1	96.9
II	95.6	101.5	133.7	105.5	90.2	159.7	70.8	82.0	104.3	103.6	97.9	86.9	101.7
III	94.4	100.4	116.0	108.3	88.9	199.3	69.6	66.8	94.3	94.6	91.0	99.8	103.0
IV	85.0	97.4	127.9	111.2	73.5	135.5	68.4	77.7	104.4	95.9	88.7	83.2	103.0
2002 I	79.2	97.3	123.3	97.0	62.5	146.7	71.4	77.5	111.4	111.3	88.7	82.5	97.8
II ^P	88.0	106.9	142.5	111.8	70.5	172.4	79.5	84.0	103.3	114.6	96.7	104.8	108.0

^P Preliminary

TABLE 5
PERCENT CHANGE IN FOREIGN WHOLESALE TRADE INDEX OVER PREVIOUS QUARTER
(2000 = 100)

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Timber, Paints & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Other Wholesale Trade
Weights Period	10,000	4,801	275	548	5,199	366	676	410	495	216	861	162	792
2000 I	1.4	-3.6	-4.6	-0.8	6.7	-18.3	-0.1	-8.9	1.4	-12.4	1.1	15.0	-7.2
II	10.2	13.3	19.3	10.3	7.3	16.4	17.7	19.5	-2.0	19.0	17.3	-6.5	13.6
III	7.1	6.7	-6.0	3.9	7.6	9.4	21.7	14.5	13.6	-0.9	-2.3	20.6	2.4
IV	6.1	-1.6	-5.3	14.5	13.4	27.0	-11.3	-3.5	5.3	0.9	-11.9	-16.1	-3.7
2001 I	-14.6	-7.1	-1.1	-11.8	-20.8	0.8	-20.5	-29.7	-1.6	-1.1	6.5	-12.0	-4.4
II	1.4	4.1	39.3	3.9	-1.3	23.8	-14.5	7.8	-3.5	0.4	-1.5	4.6	5.0
III	-1.3	-1.1	-13.2	2.7	-1.4	24.8	-1.7	-18.5	-9.6	-8.7	-7.0	14.8	1.3
IV	-10.0	-3.0	10.3	2.7	-17.3	-32.0	-1.7	16.3	10.7	1.4	-2.5	-16.6	0.0
2002 I	-6.8	-0.1	-3.6	-12.8	-15.0	8.3	4.4	-0.3	6.7	16.1	0.0	-0.8	-5.0
II ^P	11.1	9.9	15.6	15.3	12.8	17.5	11.3	8.4	-7.3	3.0	9.0	27.0	10.4

^P Preliminary

TABLE 6
PERCENT CHANGE IN FOREIGN WHOLESALE TRADE INDEX OVER CORRESPONDING PERIOD OF PREVIOUS YEAR
(2000 = 100)

	Total	Total (excluding petroleum)	Food, Beverages & Tobacco	Household Equipment & Furniture	Petroleum & Petroleum Products	Chemicals & Chemical Products	Electronic Components	Industrial & Construction Machinery	Telecom- munications & Computers	Timber, Paints & Construction Materials	General Wholesale Trade	Ship Chandlers & Bunkering	Other Wholesale Trade
Weights Period	10,000	4,801	275	548	5,199	366	676	410	495	216	861	162	792
2000	39.0	16.5	-4.9	-0.7	69.1	15.7	33.8	32.8	23.4	11.3	18.1	36.8	12.2
2001	-7.7	-0.8	18.4	6.6	-14.0	55.9	-27.1	-24.4	2.8	-0.7	-5.8	-11.8	1.2
2000 I	51.5	17.4	-13.9	1.6	107.0	10.8	28.5	33.0	39.4	11.9	16.5	79.8	14.8
II	42.3	11.2	5.1	-31.6	95.5	7.1	30.4	31.1	9.9	16.9	33.3	28.5	14.7
III	40.1	23.2	-10.9	15.7	61.8	10.2	48.4	49.5	29.4	12.9	22.0	45.3	16.4
IV	26.9	14.6	1.4	30.2	39.5	32.2	26.8	20.4	18.8	4.3	2.1	8.8	4.0
2001 I	6.9	10.4	5.0	15.7	3.6	63.1	1.0	-7.1	15.2	17.7	7.6	-16.7	7.1
II	-1.6	1.5	22.7	9.1	-4.7	73.4	-26.6	-16.2	13.5	-0.8	-9.7	-6.9	-1.1
III	-9.3	-5.9	13.2	7.8	-12.7	97.7	-40.7	-40.4	-9.7	-8.6	-14.1	-11.3	-2.2
IV	-23.0	-7.2	31.7	-3.4	-36.3	5.9	-34.3	-28.2	-5.0	-8.1	-4.9	-11.9	1.6
2002 I	-16.0	-0.2	28.4	-4.4	-31.6	13.7	-13.8	1.8	3.1	7.8	-10.8	-0.7	0.9
II ^P	-7.9	5.3	6.6	6.0	-21.8	8.0	12.3	2.4	-1.0	10.6	-1.2	20.6	6.2

^P Preliminary