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Trends in Singapore's Inward and Outward Direct Investment, 2001 - 2011

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Introduction

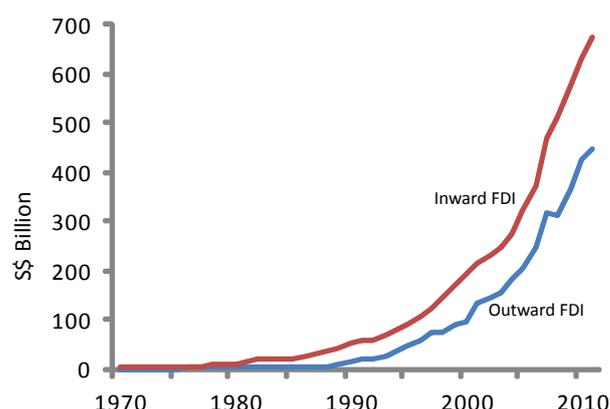
Foreign direct investment (FDI) is a cross border investment in which a resident entity in one economy (the direct investor) acquires a lasting interest in an enterprise resident in another economy (the direct investment enterprise). Direct investment implies a long-term relationship between the direct investor and the direct investment enterprise, and a significant degree of influence (by holding at least 10 per cent equity interest) by the direct investor on the management of the direct investment enterprise.

This article highlights recent trends in the extent and pattern of Singapore's FDI stock¹ from 2001 to 2011. The geographical and industrial composition of Singapore's inward and outward investment are also presented.

Overview

As at end 2011, Singapore's inward FDI stock amounted to \$672 billion, higher than its outward FDI stock of \$449 billion (Chart 1). The inward and outward FDI stock had more than tripled the 2001 stock of \$217 billion and \$132 billion respectively.

CHART 1 SINGAPORE'S FOREIGN DIRECT INVESTMENT, 1970-2011
(Stock as at Year-End)



1 Foreign direct investment (FDI) stock comprises three components namely: paid-up shares in affiliates, reserves attributed to direct investors and net outstanding debt owed by the direct investment enterprises to their direct investors. Data on inward FDI stock are compiled using administrative records from the Accounting and Corporate Regulatory Authority (ACRA), supplemented with data from the Survey of Foreign Debt and Financial Derivative Transactions conducted by the Singapore Department of Statistics (DOS). Data on outward FDI stock are compiled from the Survey of Singapore's Investment Abroad, also conducted by DOS.

Over this period, Singapore's inward and outward stocks of FDI expanded at compounded annual growth rates (CAGR) of 12 per cent and 13 per cent respectively.

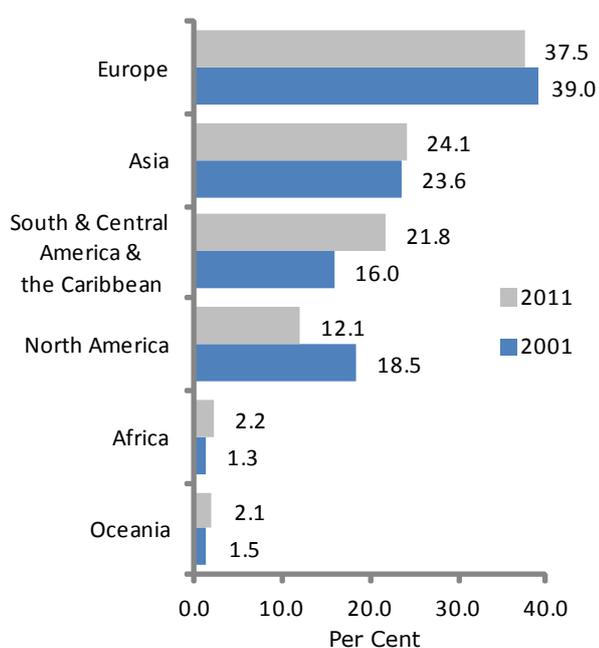
Singapore's inward FDI stock had consistently been higher than its outward FDI stock over the years. Singapore has a longer history of being a FDI recipient. As the Singapore economy developed and companies acquired resources and expertise to venture abroad, overseas direct investment picked up in the 1990s.

Singapore's Inward Direct Investment

Geographical Distribution

Europe and Asia were the top two sources of FDI in Singapore, accounting for a combined 62 per cent of FDI in Singapore as at end 2011 (Chart 2).

CHART 2 SOURCES OF FDI IN SINGAPORE BY MAJOR REGION, 2001 AND 2011



The share of direct investment from Europe declined from 39 per cent in 2001 to 38 per cent as at end 2011 while that of Asia increased slightly over the same period.

Collectively, investors from South & Central America & the Caribbean contributed 22 per cent of the stock of inward FDI in Singapore as at end 2011, higher than the share of 16 per cent as at end 2001.

In contrast, North America's share declined from 19 per cent to 12 per cent during the same period.

Europe

The value of Europe FDI stock in Singapore tripled from \$85 billion as at end 2001 to \$252 billion as at end 2011 (Table 2). The top three European investors were Netherlands, United Kingdom and Switzerland.

The total direct investment contributed by the three leading investor countries rose from \$64 billion as at end 2001 to \$151 billion as at end 2011. However, their combined share of Europe's FDI stock declined from 76 per cent to 60 per cent during this period. In recent years, investors from other European countries such as Luxembourg and Norway had increased their stock of direct investment in Singapore. Luxembourg's and Norway's combined share of Europe's FDI stock expanded from 5.5 per cent to 18 per cent between 2001 and 2011.

Asia

Asia's FDI stock in Singapore more than tripled from \$51 billion as at end 2001 to \$162 billion as at end 2011 (Table 3). Japan was the top Asian investor in Singapore, but its share of

TABLE 1 SOURCES OF FDI IN SINGAPORE BY MAJOR REGION, 2001-2011
 (Stock As At Year-End)

Region	2001	2003	2005	2007	2009	2011
S\$ Billion						
Total FDI	216.5	246.2	323.8	466.6	574.8	672.0
Europe	84.5	103.9	140.0	198.3	222.2	252.0
Asia	51.2	57.8	78.3	105.3	145.8	161.9
South & Central America & The Caribbean	34.7	38.1	50.1	91.0	121.8	146.3
North America	40.0	39.7	43.2	54.7	61.7	81.6
Africa	2.9	4.0	7.5	9.0	12.8	14.9
Oceania	3.2	2.6	4.8	7.3	9.5	14.4
Per Cent (%)						
Total FDI	100.0	100.0	100.0	100.0	100.0	100.0
Europe	39.0	42.2	43.2	42.5	38.7	37.5
Asia	23.6	23.5	24.2	22.6	25.4	24.1
South & Central America & The Caribbean	16.0	15.5	15.5	19.5	21.2	21.8
North America	18.5	16.1	13.3	11.7	10.7	12.1
Africa	1.3	1.6	2.3	1.9	2.2	2.2
Oceania	1.5	1.1	1.5	1.6	1.7	2.1

 TABLE 2 MAJOR INVESTOR COUNTRIES FROM EUROPE, 2001-2011
 (Stock As At Year-End)

Region/Country	2001	2003	2005	2007	2009	2011
S\$ Billion						
Europe	84.5	103.9	140.0	198.3	222.2	252.0
Netherlands	34.7	26.9	32.1	51.4	61.4	66.3
United Kingdom	13.6	38.1	49.6	62.5	49.5	55.9
Switzerland	15.5	16.8	22.3	27.5	26.9	28.8
Luxembourg	0.7	1.2	2.9	5.6	18.7	23.7
Norway	3.9	4.6	8.6	17.1	23.1	21.8
Germany	6.3	6.1	8.2	9.2	11.1	13.0
France	4.4	5.2	7.0	11.0	8.1	10.2
Per Cent (%)						
Europe	100.0	100.0	100.0	100.0	100.0	100.0
Netherlands	41.1	25.9	23.0	25.9	27.6	26.3
United Kingdom	16.1	36.6	35.4	31.5	22.3	22.2
Switzerland	18.4	16.2	15.9	13.8	12.1	11.4
Luxembourg	0.9	1.1	2.1	2.8	8.4	9.4
Norway	4.6	4.5	6.1	8.6	10.4	8.6
Germany	7.5	5.9	5.8	4.7	5.0	5.1
France	5.2	5.0	5.0	5.5	3.6	4.1

Asian FDI stock decreased from 59 per cent to 32 per cent between 2001 and 2011. The other major Asian investor countries or

economies were India, Hong Kong, Malaysia, and China, with the emergence of India and China being a more recent phenomenon.

TABLE 3 MAJOR INVESTOR COUNTRIES/REGION FROM ASIA, 2001-2011 (Stock As At Year-End)

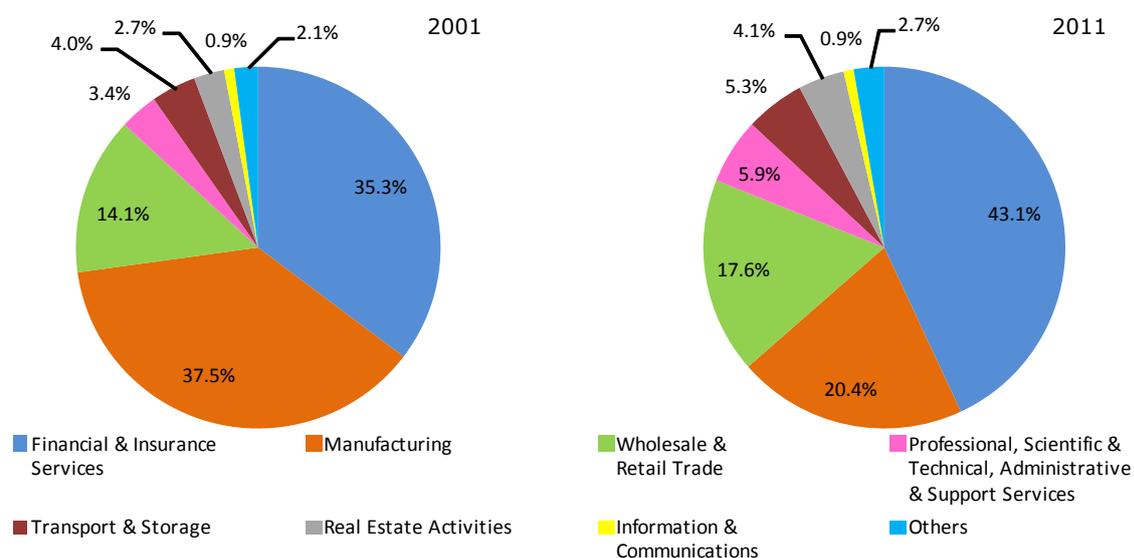
Country/Economy	2001	2003	2005	2007	2009	2011
S\$ Billion						
Asia	51.2	57.8	78.3	105.3	145.8	161.9
Japan	29.9	34.0	44.8	47.5	50.4	52.5
India	0.3	0.4	1.3	13.0	22.0	23.8
Hong Kong	5.6	3.9	4.7	6.9	18.1	23.5
Malaysia	5.9	4.4	8.2	11.4	15.9	18.6
China	0.9	0.9	0.9	2.3	9.7	14.7
Taiwan	4.8	5.9	7.2	7.7	6.2	7.3
Per Cent (%)						
Asia	100.0	100.0	100.0	100.0	100.0	100.0
Japan	58.5	58.8	57.3	45.1	34.6	32.4
India	0.7	0.6	1.7	12.4	15.1	14.7
Hong Kong	10.9	6.8	6.0	6.5	12.4	14.5
Malaysia	11.5	7.7	10.4	10.8	10.9	11.5
China	1.7	1.5	1.2	2.2	6.7	9.1
Taiwan	9.3	10.2	9.2	7.3	4.2	4.5

Industrial Distribution

As at end 2011, the financial & insurance services sector attracted the most FDI, followed by the manufacturing and the

wholesale & retail trade sectors (Chart 3). The share of FDI in financial & insurance services and wholesale & retail trade increased while that of the manufacturing sector declined from 2001 to 2011.

CHART 3 SINGAPORE INWARD FDI STOCK BY MAJOR SECTOR, 2001 AND 2011



Financial & Insurance Services

The bulk of inward FDI stock in the financial & insurance services sector was in investment holding companies, and their share of FDI

stock in the sector rose from 78 per cent to 84 per cent between 2001 and 2011 (Table 4). Banks accounted for 5.1 per cent of the sector's FDI stock as at end 2011, lower than the 12 per cent as at end 2001.

TABLE 4 INWARD FDI IN FINANCIAL AND INSURANCE SERVICES, 2001-2011 (Stock As At Year-End)

Sector/Industry	2001	2003	2005	2007	2009	2011
S\$ Billion						
Financial & Insurance Services	76.4	86.4	121.7	195.4	239.3	289.7
Financial Services	73.7	82.9	116.0	187.9	231.4	280.3
Banks	8.8	8.9	9.7	11.3	14.3	14.7
Investment Holding Companies	59.3	67.3	95.3	161.9	197.8	242.9
Other Financial Services	5.6	6.6	10.9	14.7	19.2	22.7
Insurance Services	2.7	3.5	5.7	7.4	8.0	9.4
Per Cent (%)						
Financial & Insurance Services	100.0	100.0	100.0	100.0	100.0	100.0
Financial Services	96.5	95.9	95.3	96.2	96.7	96.7
Banks	11.5	10.3	8.0	5.8	6.0	5.1
Investment Holding Companies	77.6	77.9	78.4	82.9	82.6	83.8
Other Financial Services	7.4	7.7	9.0	7.5	8.0	7.8
Insurance Services	3.5	4.1	4.7	3.8	3.3	3.3

Manufacturing

FDI stock in manufacturing expanded from \$81 billion to \$137 billion between 2001 and 2011 (Table 5). As at end 2011, FDI stock in manufacturing was concentrated in pharmaceuticals (32 per cent), electronics (30 per cent) and refined petroleum products (15

per cent) which together contributed 78 per cent of the sector's FDI stock as at end 2011. While the share of pharmaceuticals industry in manufacturing FDI stock increased from 22 per cent as at end 2001 to 32 per cent as at end 2011, the share of electronics industry in manufacturing FDI stock decreased from 45 per cent to 30 per cent during the same period.

TABLE 5 INWARD FDI IN MANUFACTURING, 2001-2011 (Stock As At Year-End)

Sector/Industry	2001	2003	2005	2007	2009	2011
S\$ Billion						
Manufacturing	81.2	90.0	103.7	116.5	123.3	137.3
Pharmaceutical Products	17.4	29.3	38.7	47.9	37.0	44.5
Computer, Electronic and Optical Products	36.6	30.9	31.7	31.6	40.5	41.4
Refined Petroleum Products	12.3	13.6	13.9	14.1	19.7	21.2
Per Cent (%)						
Manufacturing	100.0	100.0	100.0	100.0	100.0	100.0
Pharmaceutical Products	21.5	32.6	37.3	41.1	30.0	32.4
Computer, Electronic and Optical Products	45.1	34.3	30.6	27.1	32.8	30.1
Refined Petroleum Products	15.1	15.1	13.4	12.1	16.0	15.4

Singapore's Outward Direct Investment

Geographical Distribution

Asia, Europe and South & Central America & the Caribbean were the top three destination regions for Singapore's outward FDI.

Asia had been the top destination region for Singapore's outward FDI, with its share increasing to 58 per cent as at end 2011 from 49 per cent as at end 2001 (Chart 4).

Europe accounted for 14 per cent of Singapore's outward FDI stock as at end 2011, higher than the 9.6 per cent recorded as at end 2001.

South & Central America & the Caribbean accounted for 13 per cent of outward FDI stock as at end 2011, lower than the 30 per cent recorded in 2001, though the investment amount increased from \$40 billion

as at end 2001 to \$57 billion as at end 2011. In contrast, Oceania accounted for a higher proportion of Singapore's outward FDI stock as at end 2011 (8.8 per cent) compared to 2001 (2.6 per cent).

CHART 4 SINGAPORE OUTWARD FDI STOCK BY REGION, 2001 AND 2011

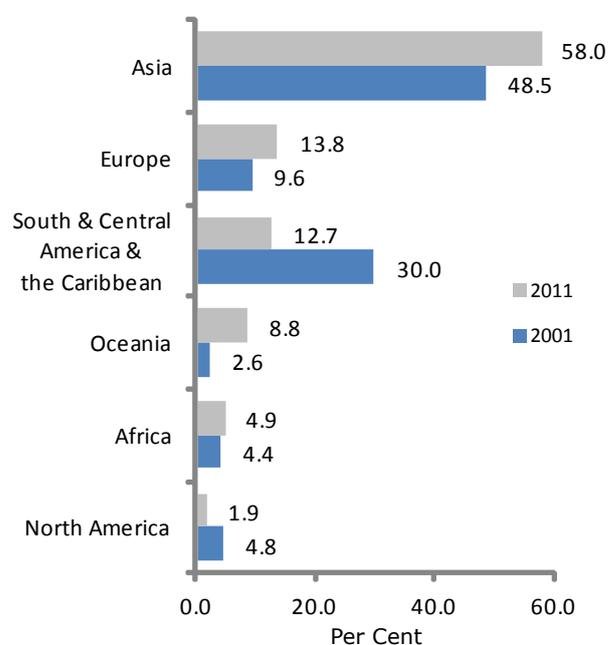


TABLE 6 SINGAPORE OUTWARD FDI BY MAJOR REGION, 2001-2011 (Stock As At Year-End)

Region	2001	2003	2005	2007	2009	2011
S\$ Billion						
Total FDI	132.1	153.7	201.5	317.5	368.7	449.0
Asia	64.1	76.7	103.6	148.1	200.5	260.2
Europe	12.7	13.5	17.5	46.5	51.0	61.8
South & Central America & The Caribbean	39.6	42.2	47.3	56.2	58.4	56.9
Oceania	3.5	6.4	11.1	20.2	26.4	39.5
Africa	5.9	6.7	11.9	32.5	18.4	22.1
North America	6.4	8.2	10.1	14.0	14.0	8.5
Per Cent (%)						
Total FDI	100.0	100.0	100.0	100.0	100.0	100.0
Asia	48.5	49.9	51.4	46.6	54.4	58.0
Europe	9.6	8.8	8.7	14.6	13.8	13.8
South & Central America & The Caribbean	30.0	27.5	23.5	17.7	15.9	12.7
Oceania	2.6	4.2	5.5	6.4	7.1	8.8
Africa	4.4	4.3	5.9	10.2	5.0	4.9
North America	4.8	5.3	5.0	4.4	3.8	1.9

Asia

Singapore's outward FDI stock in Asia quadrupled from \$64 billion to \$260 billion during the period 2001 to 2011 (Table 7). China remained the top Asian destination, increasing its share of Singapore's direct investment in Asia to 32 per cent as at end 2011 from 25 per cent at end 2001.

Hong Kong and Malaysia were the other two Asian economies favoured by Singapore investors, although their share of Singapore's FDI stock in Asia declined from 2001 (Hong Kong: 18 per cent; Malaysia: 18 per cent) to 2011 (Hong Kong: 15 per cent; Malaysia: 13 per cent). Indonesia was another popular investment destination, accounting for 12.8 per cent of Singapore's FDI in Asia as at end 2011.

TABLE 7 MAJOR DESTINATIONS OF OUTWARD FDI IN ASIA, 2001-2011 (Stock As At Year-End)

Country/Economy	2001	2003	2005	2007	2009	2011
S\$ Billion						
Asia	64.1	76.7	103.6	148.1	200.5	260.2
China	15.7	19.8	27.3	40.3	60.6	82.1
Hong Kong	11.4	11.1	15.3	20.0	23.4	38.5
Malaysia	11.2	13.6	16.8	22.7	27.6	34.3
Indonesia	5.6	10.3	14.6	20.1	25.9	33.4
Thailand	4.5	4.7	8.8	16.9	20.4	19.1
Per Cent (%)						
Asia	100.0	100.0	100.0	100.0	100.0	100.0
China	24.5	25.8	26.3	27.2	30.2	31.5
Hong Kong	17.7	14.4	14.8	13.5	11.7	14.8
Malaysia	17.5	17.7	16.2	15.3	13.8	13.2
Indonesia	8.7	13.4	14.1	13.6	12.9	12.8
Thailand	7.0	6.1	8.5	11.4	10.2	7.3

Europe

Singapore's FDI stock in Europe amounted to \$62 billion as at end 2011, up from \$13 billion in 2001 (Table 8). The United Kingdom continued to be the most attractive European destination, accounting for 60 per

cent of Singapore's FDI stock in Europe as at end 2011. Netherlands and Switzerland were the other main European countries favoured by Singapore investors, accounting for 11 per cent and 5.4 per cent of Singapore's outward FDI stock in the region respectively as at end 2011.

TABLE 8 MAJOR DESTINATIONS OF OUTWARD FDI IN EUROPE, 2001-2011 (Stock As At Year-End)

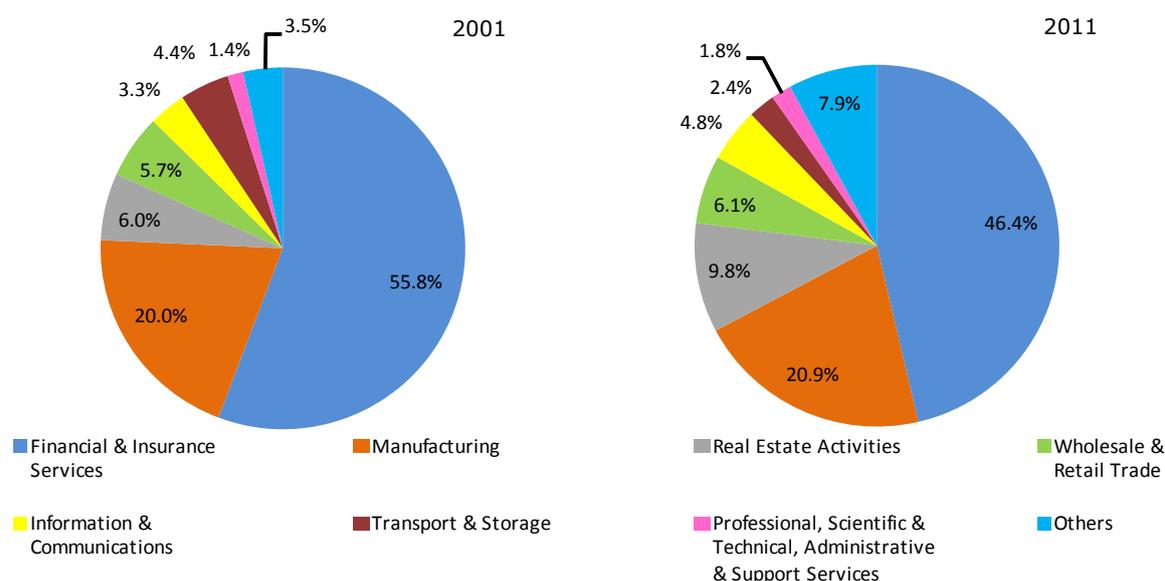
Region/Country	2001	2003	2005	2007	2009	2011
S\$ Billion						
Europe	12.7	13.5	17.5	46.5	51.0	61.8
United Kingdom	6.8	7.5	7.2	31.4	32.4	37.1
Netherlands	1.3	0.7	2.5	3.9	5.0	6.9
Switzerland	0.4	0.6	0.6	4.4	4.7	3.4
Per Cent (%)						
Europe	100.0	100.0	100.0	100.0	100.0	100.0
United Kingdom	53.5	55.7	41.3	67.6	63.5	60.1
Netherlands	10.2	5.5	14.5	8.4	9.8	11.1
Switzerland	3.5	4.4	3.6	9.5	9.3	5.4

Industrial Distribution

The top sectors where the bulk of Singapore's outward FDI stock was residing were financial & insurance services, manufacturing and real estate sectors (Chart 5).

The share of outward FDI stock in financial & insurance sector decreased while manufacturing's share remained relatively stable from 2001 to 2011. In contrast, the share of direct investment in real estate sector became larger over the same period.

CHART 5 SINGAPORE OUTWARD FDI STOCK BY MAJOR SECTOR, 2001 AND 2011



Financial & Insurance Services

Similar to Singapore's inward FDI stock, the bulk of Singapore's outward FDI stock in the financial & insurance services sector was in investment holding companies.

Its share of the sector's FDI stock declined from 92 per cent as at end 2001 to 80 per cent as at end 2011 (Table 9). In contrast, the share accruing to banks increased from 5.4 per cent to 12 per cent over the same period.

TABLE 9 OUTWARD FDI IN FINANCIAL AND INSURANCE SERVICES, 2001-2011 (Stock As At Year-End)

Sector/Industry	2001	2003	2005	2007	2009	2011
	S\$ Billion					
Financial & Insurance Services	73.8	85.3	104.6	177.4	183.0	208.2
Financial Services	73.3	84.6	103.8	176.0	181.4	206.2
Banks	4.0	5.5	14.0	29.3	22.4	25.7
Investment Holding Companies	67.7	78.0	86.8	133.0	147.0	166.2
Other Financial Services	1.6	1.0	3.0	13.6	12.0	14.3
Insurance Services	0.4	0.7	0.8	1.4	1.6	2.0
	Per Cent (%)					
Financial & Insurance Services	100.0	100.0	100.0	100.0	100.0	100.0
Financial Services	99.4	99.2	99.3	99.2	99.1	99.1
Banks	5.4	6.5	13.4	16.5	12.2	12.4
Investment Holding Companies	91.8	91.5	83.0	75.0	80.3	79.8
Other Financial Services	2.2	1.2	2.8	7.7	6.6	6.9
Insurance Services	0.6	0.8	0.7	0.8	0.9	0.9

Manufacturing

Singapore's outward FDI in manufacturing were relatively diversified. The top three manufacturing industries preferred by Singapore investors were food, beverage & tobacco (22 per cent), electronics (14 per cent) and transport equipment (13 per cent) as at end 2011 (Table 10).

The other manufacturing industries which attracted significant FDI from Singapore were chemicals (9.2 per cent) and machinery & equipment (7.8 per cent).

Conclusion

Singapore's inward and outward direct investment expanded significantly in the last decade, reflecting Singapore's continued attractiveness to foreign investors and its expansion abroad to complement its domestic economic activities.

Europe and Asia are the major regional contributors of foreign direct investment in Singapore. The two regions are also the preferred destinations for Singapore-based companies which invest abroad.

TABLE 10 OUTWARD FDI IN MANUFACTURING, 2001-2011 (Stock As At Year-End)

Sector/Industry	2001	2003	2005	2007	2009	2011
	S\$ Billion					
Manufacturing	26.4	33.0	46.6	69.6	80.1	93.7
Food, Beverages & Tobacco	4.4	5.7	7.6	11.1	13.8	21.0
Computer, Electronic & Optical Products	7.3	8.2	10.5	16.3	15.7	13.0
Transport Equipment	1.2	2.2	5.4	8.6	3.5	12.2
Chemicals & Chemical Products	1.2	1.8	2.7	4.7	6.8	8.7
Machinery & Equipment	1.2	2.0	2.3	3.9	6.1	7.3
	Per Cent (%)					
Manufacturing	100.0	100.0	100.0	100.0	100.0	100.0
Food, Beverages & Tobacco	16.6	17.4	16.3	15.9	17.2	22.4
Computer, Electronic & Optical Products	27.8	24.8	22.5	23.4	19.5	13.9
Transport Equipment	4.5	6.7	11.5	12.4	4.4	13.1
Chemicals & Chemical Products	4.6	5.3	5.8	6.7	8.5	9.2
Machinery & Equipment	4.5	6.0	5.0	5.6	7.6	7.8

The latest report on Foreign Equity Investment in Singapore 2011 contains key findings compiled from the Survey of Financial Structure and Operations of Companies and the Survey of Foreign Debt and Financial Derivative Transactions for the year 2011. Download the report at

http://www.singstat.gov.sg/publications/publications_and_papers/investment/foreign_investment.html

Latest data on Singapore's overseas investment are available in the report on Singapore's Investment Abroad 2011, which contains key findings compiled from the Survey of Singapore's Investment Abroad for the year 2011. Download this publication at

http://www.singstat.gov.sg/publications/publications_and_papers/investment/investment_abroad.html

PREVALENCE OF BREASTFEEDING IN SINGAPORE

By
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Introduction

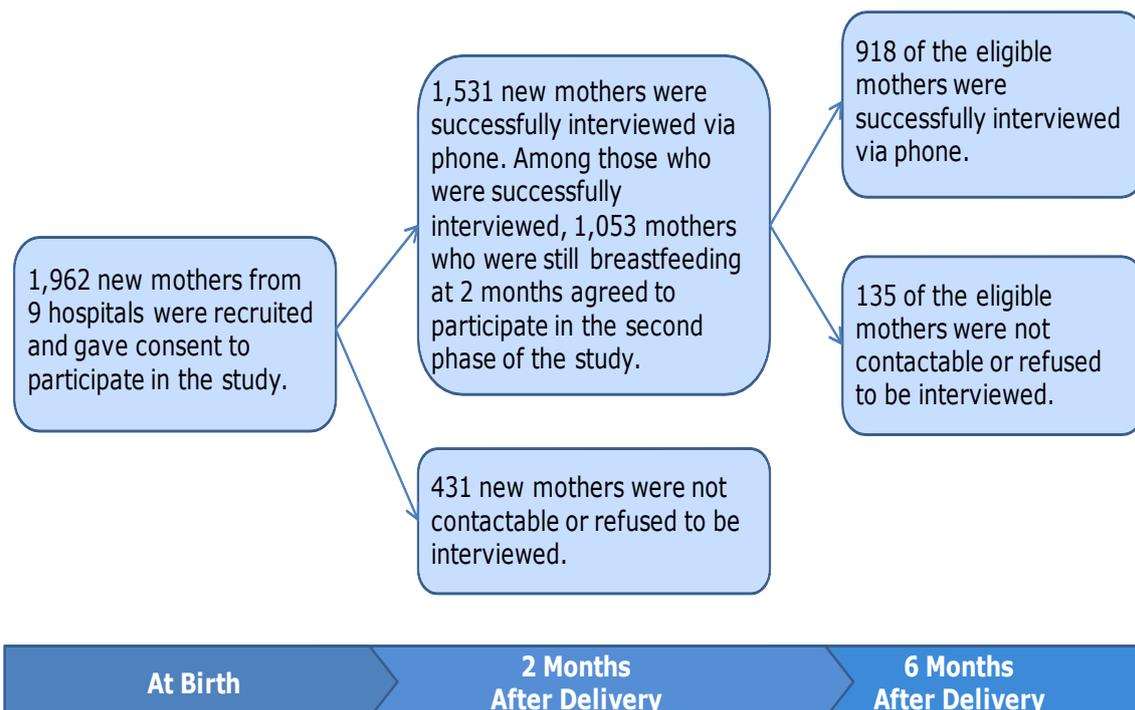
The health benefits of breastfeeding have been widely documented. It is beneficial to both mother and infant. These benefits include:

- antibodies in the breast milk protects the baby from common illnesses;
- provides the necessary bonding and attachment with the mother;
- a reduced risk of Type 2 diabetes for both mother and child;
- a decreased risk of breast and ovarian cancer for the mother;
- a decreased risk of childhood obesity; and,
- a decreased risk of sudden infant death syndrome.

The National Breastfeeding Survey (NBFS) series provides national statistics on the prevalence and duration of breastfeeding among mothers in Singapore. It also identifies factors influencing mothers in their decision to breastfeed. The NBFS was the second national survey conducted on new mothers who delivered between July and September 2011

A total of 1,962 new mothers were recruited to participate in this two-phase study. During the first phase of the study, the mothers were interviewed by phone 2 months after delivery. During the second phase, another phone interview was conducted at 6 months after delivery among mothers who were still breastfeeding at 2 months (Chart 1).

CHART 1 FLOW CHART ON SELECTION OF PARTICIPANTS

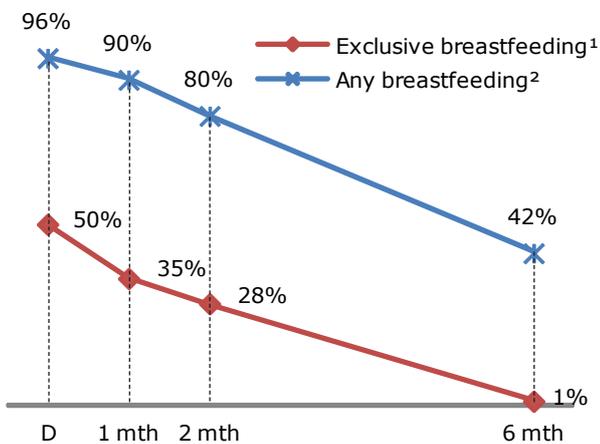


The data collected were used to determine the prevalence of different types of breastfeeding and to examine the motivators and obstacles to breastfeeding among these new mothers.

Prevalence of Breastfeeding

99% of the new mothers attempted to breastfeed their babies. Although breastfeeding initiation rate was high, subsequent continuation rates were not sustainable. In summary, 96% of the new mothers left the hospital breastfeeding, with 50% of infants being exclusively breastfed. After 2 months, 80% of the mothers were still breastfeeding and slightly over a quarter (28%) were exclusively breastfeeding. At 6 months of age, less than half (42%) of the infants were receiving any breast milk and only 1% were exclusively breastfed (Chart 2).

CHART 2 PREVALENCE OF BREASTFEEDING



D = On day of Discharge
mth = Number of Months after Delivery

Breastfeeding prevalence was lowest among younger mothers aged 29 and below at all reference time points.

Across ethnic groups, Chinese and Indian mothers had higher prevalence of any breastfeeding compared to other ethnic groups from 2 months after child birth.

Prevalence of breastfeeding is higher for better-educated mothers. At 6 months, the prevalence of any breastfeeding ranged from 15% among those with primary education to 57% among those with university education.

Prevalence of any breastfeeding was lower among working mothers compared to home-makers from 1 month after child birth. (Chart 3).

Motivators to Breastfeeding Initiation

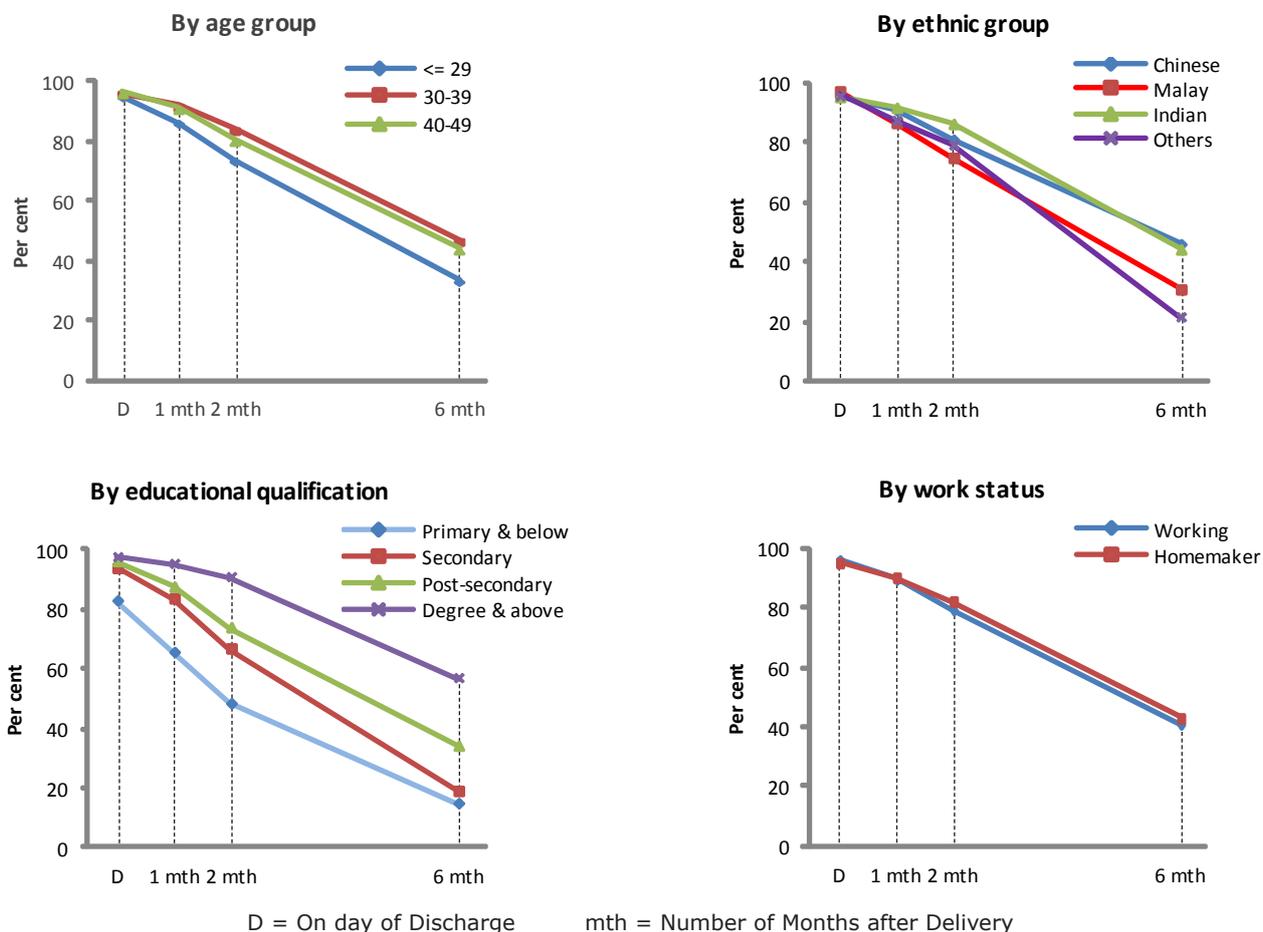
Majority of mothers (93%) knew that breastfeeding is the best form of feeding for a newborn. Awareness of "breast milk is best for baby" (79%) was the top motivating factor to start breastfeeding.

The mothers knew that "breast milk protects baby from a wide range of diseases" (54%) and that mother-baby bonding (53%) was also a push factor for them to initiate breastfeeding.

Other motivators included "breastfeeding is convenient" (18%) and "breastfeeding would help mother to lose weight" (17%).

- 1 Exclusive breastfeeding is defined as only breast milk (including expressed breast milk) is given. May include drop and syrup forms of vitamins, minerals and medicines and oral rehydration salts (ORS) solution. Predominant breastfeeding is defined as both breast milk (including expressed breast milk) and water are given. May include sweetened water and juices, drop and syrup forms of vitamins, minerals and medicines and ORS solution.
- 2 Any breastfeeding is defined as infant being exclusively/predominantly breastfed or receiving both breast milk and a formula, with or without solids.

CHART 3 PREVALENCE OF ANY BREASTFEEDING BY SELECTED DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS



Reasons for Stopping Breastfeeding

Mothers who had stopped breastfeeding during the survey period did so for reasons that varied to some extent depending on whether they stopped breastfeeding within the early weeks or a few months after the birth.

The most common reasons for stopping before 2 months or earlier were: (a) Not able to supply enough breast milk (61%), (b) Need to return to work (24%), and (c) Baby was not able to suck properly/well (18%).

A similar pattern emerged for those who stopped between 2 months and 6 months

after child birth. Although “not able to supply enough breast milk” (50%) became less of an issue for this group of mothers, “the need to return to work” (51%) became the top reason for giving up breastfeeding.

For working mothers and homemakers who breastfed for 6 months or less, the main reasons for stopping breastfeeding were:

Rank	Working Mother	Homemaker
1	Not able to supply enough breast milk 53%	Not able to supply enough breast milk 63%
2	Need to return to work 46%	Mother was tired 12%
3	Baby was not able to suck properly/well 13%	Baby was not able to suck properly/well 12%

Note: Mothers were allowed to give more than 1 reason.

The top reason for both groups of mothers was “not able to supply enough breast milk”. For working mothers, “need to return to work” was the next compelling reason. For homemakers, “mother was tired” and “baby was not able to suck properly/well” were the subsequent reasons for giving up breastfeeding.

Factors That Would Have Encouraged Mothers to Continue Breastfeeding for a Longer Period

A majority of mothers who stopped breastfeeding stated that they would have carried on for a longer period if given the right support and environment. The main factors that would have encouraged them to do so were:

Rank	Breastfed for 2 months or less	Breastfed for more than 2 months to 6 months
1	If mother could produce enough breast milk 35%	If mother could produce enough breast milk 33%
2	If mother receives more help with care of baby 18%	If maternity leave could be extended to look after the baby 22%
3	If maternity leave could be extended to look after the baby 12%	If the facilities at the workplace could be more conducive for breastfeeding or expressing breast milk 14%

Note: Mothers were allowed to give more than 1 reason.

Among the mothers who stopped breastfeeding, the problem of not producing enough breast milk persisted throughout their entire breastfeeding

experience. For mothers who breastfed for 2 months or less, they also indicated that more help were needed in the care of the baby. This suggested that they may be too overwhelmed by caring of the newborn to concentrate on breastfeeding the baby.

For both working mothers and homemakers, factors that would have encouraged them to breastfeed for longer were:

Rank	Working Mother	Homemaker
1	If mother could produce enough breast milk 32%	If mother could produce enough breast milk 40%
2	If maternity leave could be extended to look after the baby 21%	If mother receives more help with care of baby 13%
3	If mother receives more help with care of baby 13%	If the doctors or nurses or other health professionals had given mother support or counseling on breastfeeding 12%

Note: Mothers were allowed to give more than 1 reason.

Linked to the findings on reasons for stopping breastfeeding, both working mothers and homemakers mentioned “if mother could produce enough breast milk” as a major factor that would have influenced them to breastfeed longer. These findings corroborated to some extent the reasons these mothers gave for stopping breastfeeding.

Obstacles Encountered During Breastfeeding

Mothers who were still breastfeeding when interviewed were asked if they encountered any obstacles in their attempts to breastfeed.

Interview at 2 Months after Delivery

49% of the mothers who were still breastfeeding indicated that they did not encounter any obstacles during their breastfeeding experience.

Those who did identified “breast/nipple problems (for example breast engorgement, breast infection, inverted/short nipples, cracked/sore nipples)” (51%), “not able to supply enough breast milk” (47%) and “baby was not able to suck properly” (29%) as major obstacles.

Interview at 6 Months after Delivery

72% of the mothers who were still breastfeeding said that they did not face any obstacles during their breastfeeding experience.

Similar to the responses received from the mothers 2 at months after delivery, the obstacles encountered were “breast/nipple problems (for example breast engorgement, breast infection, inverted/short nipples, cracked/sore nipples)” (40%), “not able to supply enough breast milk” (37%) and “baby was not able to suck properly” (27%) as the key obstacles.

The proportion of mothers who encountered obstacles decreased as they continued with their breastfeeding journey.

Conclusion

Breastfeeding initiation rate is high among new mothers. Majority of the mothers were aware of the benefits of breastfeeding. The challenge is to overcome breastfeeding barriers and to encourage mothers to continue breastfeeding, in particular exclusive breastfeeding.

Findings from the NBFS showed that most problems with breastfeeding can be prevented or treated with the right support and information. With the introduction of Baby Friendly Hospital Initiative (BFHI) certification³ among maternity hospitals, these hospitals would be able to provide the necessary support and equip new mothers with the knowledge and skills to breastfeed successfully. To encourage shared parental responsibility, new fathers are entitled to one week of government paid paternity leave with effect from 1 May 2013, as well as sharing one week of the working mother’s maternity leave. This means that new fathers will have more time to help out in caring the newborn and hence, allowing new mothers more time to rest and concentrate on breastfeeding the baby.

As the labour force participation rate among married women rises, workplace support⁴ towards breastfeeding should also improve so that working mothers can successfully combine breastfeeding and employment responsibilities when they return to work.

3 The Baby Friendly Hospital Initiative (BFHI) is a joint UNICEF and WHO project started in 1991. The aim is to increase breastfeeding rates and encourage global breastfeeding standards for maternal services. It encourages hospitals and health care facilities, especially maternity wards to adopt practices that fully protect, promote and support exclusive breastfeeding from birth. The Health Promotion Board (HPB) is currently working with five hospitals that account for 80 per cent of births in Singapore – National University Hospital (NUH), KK Women’s and Children’s Hospital (KKH), Singapore General Hospital (SGH), Mount Alvernia Hospital and Thomson Medical Centre – on achieving BFHI certification by 2014.

4 NTUC U Family recently launched an initiative “Project Liquid Gold” in May 2013 to help raise awareness on the need to support working mothers to breastfeed their babies in the early stages of their lives even after the mothers return to work from maternity leave. It encourages office building owners and employers to provide suitable nursing rooms spaces at workplaces and also to render reasonable break time for female employees to express their breast milk during office hours.

Rebasing of Import, Export, Singapore Manufactured Products and Domestic Supply Price Indices (Base Year 2012 = 100)

By

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Introduction

The Import Price Index (IPI), Export Price Index (EPI), Singapore Manufactured Products Price Index (SMPPI) and Domestic Supply Price Index (DSPI) compiled by the Department of Statistics (DOS) have been rebased from base year 2006 to 2012. These price indices are rebased periodically to ensure that the 'baskets' of commodities remain representative of the current structure of trade and production patterns.

This article provides an overview on the rebasing of the four price indices to reference year 2012 and highlights changes in the weighting patterns and trends of the 2012-based price indices with those of the 2006-based series.

Definition and Index Classification

The IPI, EPI and SMPPI measure the price changes of Singapore's imports, exports and manufactured products respectively. The DSPI, a derived index of the IPI and SMPPI, measures the price changes of commodities used in the domestic economy.

The price indices are classified in accordance with the Standard International Trade Classification, Revision 4.1 (SITC v 4.1). The most detailed level of this classification is the 7-digit commodity item level. Higher or broader levels include:

- 3-digit group level
- 2-digit division level
- 1-digit section level

Survey Coverage and Products Selection

In the 2012 rebasing exercise, purposive sampling was used in the selection of commodity items or 7-digit SITC codes. Only items that had significant contributions to the higher level SITCs were selected.

The top ten importers, exporters and manufacturers of the selected commodity items were picked from the trade databases and census of manufacturing activity, to provide detailed product models or brand specifications in the preliminary surveys of the rebasing exercise.

The surveys covered about 3,400 importers, 2,400 exporters and 1,400 manufacturers.

Only products available on a frequent and regular basis and of significance to companies' businesses were selected for inclusion in the new basket for price collection for the four index series.

Approximately 2,240 prices were collected on a monthly basis from 1,300 importers for the index compilation of 545 commodity items in the 2012-based IPI. The rebased EPI consisted of 650 exporters providing 1,480 prices for the compilation of 346 commodity item sub-indices.

As for the SMPPI, 1,170 prices from 600 manufacturers were selected for the computation of 302 commodity item sub-indices. The DSPI was derived from 489 commodity items and 2,020 import prices of the IPI and 213 commodity items of the SMPPI comprising 820 manufactured product prices.

Changes in trade and production patterns over the past few years led to significant replacements of commodity items in the 2006-based baskets with new items in the 2012-based series. Some examples of the new items included were smart phones, solar panels, LED televisions and natural gas.

Weights Distributions

The most up-to-date data sources were used to derive the weighting patterns for the 2012-based price indices. The weights at 1-digit, 2-digit, 3-digit and 7-digit level SITC for the 2012-based IPI and EPI were compiled from the 2012 import and export values while that of the SMPPI were based on the 2011 production values. The weights of the 2012-based DSPI were based on the 2011 "retained imports" and "domestic

production sales". The retained imports referred to the values of imports less re-exports in 2011, while the domestic production sales were derived from the total sales of local producers less exports in 2011.

Similar to the 2006-based indices the Machinery & Transport Equipment section, Oil section and Chemicals & Chemical Products section continued to be the top three commodity sections for all the four 2012-based price series. These three sections accounted for over 80 per cent of the total weights of each individual index.

Chart 1 compares the weights distribution by commodity section between the 2012-based and 2006-based price indices.

The Machinery & Transport Equipment remained the top commodity section in the 2012-based IPI, EPI and SMPPI, and ranked second in importance within the DSPI, despite declining relative weights over the years, arising from reduced shares of information and communications technology (ICT)-related products.

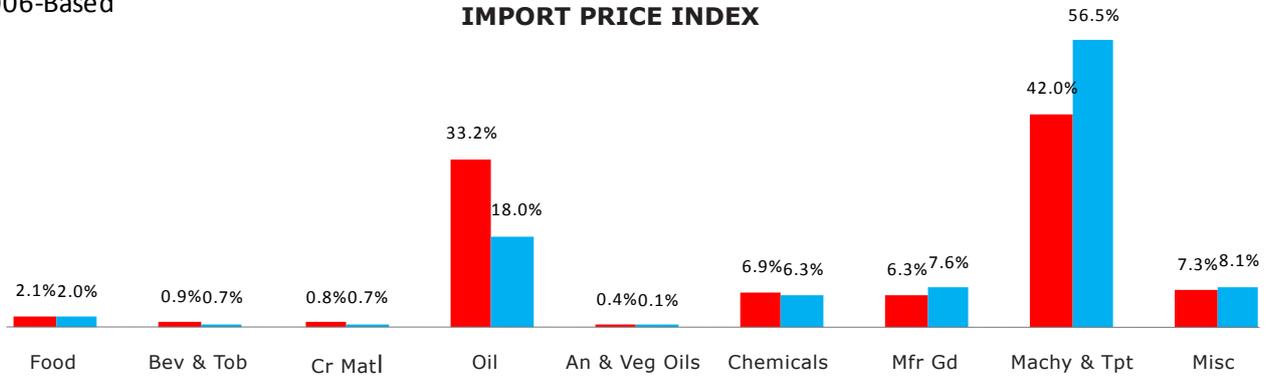
Within the DSPI, Oil had replaced Machinery & Transport Equipment as the leading section in 2012. Due to increased global demand for oil, the commodity section of Oil showed a marked increase within IPI, EPI and DSPI, and a slight gain within SMPPI between 2006 and 2012.

Rapid expansion in the local chemical and pharmaceutical industries since 2006 had resulted in higher relative weights of the Chemicals & Chemical Products section within the 2012-based EPI and SMPPI. In contrast, the share of Chemicals & Chemical Products within DSPI fell in 2012.

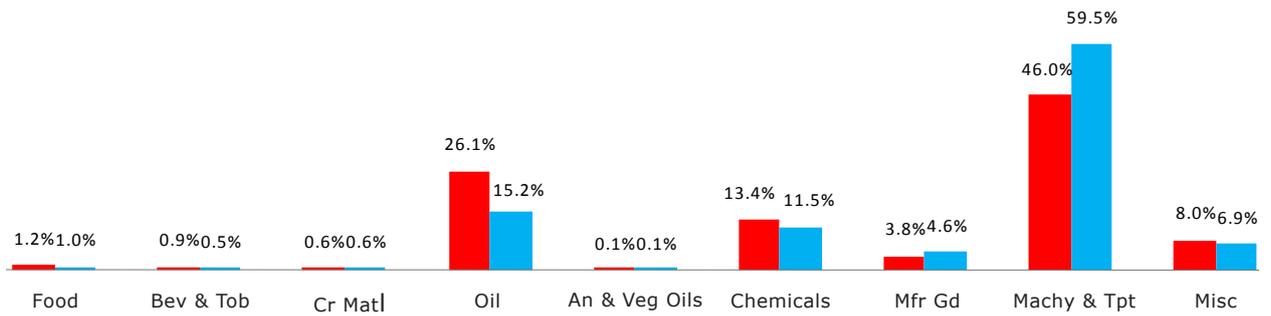
CHART 1 WEIGHTS OF 2012-BASED & 2006-BASED IPI, EPI, SMPPI & DSPI

■ 2012-Based
■ 2006-Based

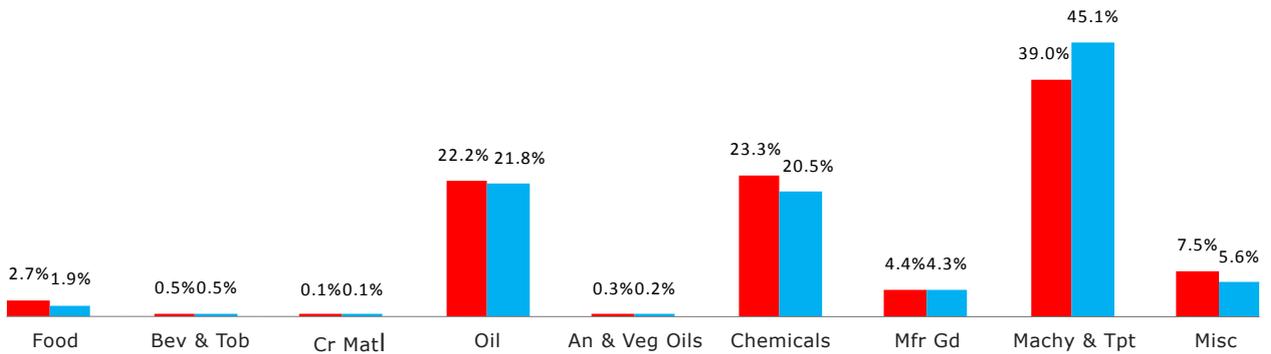
IMPORT PRICE INDEX



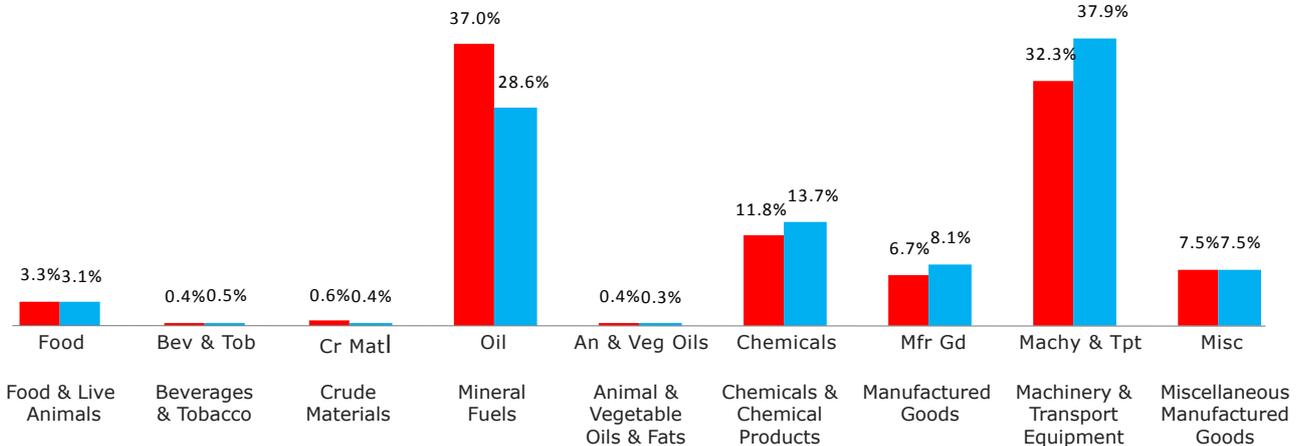
EXPORT PRICE INDEX



SINGAPORE MANUFACTURED PRODUCT PRICE INDEX



DOMESTIC SUPPLY PRICE INDEX



Price Trends of 2012-Based and 2006-Based Series

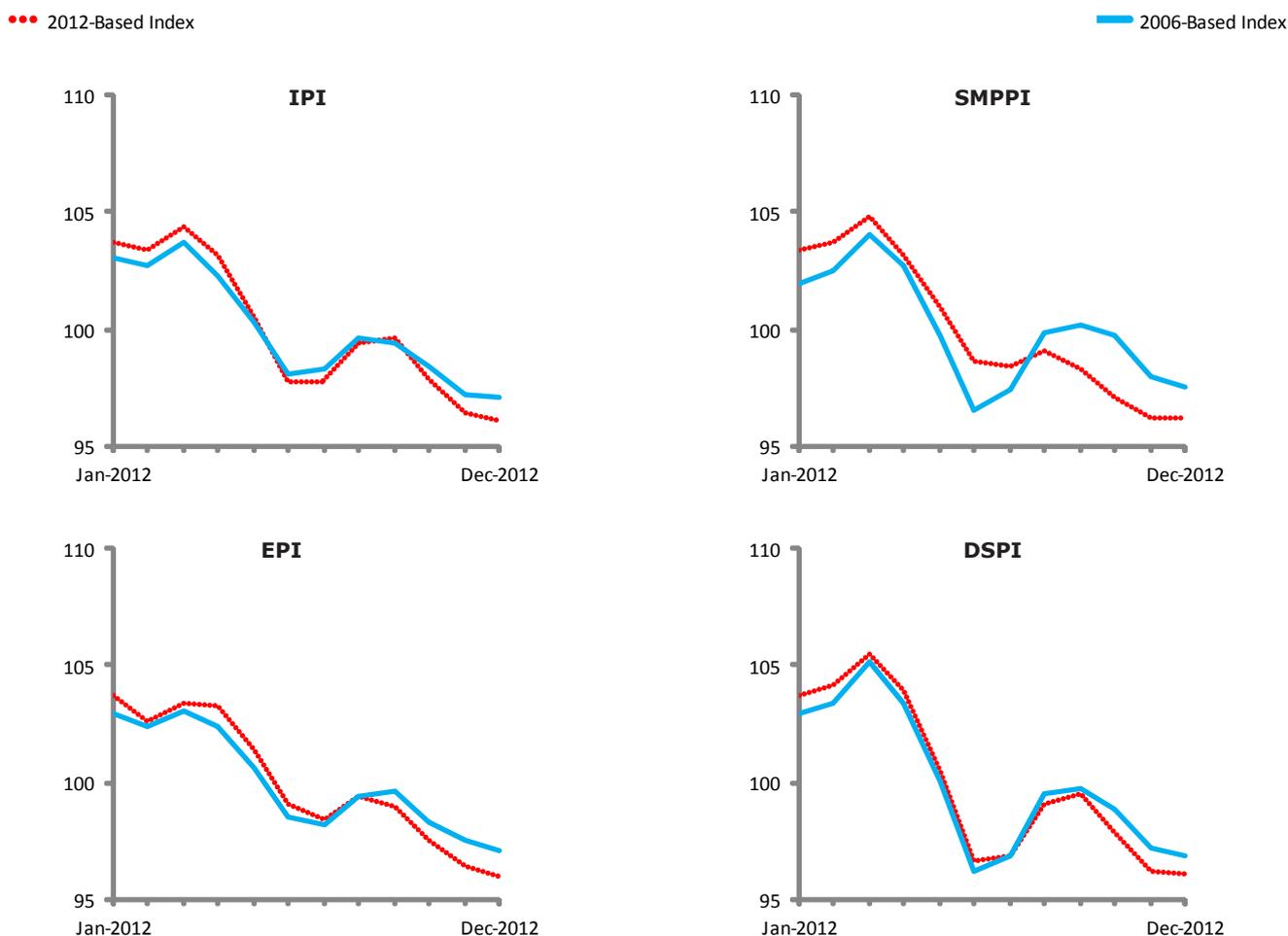
Chart 2 compares the trends of the 2012-based and 2006-based series of the four price indices over the period of January to December 2012.

The overall trends of the new and old series of IPI and EPI were similar in 2012. Most of the commodity sections exhibit similar price trends for the two indices, except the Crude Materials and Animal & Vegetable Oils, Fats & Waxes price indices, which showed some variations between the new and old series. Due to their relatively smaller shares, they had insignificant impact on the trends of the overall IPI and EPI.

The 2012-based overall SMPPI was lower than the 2006-based SMPPI in the second half of 2012, due mainly to differences in the new and old Machinery & Transport Equipment sub-indices. Prices of newer models of electronic products such as integrated circuits, disk drives and printed circuit boards in the 2012-based Machinery & Transport Equipment series generally declined at a faster rate than prices of older models represented in the 2006-based Machinery & Transport Equipment series.

The overall DSPI trends for the 2012-based and 2006-based series were generally comparable. Similar to SMPPI, the 2012-based Machinery & Transport Equipment series of DSPI fell more than the 2006-based series.

CHART 2 2012-BASED & 2006-BASED IPI, EPI, SMPPI & DSPI
(JANUARY 2012 - DECEMBER 2012)



For More Information

DOS releases two monthly reports of the four price indices on the Department's website for free downloading.

In addition, two Information Papers providing details on the rebasing exercises titled "Rebasing of Import and Export Price Indices" and "Rebasing of Singapore Manufactured Products and Domestic Supply Price Indices" are available in

http://www.singstat.gov.sg/publications/economy.html#producer_and_international_trade_prices.

Overseas Visitors

The Singapore Department of Statistics welcomed visitors from Bhutan, Abu Dhabi and Luxembourg over the last six months. The visits provided an excellent platform for professional exchanges and sharing.

Topics discussed included data dissemination through website and web services, as well as economic and population statistics.

Overviews on the Singapore's Statistical System, Statistics Act and national statistical classifications were presented.

Abu Dhabi

Abu Dhabi Centre for Economic Research & Policies (ADCERP)

- Rashid Al-Zaabi
Deputy Executive Director
Planning & Statistics Sector
- Shorooq Al-Zaabi
Head
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Deputy Chief Statistical Officer
- Birkha Bahadur Gurung
Planning Officer

Luxembourg

Service Central de la Statistique et des Etudes Economiques (STATEC)

- Guy Steiwer
Head of Website and Web Services,
Dissemination and Public Relations
Department

Monthly Deaths in Singapore, 2012

Introduction

Under the Registration of Births and Deaths Act, all deaths occurring within Singapore and its territorial waters are required to be registered within 3 days of the occurrence.

Based on administrative data from the Registry of Births and Deaths, Immigration and Checkpoints Authority, 18,481 deaths¹ were registered in Singapore in 2012. This translated to an average of 50 deaths registered per day.

Monthly Deaths

In 2012, the average number of deaths registered per day was the highest in May at 54, followed by June at 52. The months of March and November had the lowest number of deaths registered per day at 49 (Chart 1).

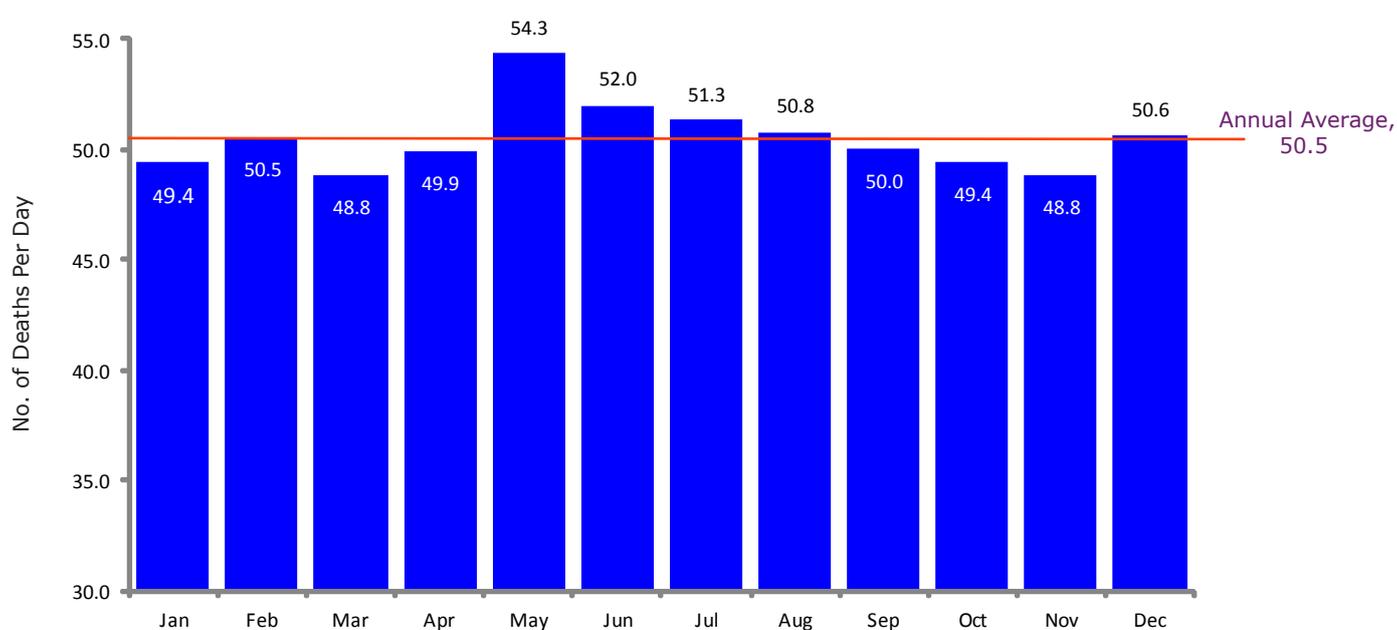
Major Causes of Deaths

In 2012, over 94% of annual total deaths were due to natural causes (Table 1). The remaining 6% were due to non-natural causes of death such as accidents, suicides and other external injuries.

Deaths due to malignant neoplasms (i.e. cancer) were the biggest contributors among total deaths in 2012, making up some 27%-32% each month (Chart 2).

This was followed by deaths due to heart & hypertensive diseases (including ischaemic heart diseases) at some 19%-23% each month, and deaths due to lung & respiratory system diseases (including pneumonia) at some 17%-23% each month. Cerebrovascular disease (including stroke) were behind some 7%-12% of total deaths each month.

CHART 1 AVERAGE DAILY NUMBER OF TOTAL DEATHS BY MONTH, 2012

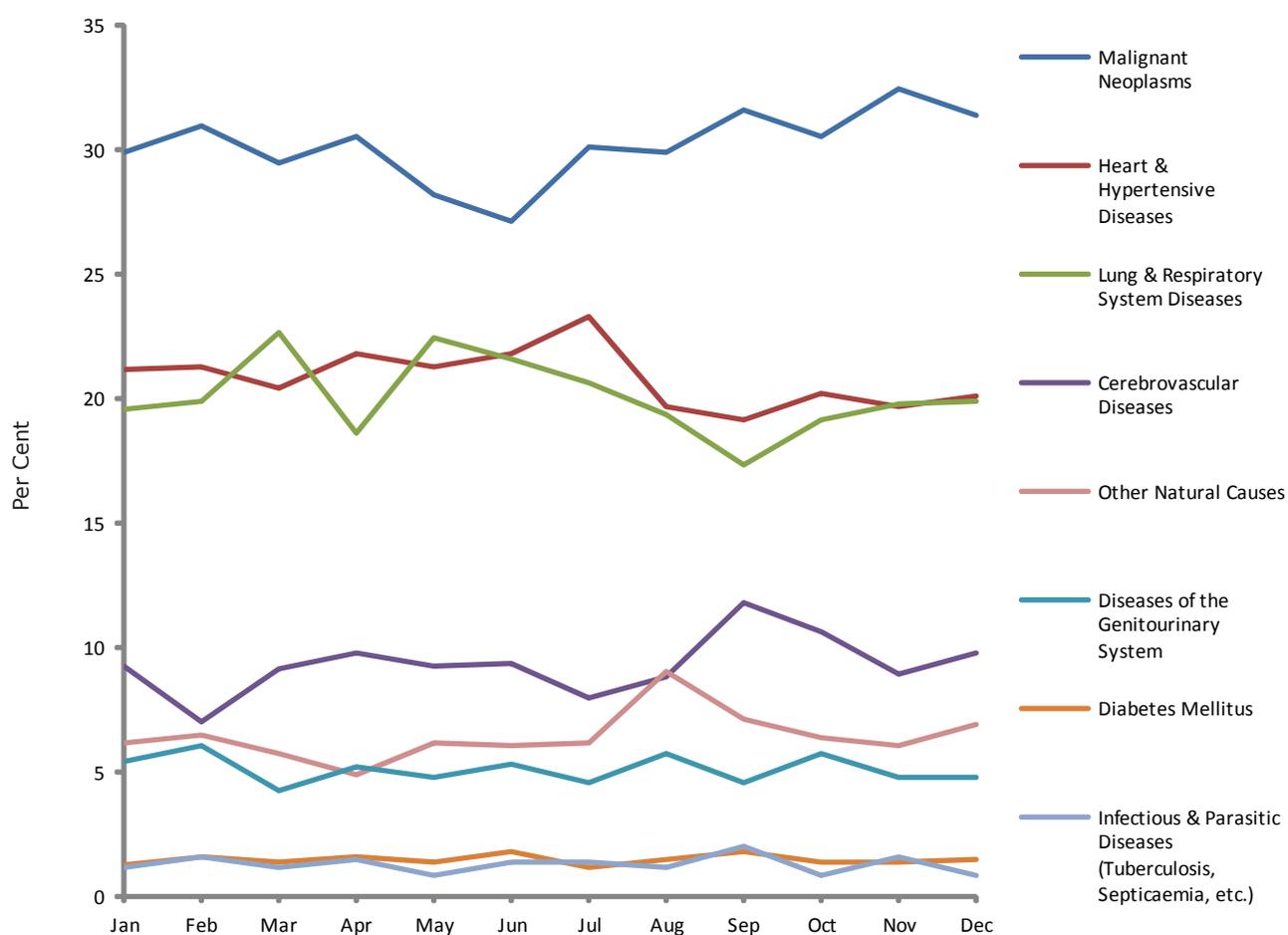


¹ Data pertain to total population, which comprises Singapore residents (i.e. Singapore citizens and permanent residents) and non-residents.

TABLE 1 MAJOR CAUSES OF TOTAL DEATHS BY MONTH, 2012

Month	All Causes	Natural Causes	Per Cent
			Accidents and Violence (All Forms)
Total	100.0	94.4	5.6
Jan	100.0	93.5	6.5
Feb	100.0	94.5	5.5
Mar	100.0	93.9	6.1
Apr	100.0	94.1	5.9
May	100.0	93.9	6.1
Jun	100.0	94.3	5.7
Jul	100.0	94.8	5.2
Aug	100.0	94.9	5.1
Sep	100.0	95.1	4.9
Oct	100.0	94.8	5.2
Nov	100.0	94.2	5.8
Dec	100.0	95.0	5.0

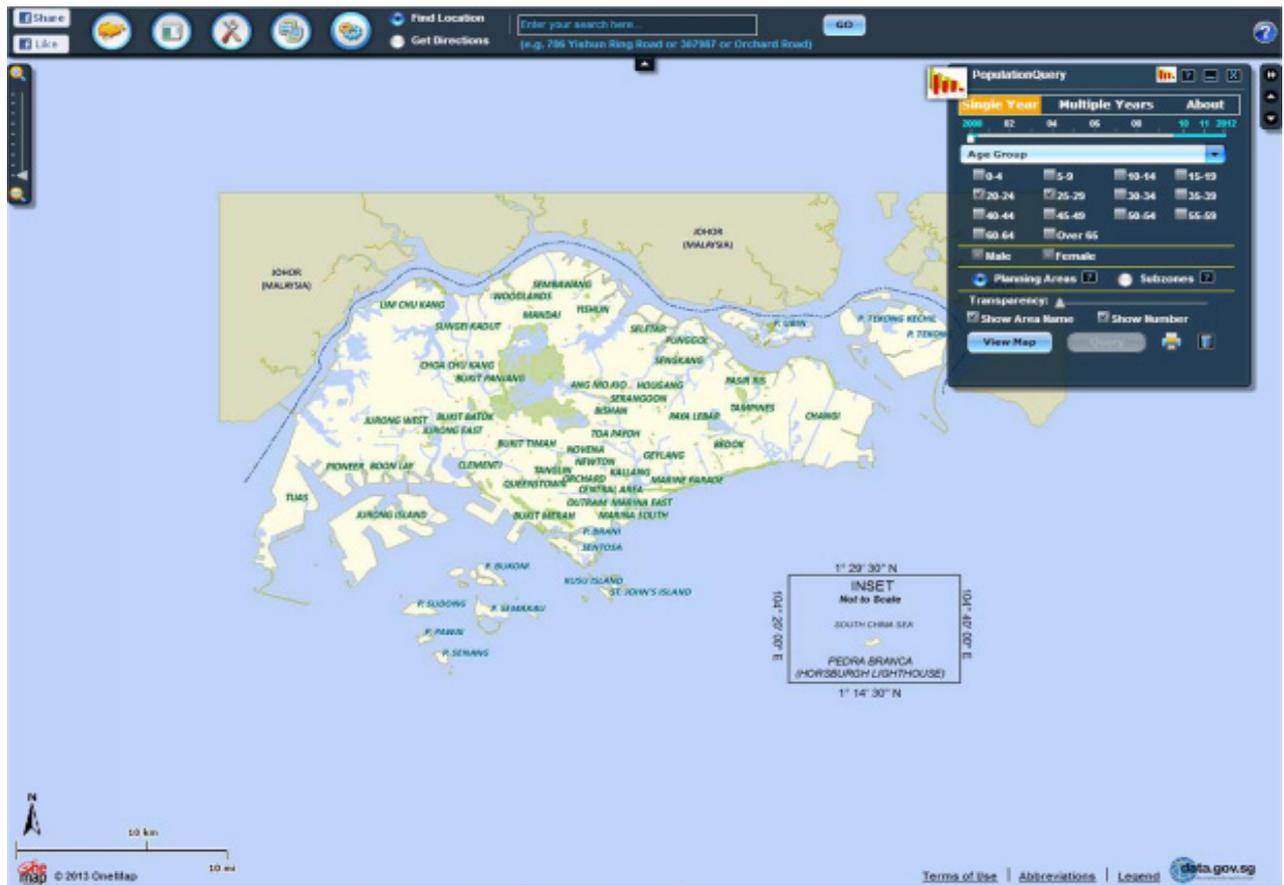
CHART 2 MAJOR NATURAL CAUSES OF TOTAL DEATHS BY MONTH, 2012



Note: The causes of death are adapted from the Mortality Tabulation List of the International Classification of Diseases - Tenth Revision.

PopulationQuery Unveiled on OneMap

Launched on 17 June 2013, this free map-based service allows users to obtain statistical data of the Singapore population through comprehensive and detailed visual representations.



PopulationQuery is a collaboration between the Singapore Land Authority and the Singapore Department of Statistics to provide visual representations of the demographic landscapes of Singapore at planning area¹ or subzone level.

For example, Figure 1 is a screenshot of the application showing the number of residents under the age of 25 years in Pasir Ris, Changi, Tampines and Bedok, as at June 2012.

PopulationQuery is also capable of overlaying with other services and themes available on OneMap. Figure 2 shows an overlay of the number of residents aged below 5 years and the available locations of kindergartens at subzone level.

The PopulationQuery web service presents statistics in an interactive manner that enhances the users' experience in viewing geospatial population statistics.

1 Planning areas/subzones refer to areas demarcated in the Urban Redevelopment Authority's Master Plan 2008.

FIGURE 1 RESIDENT POPULATION BY PLANNING AREA & AGE GROUP, JUNE 2012

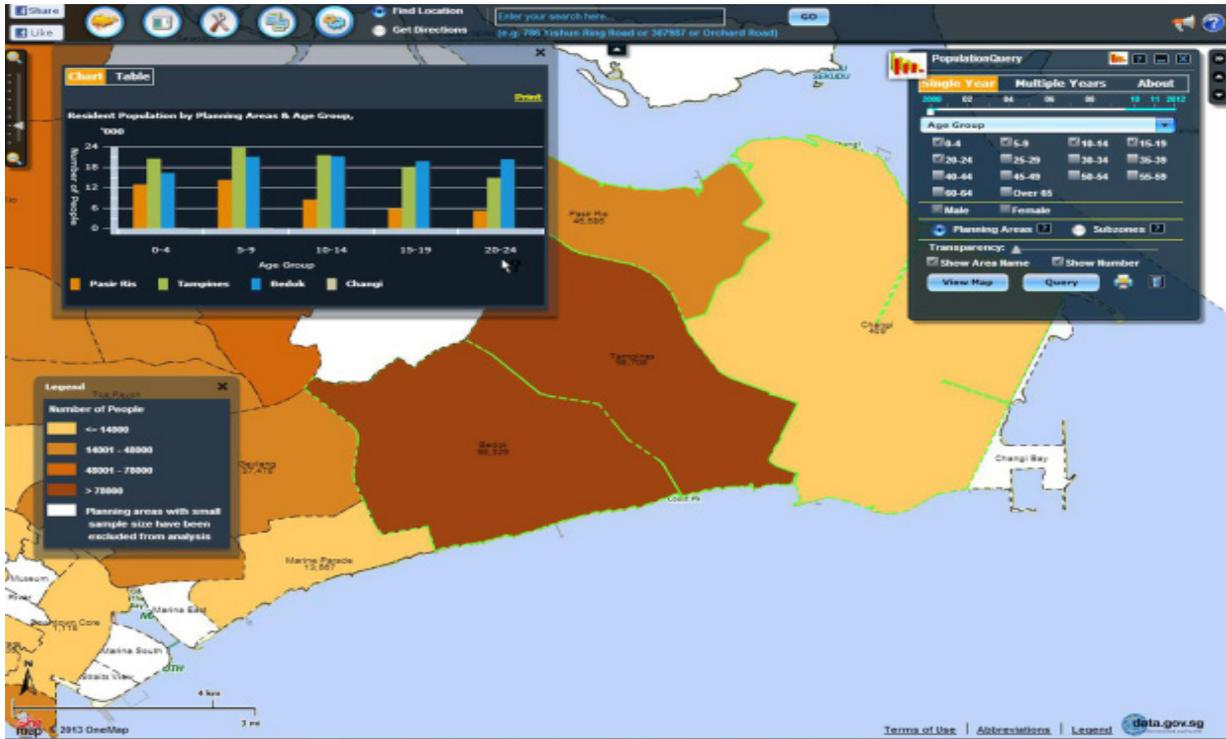
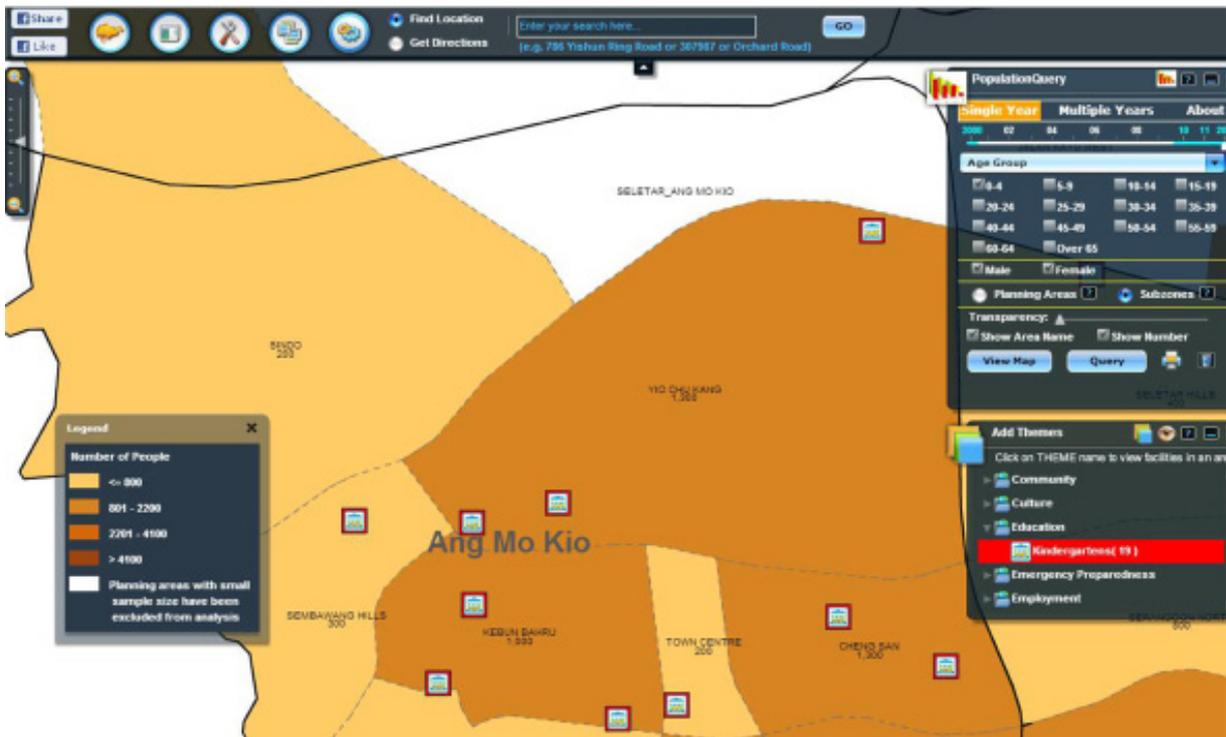


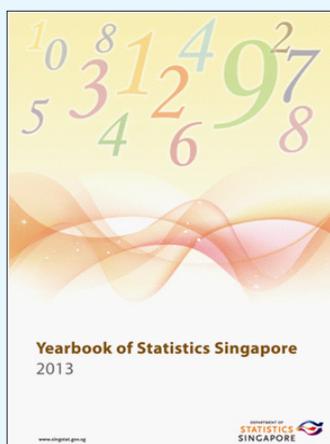
FIGURE 2 OVERLAYING POPULATIONQUERY WITH "KINDERGARTENS" THEME



About OneMap

OneMap is an integrated map system for government agencies to deliver location-based services and information. It is a multi-agency collaboration with many government agencies currently participating and contributing information. Visit www.OneMap.sg for more information.

The Yearbook of Statistics is now available!



An annual publication of the Singapore Department of Statistics, the *Yearbook of Statistics (YOS)* 2013 features important statistical series on Singapore's economy and population. This edition includes a new chapter on 'Households', where data on resident households, average household size, and average household income from work per member among resident employed households are presented. New tables and data series have also been added to the *YOS 2013*.

Download YOS 2013 at

http://www.singstat.gov.sg/publications/publications_and_papers/reference/yearbook_of_stats_2013.html

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The *Statistics Singapore Newsletter* is issued half-yearly by the Singapore Department of Statistics.

It aims to provide readers with news of recent research and survey findings. It also serves as a vehicle to inform readers of the latest statistical activities in the Singapore statistical service.

Contributions and comments from readers are welcomed.

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