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Age-Standardised Death Rate for Singapore

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Introduction

Over the last decade, Singapore residents have generally experienced improvements in their health and mortality. Life expectancy at birth[1] has risen (Chart 1), while the age-specific death rates (ASDRs) have declined (Chart 2). In comparison, the crude death rate (CDR) has been rising over the last five years. After declining from 4.4 deaths per 1,000 residents in 2004 to 4.3 deaths in 2009, the resident CDR rebounded to 4.7 deaths per 1,000 residents in 2014 (Chart 3). So, why has the CDR been rising in spite of improvements in mortality in recent years?

CHART 1 RESIDENT LIFE EXPECTANCY AT BIRTH

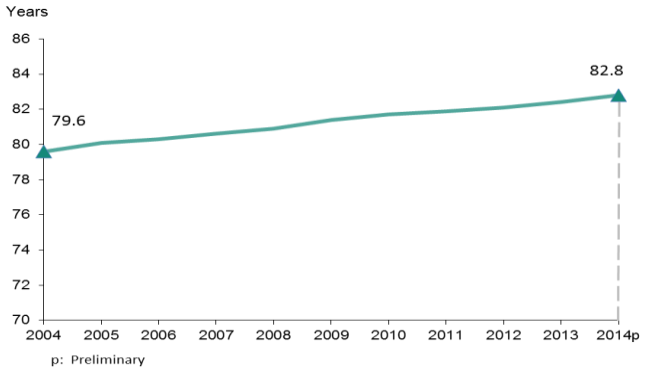


CHART 2 RESIDENT AGE-SPECIFIC DEATH RATE

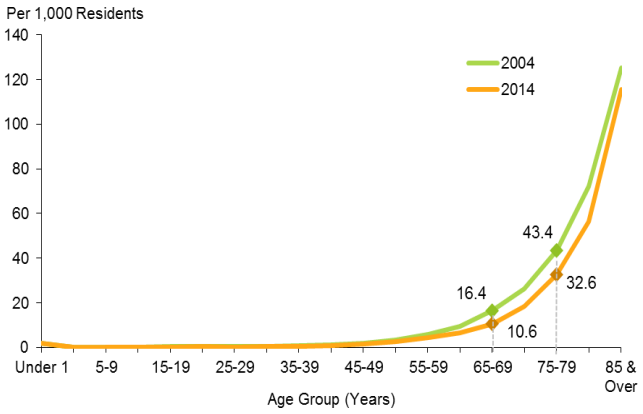
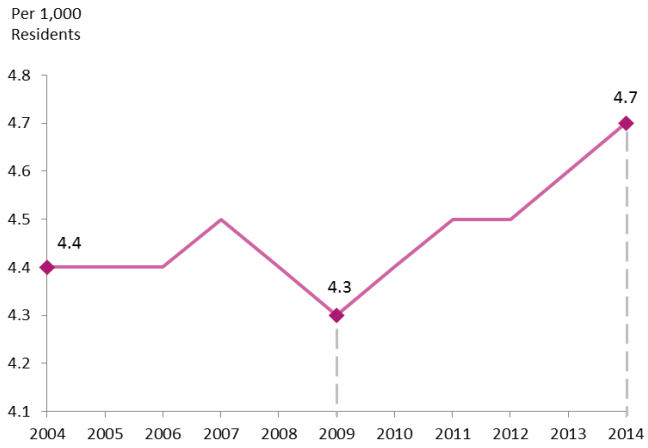


CHART 3 RESIDENT CRUDE DEATH RATE



1 Life expectancy at birth refers to the average number of years a person at birth could expect to live if the age-specific mortality rates of a given year were held constant over his/her lifetime. It does not take into account future changes in mortality. This indicator is commonly used to sum up the mortality experience of a population, taking into account the population's age and sex structure.

Crude death rate does not factor in age structure of the population...

The CDR is defined as the number of deaths per 1,000 population in a reference period. It is a summary indicator and a crude measure of mortality which does not take into account the age structure of the population. The population age structure can influence the number of deaths.

For example, a younger population will have fewer deaths than an older population, other things being equal. Hence, comparisons between populations with different age structures, such as those between different countries and over time, based on the CDR may not be meaningful.

With the ageing Singapore resident population, the higher number of deaths at the older ages caused the CDR to rise in recent years. This trend will become more pronounced when the baby boomers reach their 80s and if the baby dearth continues, coupled with a slowdown in immigration.

...but age-specific death rates do

The ASDR is defined as the number of deaths in a given age group, per 1,000 population in the same age group, during a reference period. Hence, the ASDRs factor in the population age structure, allowing further insights into the mortality patterns within each age group as well as facilitating comparisons across different populations and over time.

Improvements in health and mortality in Singapore are reflected in lower ASDRs, as fewer deaths occurred within each age group over the years. For example, the death rate fell from 16 deaths for every 1,000 residents aged 65-69 years in 2004 to 11 deaths in 2014 (Chart 2). The death rates also declined for those aged 75-79 years from 2004 to 2014. Unlike the CDR, however, ASDRs do not offer a summary index.

Age-standardised death rate offers a summary index and factors in age structure of the population

The age-standardised death rate (ADR) provides a summary indicator that removes the influence of the population age structure. It is derived by multiplying the ASDRs of the reference population by the proportion of the corresponding age group out of a "standard" population.

A "standard" population, or an index or base population, is any population chosen to fix the age structure so as to eliminate its effect on mortality trends.

Thus, the ADR enables meaningful comparison of death rates between populations with different age structures and over time, by relating the ASDRs to a "standard" population. It can be interpreted as a *hypothetical* overall death rate if the "standard" population were subject to the observed ASDRs.

The ADR may change depending on the "standard" population chosen. Hence, while it provides a *hypothetical* overall death rate to facilitate comparisons, it does not replace the observed CDR and ASDRs.

Singapore's resident age-standardised death rate is declining

Using the age structure of the Singapore resident population as at June 2003[2] as the "standard" population, the resident ADR exhibited a downtrend since 1990, in line with the improvements in health and mortality.

Over the last decade, the ADR fell from 4.2 deaths per 1,000 residents in 2004, to 3.6 deaths in 2009, and further to 3.2 deaths in 2014 (Chart 4). It follows that the uptick in CDR in the recent half-decade was mainly due to the aging resident population.

2 The year 2003 was selected as data on resident population exclude residents who have been away from Singapore for a continuous period of 12 months or longer as at the reference period from 2003 onwards.

CHART 4 RESIDENT CRUDE DEATH RATE AND AGE-STANDARDISED DEATH RATE

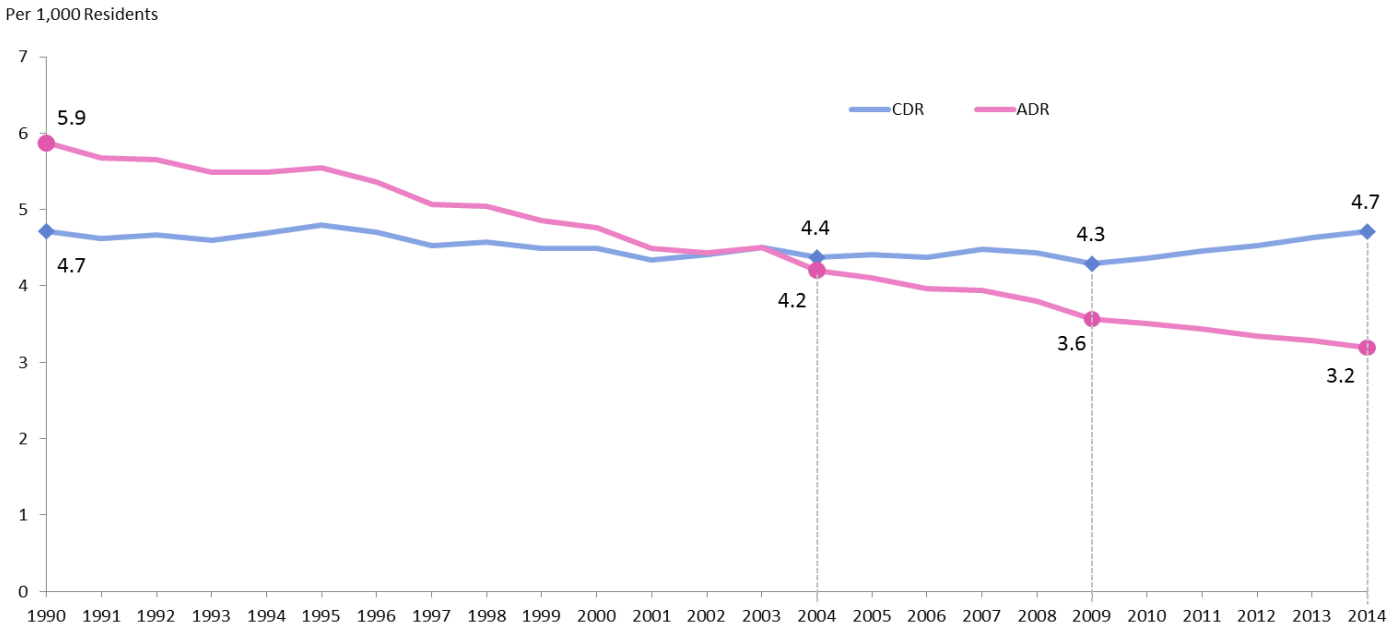


TABLE 1 SUMMARY OF VARIOUS DEATH RATES

Crude Death Rate (CDR)	Age-Specific Death Rate (ASDR)	Age-Standardised Death Rate (ADR)
• Refers to the number of deaths per 1,000 population • A summary indicator of mortality • Does not take into account the age structure of the population • A lower CDR may not indicate better mortality conditions	• Refers to the number of deaths in an age group per 1,000 population of the same age group • Takes into account the age structure of the population • Facilitates comparison across populations with differing age structures and over time • An improvement in mortality translates into a downward and rightward shift in the ASDR curve	• A summary indicator of mortality that removes effects of age structure variations in population composition • Computed by multiplying the ASDRs of the reference population by the proportion of the corresponding age group out of a “standard” population • May change depending on the “standard” population chosen

Singapore's downtrend in age-standardised death rate was the steepest among selected countries

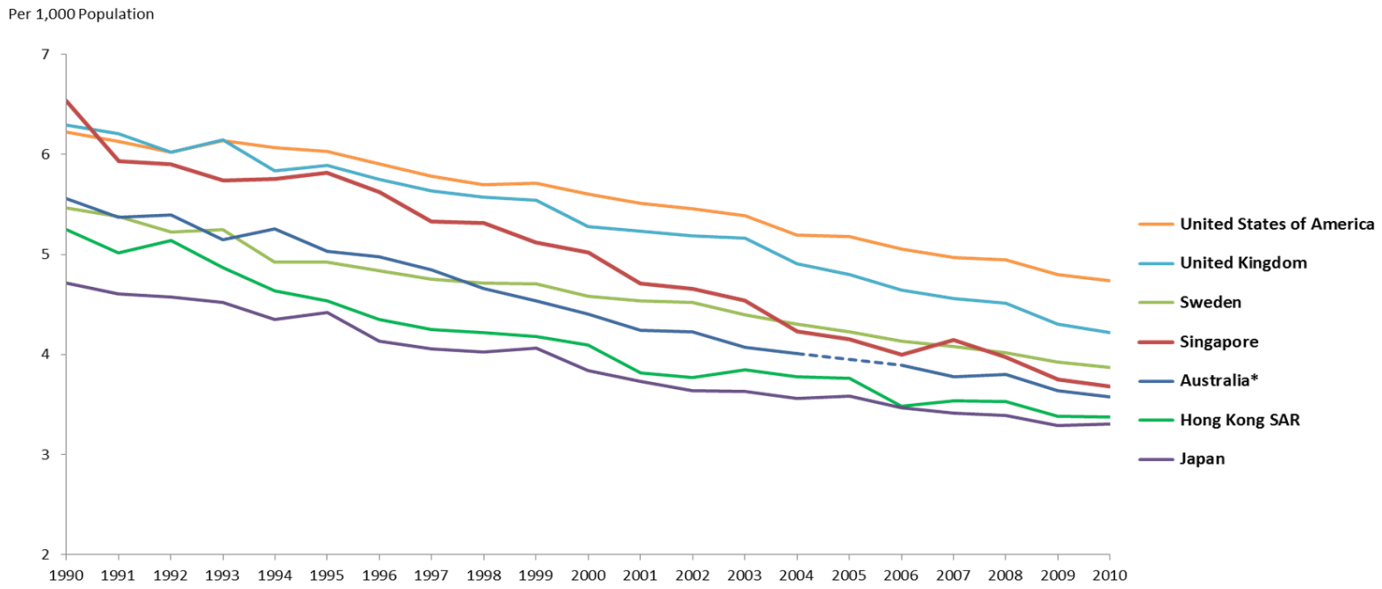
The World Health Organisation (WHO) maintains a Mortality Database where ADRs are calculated for Singapore and other countries[3] based on the world standard population[4]. According to WHO's data, besides Singapore, declining ADR is observed for selected developed countries between 1990 and 2010 (Chart 5).

Among the 7 selected countries, Japan's ADR was consistently the lowest, with Hong Kong's ADR trailing closely behind. While Singapore's ADR was the highest in 1990, we experienced the steepest downtrend over the next two decades. By 2010, our ADR was the fourth lowest, trailing behind Japan, Hong Kong and Australia while ahead of Sweden, the United Kingdom and the United States.

Concluding Remarks

Given the usefulness, age-standardised death rate will be compiled for the Singapore resident population and analysed in the annual *Population Trends*[5] publication released by the Singapore Department of Statistics from the 2015 issue onwards. The historical time series will also be made available in the publication and on the SingStat website[6].

CHART 5 INTERNATIONAL COMPARISON OF AGE-STANDARDISED DEATH RATE



Source : World Health Organisation Mortality Database
* 2005 data is not available.

3 World Health Organisation Mortality Database (July 2014):
Indicator 8013 "Age Standardised Death Rate per 100 000 – Total deaths all causes, all ages - both sexes"
(http://apps.who.int/healthinfo/statistics/mortality/whodpms/)

4 Age composition of the World Standard Population is available at
http://apps.who.int/healthinfo/statistics/mortality/whodpms/definitions/pop.htm

5 This publication is accessible via
http://www.singstat.gov.sg/publications/publications-and-papers/population-and-population-structure/population-trends

6 www.singstat.gov.sg/tablebuilder

The Development of Cohort-Based Marriages and Divorces Statistics

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Introduction

Singapore has a sound vital statistics system where yearly records of marriages and divorces are available from the *Registry of Marriages* (ROM), *Registry of Muslim Marriages* (ROMM), *Family Justice Courts* and *Syariah Court*.

Based on these administrative records, the *Singapore Department of Statistics* (DOS) compiles and releases an annual report titled "Statistics on Marriages and Divorces"[1]. This publication contains analysis on the marriage trends and characteristics of grooms and brides based on period data. It also highlights the nature of divorces and characteristics of divorcees in the reference year.

DOS has developed statistics on dissolution of marriages among marriage cohorts in Singapore and the data are published via the *Ministry of Social and Family Development* (MSF)'s paper on "Dissolution of Marriages Among Cohorts 1987-2012"[2] as well as in the Ministry of Finance's Budget Book[3] and Singapore Public Sector Outcomes Review[4] publications.

The new cohort indicator complements the marriage and divorce period indicators by providing insights on the trends in stability of marriages by marriage cohorts and their profiles, thus giving a complete picture of the number of marriages ending in divorce or annulment.

This article describes the methodology used to develop the cohort indicator, the data coverage and limitations. It also presents some key trends in marriage cohort dissolution rates in Singapore.

Use of Period and Cohort Indicators for Demographic Events

Period data describe demographic events that have occurred within a fixed period of time, such as during the year. For example, divorces or annulments registered in 2013, regardless of when the couples were married.

On the other hand, cohort data reflect the demographic events that occur to a specific cohort at various reference periods. For example, divorces or annulments which occurred by end-2013, among couples who had registered their marriage in 2008.

Compared with collecting period data, more time and effort is required to track cohort data longitudinally. By tapping on the rich administrative sources in Singapore's vital statistics system, we are able to track

1 http://www.singstat.gov.sg/publications/publications-and-papers/marriages-and-divorces/marriages-and-divorces
2 http://app.msf.gov.sg/Portals/0/Summary/publication/FDG/Statistics%20Series%20-%20Dissolution%20of%20Marriage%20Cohorts.pdf?timestamp=1427069824645
3 Financial Year 2015 Expenditure Estimates: Ministry of Social and Family Development. (http://www.singaporebudget.gov.sg/data/budget_2015/download/23%20MSF%202015.pdf)
Key performer indicator under "Strong marriages and family ties" – Cohort Divorce Rate.
4 2014 Singapore Public Sector Outcomes Review. (http://www.mof.gov.sg/portals/0/SPOR%202014/SPOR%202014.pdf)

couples in each marriage cohort and estimate the cumulative proportion of marriages that had dissolved locally for different marriage cohorts.

Methodology

Creation of Statistical Dataset on Marriage Cohorts

Records on marriages registered in Singapore under the Women's Charter and Administration of Muslim Law Act are obtained from the ROM and ROMM respectively. Data on divorces and annulments granted in Singapore under the Women's Charter are obtained from records maintained by the *Family Justice Courts*.

As for divorces under the Administration of Muslim Law Act, divorce records are obtained from the register kept by the *Syariah Court* while records on the revocation of divorces are obtained from the ROMM.

Persons who marry in Singapore are issued a marriage certificate that carries a certificate number. This marriage certificate number has to be reported by the couple if they were to subsequently divorce in Singapore. A statistical dataset on marriage cohorts is developed through the following steps:

1. All the available marriage records are matched with the divorce and annulment records through a set of unique identifiers. The marriage year is used together with the marriage certificate number as the unique identifier. If the information on marriage certificate number is not available, the marriage date is used together with the couple's personal details as the unique identifier.

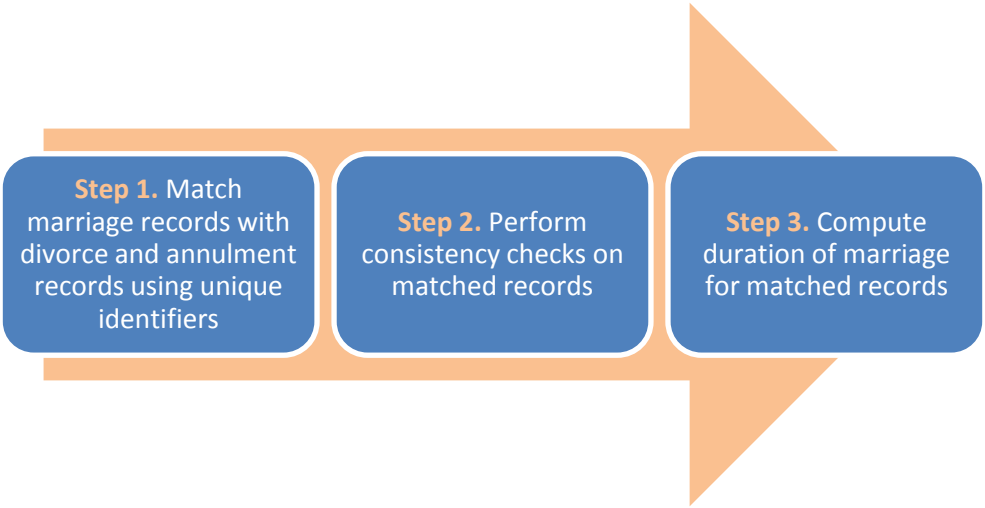
2. Marriage records that are successfully matched with a divorce or annulment record using the unique identifiers are then passed through a series of automated checks to ensure consistency in the information. For example, the date of divorce or annulment should fall after the date of marriage.

3. For marriage records with a matched divorce or annulment record, the duration from marriage till the dissolution of the marriage is computed based on the date of marriage and date of divorce or annulment.

Computation of the Cumulative Proportion of Dissolved Marriages

Data on the cumulative proportion of dissolved marriages by marriage cohort and duration of marriage can be compiled for the 1987 marriage cohort onwards. This is achieved through the following steps:

1. The marriage records are first segregated into the different marriage cohorts based on the year of marriage.



2. The number of dissolved marriages is then totaled for each category on duration of marriage. The duration of marriage categories are presented in the form of "before xth anniversary from date of marriage".

Take for example a marriage that was contracted on 1 Jan 1987 which subsequently ended in divorce on 1 Jun 1990. Since the divorce took place after the 3rd wedding anniversary (1 Jan 1990) but before the 4th anniversary (1 Jan 1991), it will be reflected in the cumulative dissolution statistics as a dissolved marriage from the category "before 4th anniversary" onwards.

3. Finally, the cumulative proportion of dissolved marriages for each marriage cohort and duration of marriage category is calculated using the following formula:

$$\text{Cumulative proportion of dissolved marriages of marriage cohort } m \text{ at duration of marriage } x = \frac{\text{Cumulative number of dissolved marriages in marriage cohort } m \text{ at duration of marriage } x}{\text{Number of marriages in marriage cohort } m}$$

Data Coverage

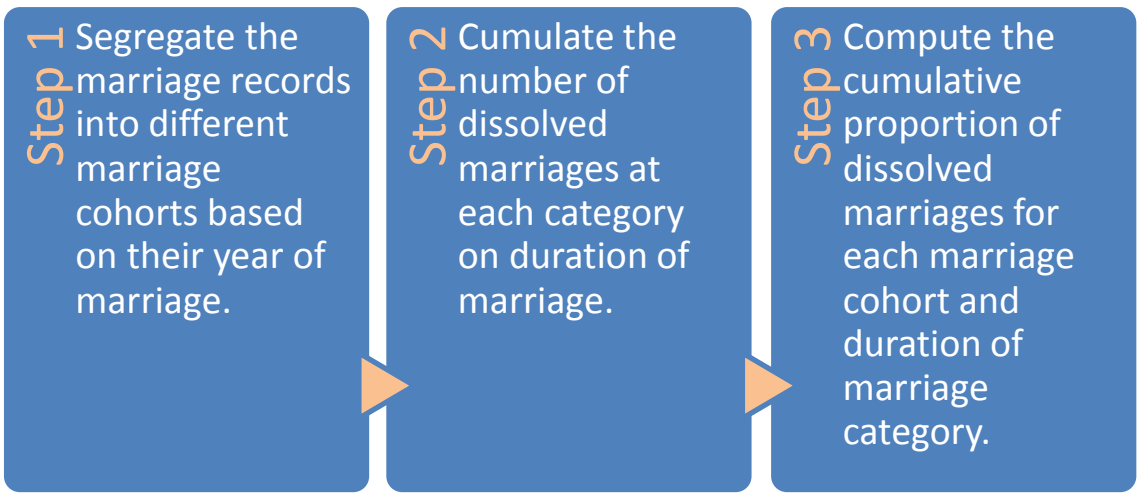
Resident Marriages

The analysis on the cumulative proportion of dissolved marriages among marriage cohorts is confined to resident marriages, which refer to marriages contracted between persons where at least one party is a Singapore citizen or permanent resident.

Marriages contracted in Singapore between two non-residents are excluded from the analysis due to the difficulty in tracking the marital outcome of such non-resident couples over time. For example, the identification documents used by non-residents to register their marriages may not be unique. In addition, such couples may eventually leave Singapore to reside in their home country and the marriage outcome could not be tracked.

Local Marriages and Divorces

As it is not required by law for residents of Singapore who contract their marriages outside of Singapore to register with the ROM or ROMM, overseas marriages are not covered in the statistics due to the unavailability of data. Similarly, divorces or annulment of marriages that were granted outside of Singapore are excluded in the compilation.



Where a couple registered their marriage in Singapore but chose to divorce or annul their marriage in another country, the couple will continue to be reflected as having an intact marriage in the cohort statistics as the overseas divorce or annulment is not captured in Singapore's administrative records.

Treatment of Deaths and Migration

Besides the dissolution of a marriage through a divorce or annulment, an intact marriage can also be affected by the death of spouse(s). Married couples may also leave Singapore through migration. As the purpose is to track the marital outcome of marriage cohorts over time, the size of each marriage cohort is kept unchanged throughout the period of analysis, i.e. couples will not be removed from the marriage cohorts due to death or migration.

Key Data Trends

Among the 1987 resident marriage cohort, 17.8 per cent of marriages had dissolved via divorce or annulment before the 26th anniversary (Chart 1). For the subsequent 1988-2002 marriage cohorts, the proportion of marriages that had dissolved by end-2013 was also about 17 per cent or higher despite the fewer number of years since marriage.

The cumulative proportion of marriages that had dissolved generally rose across marriage cohorts. For the 1987 marriage cohort, the proportion of marriages that had dissolved before the 5th anniversary was 4.0 per cent (Chart 2). The corresponding proportion rose to 6.6 per cent for the 2008 cohort.

Likewise, the proportion of marriages that had dissolved before the 10th anniversary increased from 8.7 per cent for the 1987 cohort to 16.1 per cent for the 2003 cohort.

Similarly, the proportion of marriages that had dissolved before the 15th anniversary went up from 12.3 per cent for the 1987 cohort to 20.3 per cent for the 1998 cohort.

These trends suggest that recent marriages are generally more vulnerable to dissolution compared to the older marriage cohorts.

CHART 1 CUMULATIVE PROPORTION OF DISSOLVED MARRIAGES BEFORE XTH ANNIVERSARY

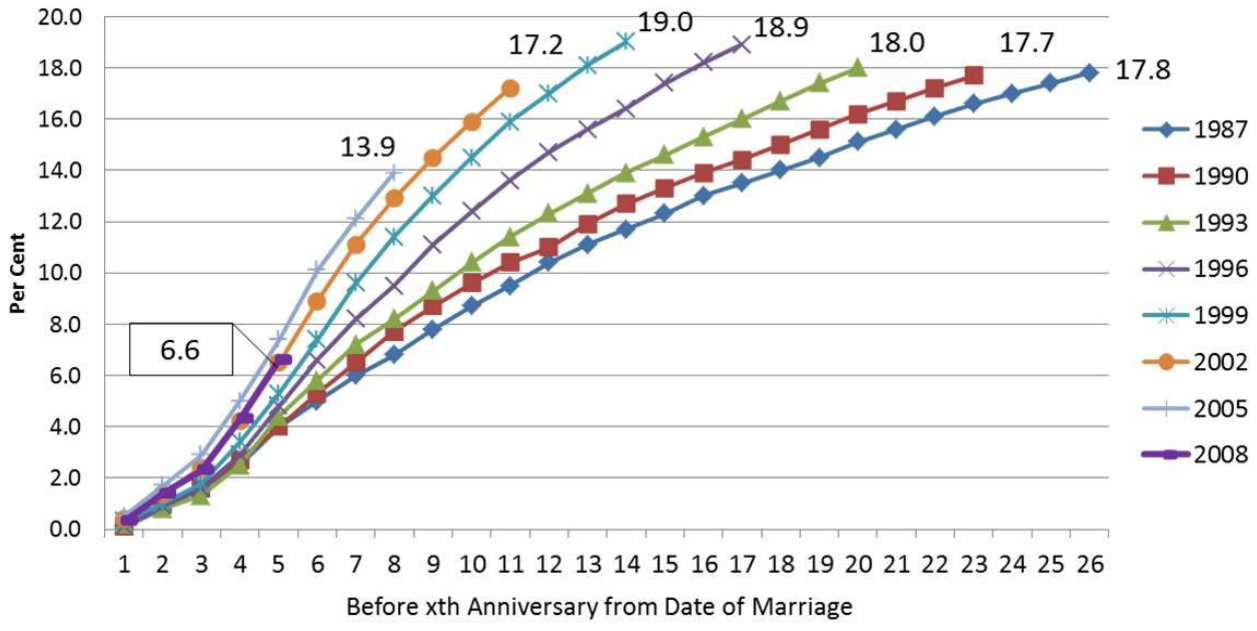
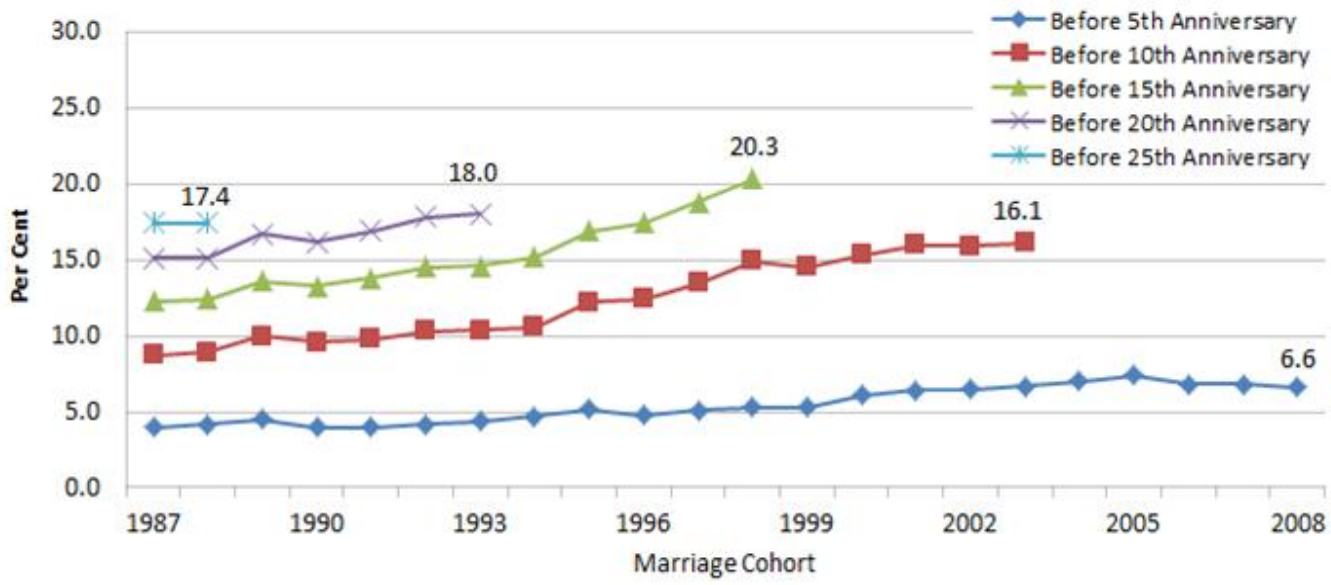


CHART 2 CUMULATIVE PROPORTION OF DISSOLVED MARRIAGES BEFORE 5TH, 10TH, 15TH, 20TH AND 25TH ANNIVERSARY



International Comparison

Unlike period statistics on marriages and divorces, there are only a few National Statistical Offices that have embarked on cohort studies on marriage dissolution. *Statistics New Zealand* (SNZ) and the United Kingdom's *Office for National Statistics* (ONS) are among those who track such cohort statistics. The methodology we used is similar to that of SNZ and ONS.

Compared to New Zealand and the United Kingdom, the proportions ending in divorce or annulment were generally lower for the older marriage cohorts in Singapore. For example, for the 1987 marriage cohort, 15.1 per cent had dissolved before the 20th anniversary for Singapore, compared with at least 30 per cent for New Zealand[5] and the United Kingdom[6].

However, for the more recent 2005 and 2007 marriage cohorts, about 7 per cent had dissolved before the 5th anniversary for Singapore, closer to the 8 per cent for the United Kingdom.

A longer time trend is needed to ascertain if this convergence with international counterparts would continue when marriages reach their 20th anniversary.

Conclusion

By tapping on the rich administrative sources in Singapore's vital statistics system, DOS has developed a new cohort indicator on the cumulative proportion of dissolved marriages among marriage cohorts through the matching and merging of marriage and divorce records.

This new cohort indicator, which provides an insight on the trends in stability of marriages by marriage cohorts, complements existing period indicators to give a more comprehensive overview of the marriage and divorce trends in Singapore.

Data based on the new indicator showed that the cumulative proportion of marriages dissolving before specific anniversaries has generally increased across successive marriage cohorts in Singapore.

5 Data for New Zealand refer to the latest available for the 1987 marriage cohort.
URL link: http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/demographic-trends-2012.aspx

6 Data for the United Kingdom refer to England and Wales.
URL link: http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-328994

Singapore Standard Statistical Classifications 2015

By
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Introduction

The Singapore Department of Statistics (DOS) completed the revision of three national standard statistical classifications in April 2015, namely the Singapore Standard Industrial Classification (SSIC) 2015, Singapore Standard Occupational Classification (SSOC) 2015 and Singapore Standard Educational Classification (SSEC) 2015. The relevant stakeholders such as major users of the classifications were consulted during the revision to incorporate changes and developments in the economy, labour market, education and training.

The classifications are used in data collection (e.g. censuses, surveys, administrative records), compilation, presentation and analysis of a wide range of statistics, such as national income, production, demographic, social, labour and education statistics.

This article provides a brief description of each national classification standard and highlights the major changes arising from the recent revision of these standards.

Singapore Standard Industrial Classification 2015

The SSIC 2015 is the eleventh edition of the SSIC. Similar to the SSIC 2010, it adopts the basic framework of the International Standard Industrial Classification Revision 4 (ISIC Rev. 4), with appropriate modifications to take into account Singapore's economic landscape while enhancing international comparability. The classification also incorporates recent changes in economic activities to better reflect the current structure of Singapore's economy.

As there were no structural changes in the ISIC Rev. 4, the number of one-, two-, three- and four-digit codes remain about the same in the SSIC 2015. At the more detailed level, a number of five-digit codes have been introduced to reflect new activities, and existing ones which have become significant. Activities with declining number of establishments have been streamlined and combined.

For instance, to reflect the growing presence of retail activities through certain channels, separate codes for retail sales via internet and retail sales via vending machines were created in the section for wholesale and retail trade. Only establishments which engage in retail sales exclusively or predominantly through the internet are classified in the code for retail sales via internet.

New unique codes have also been created to take into account various activities, such as supporting services to distribution of gas (e.g. arranging for sale of gas) and inter-country bus services (e.g. firms offering scheduled long-distance cross-country services).

On the other hand, activities such as manufacturing of starch and starch products, fish and aquatic farming activities have been streamlined and combined into fewer codes or a single code.

Some of the new codes are shown in Table 1.

TABLE 1 NEW SEPARATE CODES IN SSIC 2015

Section		Five-digit Codes Created	
C	Manufacturing	20133	Manufacture of synthetic rubber
		21030	Manufacture of traditional chinese medicine
D	Electricity, Gas, Steam and Air-Conditioning Supply	35203	Other related services (e.g. arranging for sale of natural gas)
G	Wholesale and Retail Trade	47910	Retail sale via internet
		47991	Retail sale via vending machines
H	Transportation and Storage	49213	Inter-country bus services
		52244	Stevedoring services
I	Accommodation and Food Service Activities	55109	Other short term accommodation activities n.e.c (e.g. backpackers/travellers' hostels, guesthouses etc)
		56123	Snack bars and food kiosks (mainly for takeaway, including dessert/bubble tea outlets)
K	Financial and Insurance Activities	66222	Financial advisory firms and advisers (including firms providing financial planning services)
L	Real Estate Activities	68106	Management of self-owned strata titled property
M	Professional, Scientific and Technical Activities	71114	Land surveying services
		71119	Other surveying services n.e.c. (e.g. geophysical, geologic, seismic, hydrographic surveying services)
N	Administrative and Support Service Activities	81212	Domestic/Household cleaning services
Q	Health and Social Services	86102	Community hospitals
		86905	Dialysis services

Singapore Standard Occupational Classification 2015

The SSOC 2015 is the seventh edition of the SSOC. It adopts the basic framework and principles of the International Standard Classification of Occupations 2008 (ISCO-08) developed by the International Labour Office (ILO), incorporating the latest developments in the labour market.

The number of major groups in SSOC 2015 remains unchanged at ten while the number of two-, three-, four- and five-digit groups have increased to provide more detailed breakdown at each levels.

To better reflect the different tasks and duties performed by cleaners in different premises (e.g. Food and Beverage (F&B) establishments, offices, industrial establishments), separate four-digit codes have been created. New five-digit codes have been created for

occupations that were becoming more prevalent in emerging industries, such as clinical research professionals, clinical research coordinators, safety and security consultants, enterprise/solution architects, intellectual property brokers and transaction specialists. Separate codes have also been created for those handling vehicles such as parking valets, concrete mix truck drivers and waste truck drivers to cater to the differences in skill requirements and tasks carried out.

Some of the new codes are shown in Table 2 below.

TABLE 2 NEW SEPARATE CODES IN SSOC 2015

	Major Group	**Five-digit Codes Created**	
Group 2	Professionals	21347	Clinical research professionals
		21497	Optical engineer (including laser engineer)
		21498	Safety and security consultant
		21665	Interaction/User experience designer
		25113	Enterprise/Solution architect
Group 3	Associate Professionals and Technicians	31413	Clinical research coordinator
		33291	Intellectual property brokers and transaction specialists
		33393	International market agent/representative (eg junket operator)
Group 5	Service and Sales Workers	51322	Barista
Group 8	Plant and Machine Operators and Assemblers	83225	Parking Valet
		83325	Concrete mix truck driver
		83326	Waste truck driver (including hooklift trucks with roll-on containers)
		83491	Motorised sweeper operator
Group 9	Cleaners, Labourers and Related Workers	91151	Food and beverage establishment cleaner (eg restaurants, food courts, hawker centres)
		91160	Residential area cleaner (eg HDB estates, condominiums, private apartments, common areas within residential estates)
		91170	Cleaner in open areas (eg bus stops, drains, waterways, overhead bridges, roads, expressways, parks, beaches)
		94104	Tea server/steward (excluding bartender, barista and food/drink stall assistant)
		96000	Waste and recyclables collection supervisor

Some occupations were reclassified across major groups, taking into consideration the main tasks and duties of these occupations within the context of Singapore and developments in recent years. For instance, some healthcare-related occupations (e.g. registered nurses) have been reclassified from Major Group 3 to Major Group 2 given that the nature of work are similar to those performed by their international counterparts and consistent with the tasks specified for similar occupations in Major Group 2 in ISCO-08.

Singapore Standard Educational Classification 2015

The SSEC 2015 is the third edition of the SSEC. It makes reference to the basic framework and principles of the International Standard Classification of Education (ISCED) 2011 and ISCED Fields of Education and Training classification (ISCED-F) 2013. Apart from changes in the full-time education system and vocational certification system, developments in the continuing education and training programmes have also been taken into consideration when revising the SSEC. Unlike the SSIC and SSOC which are each designed as one single classification, the SSEC comprises three sub-classifications:

- Classification of Level of Education Attending
- Classification of Educational Qualification Attained
- Classification of Field of Study

Classification of Level of Education Attending

The level of education attending refers to the grade or standard of formal education that a full-time student is attending.

The classification of level of education attending in the SSEC 2015 remains broadly similar to the structure in SSEC 2010. Minor modifications are made to the description of certain categories. For example, the description "University First Degree" at the one-digit level was changed to "Bachelor's or equivalent" to further align with the terminology used in ISCED 2011. Separate categories have been created from category 7 in SSEC 2010 (Table 3) to better reflect the differences in rigor and duration of various programmes at the postgraduate level. The comparison of the one-digit categories between SSEC 2015 and SSEC 2010 is shown in Table 3.

TABLE 3 COMPARISON OF ONE-DIGIT CATEGORIES IN SSEC 2015 AND SSEC 2010 (LEVEL OF EDUCATION ATTENDING)

SSEC 2015		SSEC 2010	
0	Pre-Primary	0	Pre-Primary
1	Primary	1	Primary
2	Secondary	2	Secondary: General & Vocational
3	Post-Secondary (Non-Tertiary): General & Vocational	3	Post-Secondary (Non-Tertiary): General & Vocational
4	Polytechnic Diploma Course	4	Polytechnic Diploma Course
5	Other Courses Leading to Award of Professional Qualification and Other Diploma	5	Other Courses Leading to Award of Professional Qualification and Other Diploma
6	Bachelor's or Equivalent	6	University First Degree
7	Postgraduate Diploma/Certificate (Excluding Master's and Doctorate)	7	University Postgraduate Diploma/Degree
8	Master's and Doctorate or Equivalent		

Classification of Educational Qualification Attained

The level of educational qualification attained refers to the grade or standard of education passed or the highest level of education where a certificate, diploma or degree is awarded by an educational or training institution. The educational qualification may be attained through full-time or part-time study in a structured educational programme.

To reflect a growing emphasis on the Continuing Education and Training (CET) programmes in Singapore such as those offered under the Singapore Workforce Skills Qualifications (WSQ) system and bite-sized learning and skills-upgrading modules, the scope and description of the category "Other Education (Non-Award Courses/Miscellaneous)" has been refined to "Modular Certification (Non-Award Courses/Non-full Qualifications)" and is denoted by the letter 'N'. Similar to the SSEC 2010, full qualifications awarded based on the WSQ system will be classified and benchmarked to the equivalent educational qualifications in the mainstream education system.

Table 4 provides a comparison between the one-digit categories of SSEC 2015 and 2010.

TABLE 4 COMPARISON OF ONE-DIGIT CATEGORIES IN SSEC 2015 AND SSEC 2010 (EDUCATIONAL QUALIFICATION ATTAINED)

SSEC 2015		SSEC 2010	
0	No Formal Qualification/ Pre-Primary/Lower Primary	0	No Formal Qualification/ Lower Primary
1	Primary	1	Primary
2	Lower Secondary	2	Lower Secondary
3	Secondary	3	Secondary
4	Post-Secondary (Non-Tertiary): General & Vocational	4	Post-Secondary (Non-Tertiary): General & Vocational
5	Polytechnic Diploma	5	Polytechnic Diploma
6	Professional Qualification and Other Diploma	6	Professional Qualification and Other Diploma
7	Bachelor's or Equivalent	7	University First Degree
8	Postgraduate Diploma/Certificate (Excluding Master's and Doctorate)	8	University Postgraduate Diploma/Degree
9	Master's and Doctorate or Equivalent		
N	Modular Certification (Non-Award Courses/Non-full Qualifications)	9	Other Education (Non-Award Courses/Miscellaneous)

Classification of Field of Study

The field of study refers to the principal discipline, branch or subject matter of study that leads to the award of the qualification attained at polytechnic or university levels. Vocational qualifications at post-secondary level may also be classified by field of study.

The number of two-digit broad fields in the SSEC 2015 field of study classification increased from 14 to 15. A new broad field "00 Generic Programmes and Qualifications" created to account for broad generic programmes and qualifications which cover a wide range of subjects with little or no specialisation in a particular field or fields, in line with ISCED 2011. The 15 broad fields are listed in Table 5 below.

At the detailed field level, codes for "Basic Programmes and Qualifications", "Literacy and Numeracy" and "Personal Skills and Development" have been included under the newly created field mentioned above. New detailed fields such as "Games Design", "Animation & Visual Effects" and "Pastry Making & Baking Skills" were also added to the narrow field of Design & Applied Arts (022) and Food Services (132) to reflect the prevalence of such programmes being offered by some of the schools in Singapore.

Separate categories were also created for "Student Care" and "Youth Care" because of the differences in their focus. The former covers aspects like before/after school supervised care for children, while the latter covers issues related to at-risk youths and mentoring youths.

The SSIC 2015, SSOC 2015 and SSEC 2015 reports can be accessed via the SingStat website at http://www.singstat.gov.sg/methodologies-standards.

TABLE 5 LIST OF BROAD FIELDS IN SSEC 2015

00	Generic Programmes and Qualifications
01	Education
02	Fine & Applied Arts
03	Humanities & Social Sciences
04	Mass Communication & Information Science
05	Business & Administration
06	Law
07	Natural, Physical, Chemical & Mathematical Sciences
08	Health Sciences
09	Information Technology
10	Architecture, Building & Real Estate
11	Engineering Sciences
12	Engineering, Manufacturing & Related Trades
13	Services
99	Other Fields

Overseas Visitors

The Singapore Department of Statistics (DOS) welcomed a six-member delegation from the Statistics Bureau of Guangxi Zhuang Autonomous Region and a four-member delegation from the Statistical Information Institute for Consulting and Analysis (SINFONICA) over the past six months. An overview of the Singapore statistical system was presented to the visitors.

China
Statistics Bureau of Guangxi Zhuang Autonomous Region

Japan
Statistical Information Institute for Consulting and Analysis (SINFONICA)

Contents

Population Trends 2015 has been released!

Singapore's total population in 2015 rose 1.2 per cent from the previous year. This growth rate was the slowest in over a decade.

Access the report for more information at:
http://www.singstat.gov.sg/publications/publications-and-papers/population-and-population-structure/population-trends

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. Please address all correspondence to:

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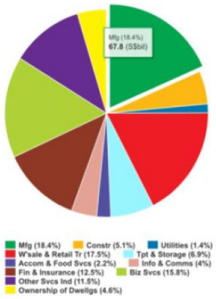

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