

Household Expenditure Survey 2012/2013 - Observations on Prevalence of Online Purchases

By

Teo Wan Choo and Chan Heng Wei

Income, Expenditure and Population Statistics Division
Singapore Department of Statistics

Introduction

The Singapore Department of Statistics (DOS) conducts the Household Expenditure Survey (HES) once in every five years. The latest HES 2012/13 was conducted from October 2012 to September 2013. The HES collects detailed information on households' consumption expenditure, income and socio-economic characteristics. Data on ownership of consumer durables, which reflect households' standards of living, are also captured.

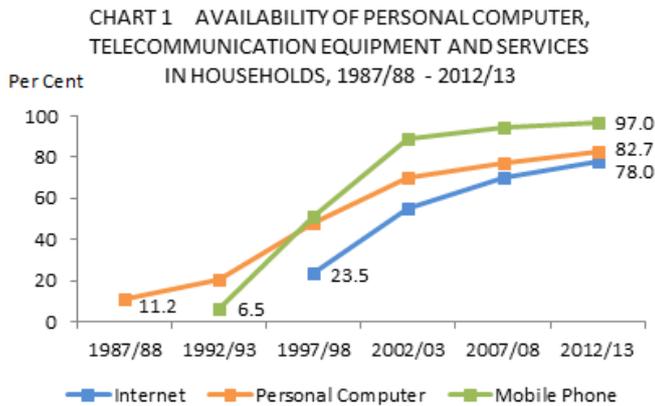
Results from the HES are used in household expenditure and income studies. They are also used to update the weighting pattern and the basket of goods and services for the compilation of the Consumer Price Index (CPI). Besides providing information on households' expenditure levels, the HES also gives insights into their consumption patterns and the changes over time.

Emergence of Online Shopping

Facilitated by technological developments and availability of online shopping, shifts in households' consumption habits in recent years are observed. Electronic retail is growing rapidly. Some traditional brick and mortar retail stores are also offering consumers the option of going online to meet their shopping needs. Increasingly, more households are making purchases over the Internet¹. These come on the back of greater access to computing and mobile equipment, growing Internet connectivity and computer literacy.

The past two decades have witnessed a rise in households' ownership of personal computer, mobile phone and access to the Internet. Findings from the HES have shown the proportion of households with personal computer climbing steadily from 11 per cent in 1987/88 to 83 per cent in 2012/13 (Chart 1).

¹ The Infocomm Development Authority of Singapore reported in the 2012 Annual Survey in Infocomm Usage in Households and by Individuals that the proportion of online shoppers among Internet users aged 15 years and over increased between 2008 and 2012.



Households with Internet subscription/access increased from 24 per cent in 1997/98 to 78 per cent in 2012/13. Most notably, the proportion of households with mobile phone increased steeply from 6.5 per cent in 1992/93 to almost universal at 97 per cent in 2012/13. Besides basic phone service, mobile services with Internet data access are also becoming more common.

The improved ease and accessibility to the virtual world supported the adoption of online activities, including online shopping. In this article, we take a closer look at the prevalence of online purchases reported by households in the latest HES 2012/13.

Information on Online Purchases Collected in HES 2012/13

In anticipation that purchases made over the Internet could become more prevalent among households over time and potentially impact their consumption patterns, the HES piloted the capturing of households' expenditure on online purchases in 2012/13.

Besides detailing the descriptions of items purchased and the amounts paid for in their expenditure records, respondents were also asked to indicate if the items were purchased online. Such distinction was not made in HES conducted prior to 2012/13.

For the purpose of the HES, an "online purchase" is defined as the purchasing or ordering of goods or services via the Internet, regardless of whether payment was made online and independent of the

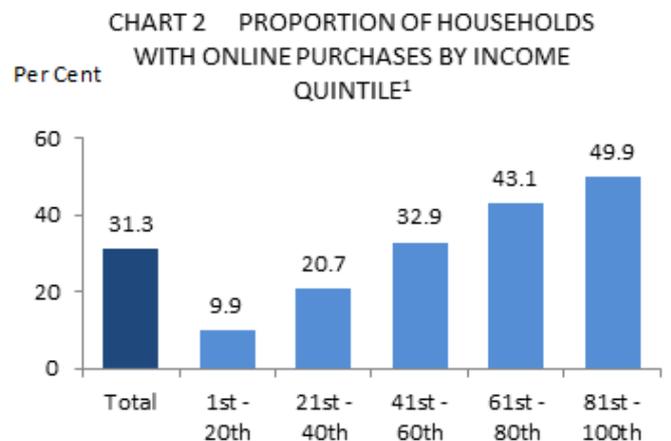
mode of delivery for the goods or services. Orders placed through email are considered online purchases.

In collecting the required information, breakdown into online and other modes of purchases was asked for day-to-day expenses captured in the respondents' expenditure recording over 2 weeks. In addition, online purchases of selected big ticket items that were ad-hoc in nature and less likely to be incurred on a day-to-day basis were also captured via a 12-month recall. Examples include overseas holidays and purchase of durable goods.

Prevalence of Online Purchases among Households

By Income Quintile

In 2012/13, almost a third of all households made at least one purchase over the Internet. The prevalence of online purchases among households in the higher income quintiles was greater compared to those in the lower income quintiles. Among households in the 81st to 100th income quintile, one in two households made purchases over the Internet compared to about one in ten among those in the 1st to 20th quintile (Chart 2).



¹ Based on ranking of all resident households by their monthly household income from all sources (including employer CPF contributions) per household member.

By Type of Dwelling

The proportion of households reporting to have made online purchases was higher among households living in condominiums, other apartments and landed properties than those living in HDB flats. Among households in HDB flats, 29 per cent made at least one online purchase, with lower proportions reported among those in smaller flat types (Chart 3). The corresponding proportions among households staying in condominiums and other apartments and landed properties were 44 – 45 per cent.

By Age of Household Members

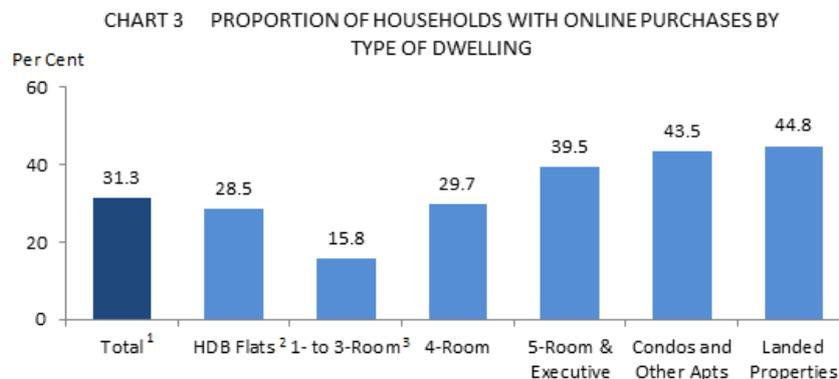
Households comprising younger adults had a higher tendency to make online purchases. Among households with at least one member aged 25 to 44, about 36 to 41 percent had made online purchases (Chart 4). In contrast, households comprising of only older members aged 45 and over observed a much lower proportion making online purchases.

By ownership of computers and Internet access

As expected, online purchases were more prevalent among households with access to the Internet and personal computer at home. Among households with Internet access, 38 per cent made at least one online purchase as compared to 8.9 per cent among those without (Chart 5). A similar trend is observed among households owning a personal computer, where a significantly higher proportion of households made at least one online purchase as compared to households without. Although households may still be able to make an online purchases without access to Internet or computer at home, online purchases were far less common among households with no access.

Average Expenditure on Online Purchases

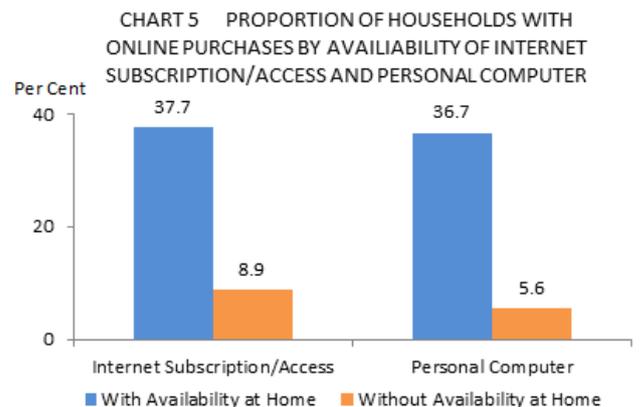
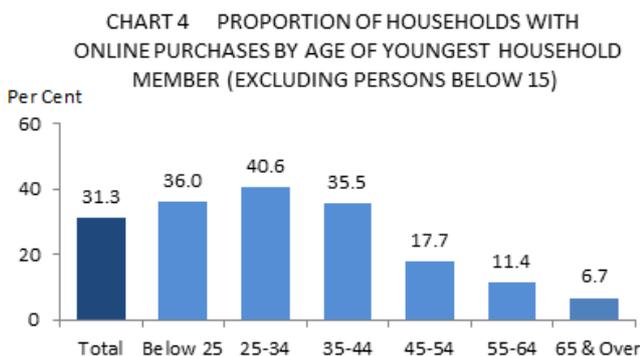
The average monthly household expenditure of all resident households was \$4,720 in 2012/13. Of this, an average of \$82 (or 1.7 per cent of household



¹ Total includes other types of dwellings not shown, e.g. non-HDB shophouses, etc.

² HDB flats include non-privatised Housing and Urban Development Corporation (HUDC) flats.

³ HDB 1- to 3-Room includes HDB Studio Apartments.



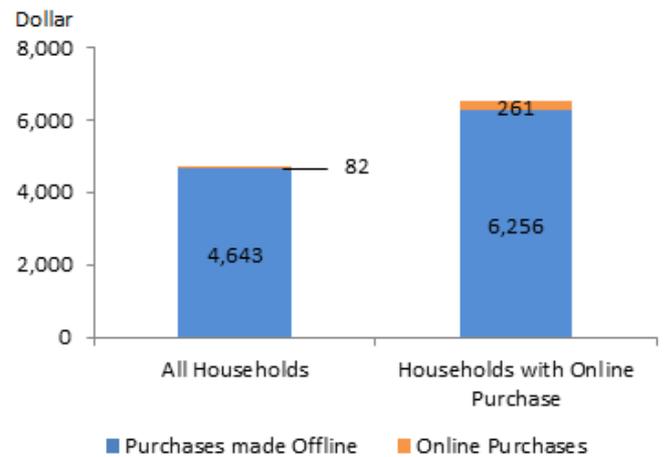
expenditure) was spent online (Chart 6). Among households who reported at least one online purchase in the survey, their average monthly household expenditure and online spending were higher at \$6,520 and \$260 respectively.

By Income Quintile

The share of online spending ranged from less than 1 per cent among households in the lower income quintiles (1st to 20th and 21st to 40th) to 2.3 per cent for the top quintile (Chart 7A). In dollar terms, monthly spending online ranged from \$15 to \$180 on average per household across income quintiles.

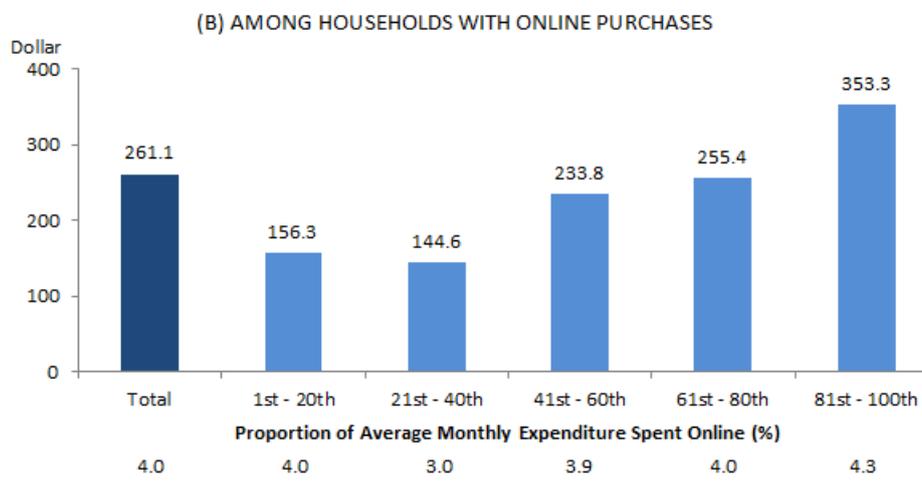
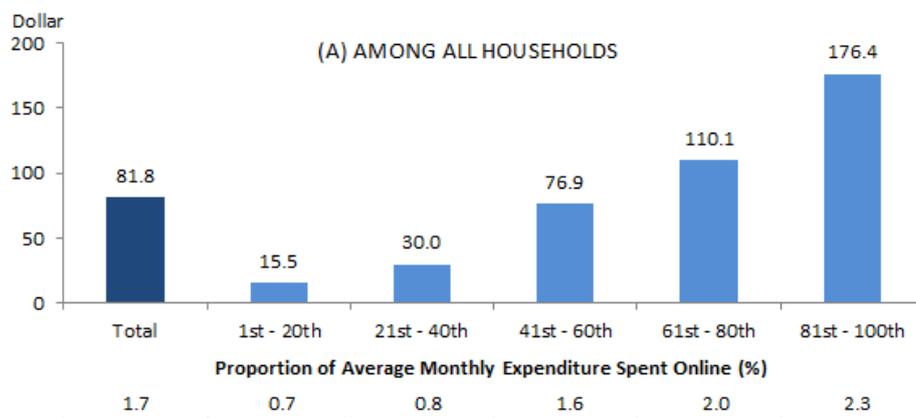
Among households who made at least one online purchase in the survey, average monthly spending online ranged from \$140 to \$350 per household (Chart 7B).

CHART 6 AVERAGE MONTHLY HOUSEHOLD EXPENDITURE¹ AMONG ALL RESIDENT HOUSEHOLDS AND HOUSEHOLDS WITH ONLINE PURCHASES BY MODE OF PURCHASE



¹ Expenditure data exclude imputed rental of owner-occupied accommodation.

CHART 7 AVERAGE MONTHLY HOUSEHOLD EXPENDITURE¹ ON ONLINE PURCHASES AND SHARE OF ONLINE SPENDING OF HOUSEHOLD EXPENDITURE BY INCOME QUINTILE²



¹ Expenditure data exclude imputed rental of owner-occupied accommodation.

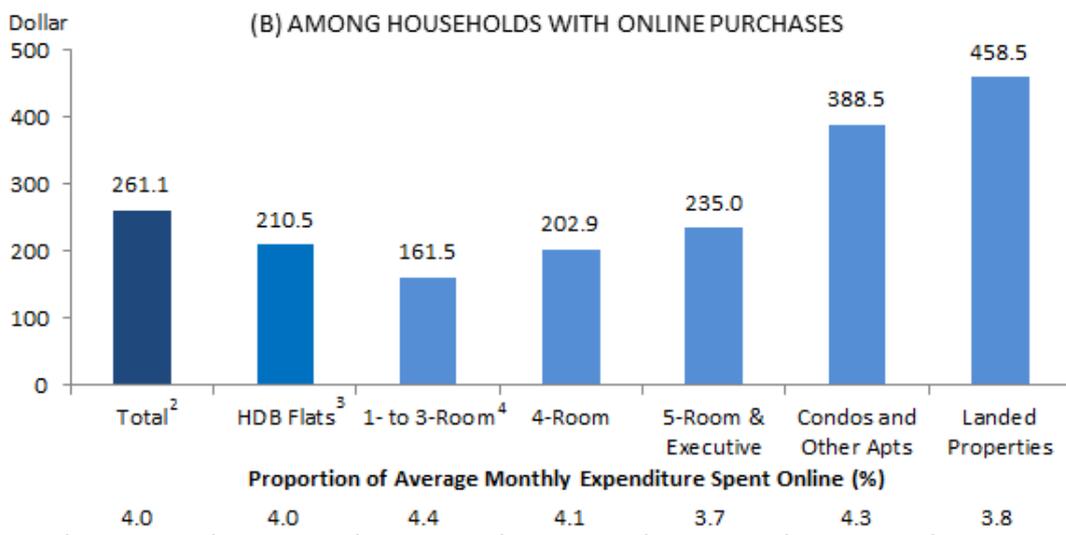
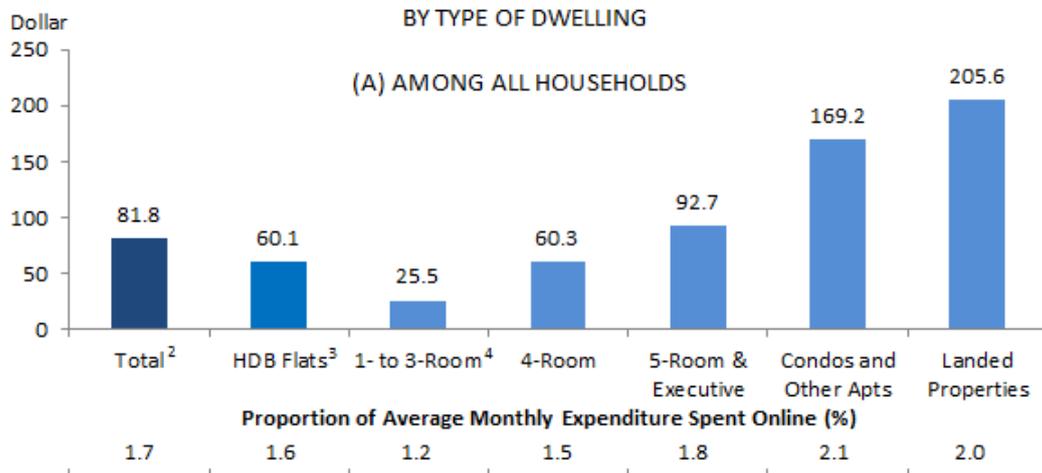
² Based on ranking of all resident households by their monthly household income from all sources (including employer CPF contributions) per household member.

By Type of Dwelling

For households staying in different types of housing, between 1.2 and 2.1 per cent of households' expenditure was spent online (Chart 8A). This amounted to some \$26 among households in the smaller HDB flats and \$210 among households residing in landed properties.

Among overall households, those staying in 1- to 3-room HDB flats incurred a small share of their expenditure online (1.2 per cent). In comparison, for households who made online purchases, the share of expenditure spent online for households staying in 1- to 3-room HDB flats at 4.4 per cent of their monthly household expenditure, was highest across all dwelling types (Chart 8B).

CHART 8 AVERAGE MONTHLY HOUSEHOLD EXPENDITURE¹ ON ONLINE PURCHASES AND SHARE OF ONLINE SPENDING OF HOUSEHOLD EXPENDITURE BY TYPE OF DWELLING



¹ Expenditure data exclude imputed rental of owner-occupied accommodation.

² Total includes other types of dwellings not shown, e.g. non-HDB shophouses, etc.

³ HDB flats include non-privatised Housing and Urban Development Corporation (HUDC) flats.

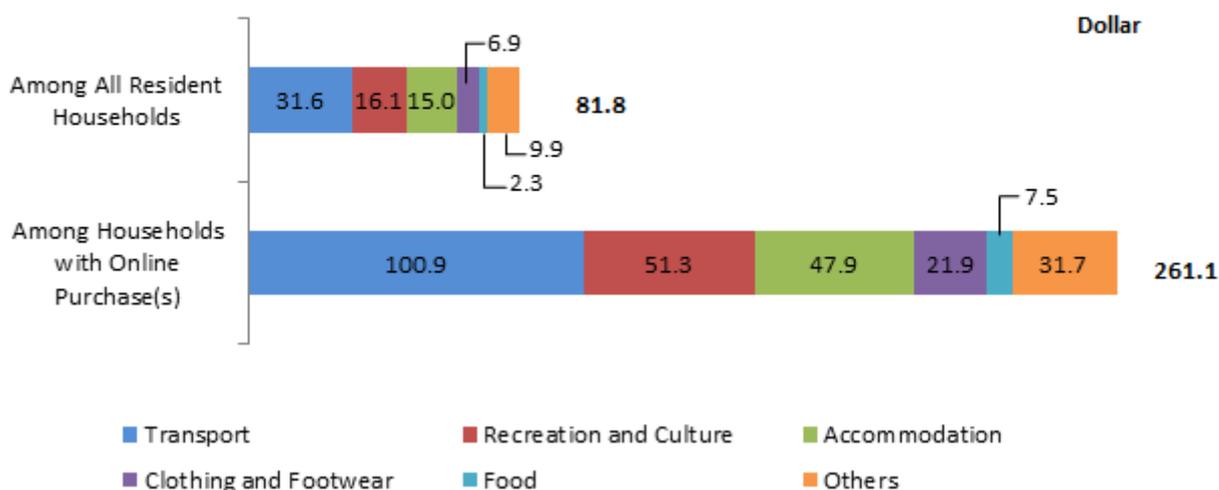
⁴ HDB 1- to 3-Room includes HDB Studio Apartments.

Travel and Clothing Accounted for the Largest Shares of Online Expenditure

Among broad types of goods and services, transport, recreation and culture, and accommodation services accounted for the largest shares of households' online expenditure. Together, they constituted 77 per cent of online expenditure reported by households (Chart 9).

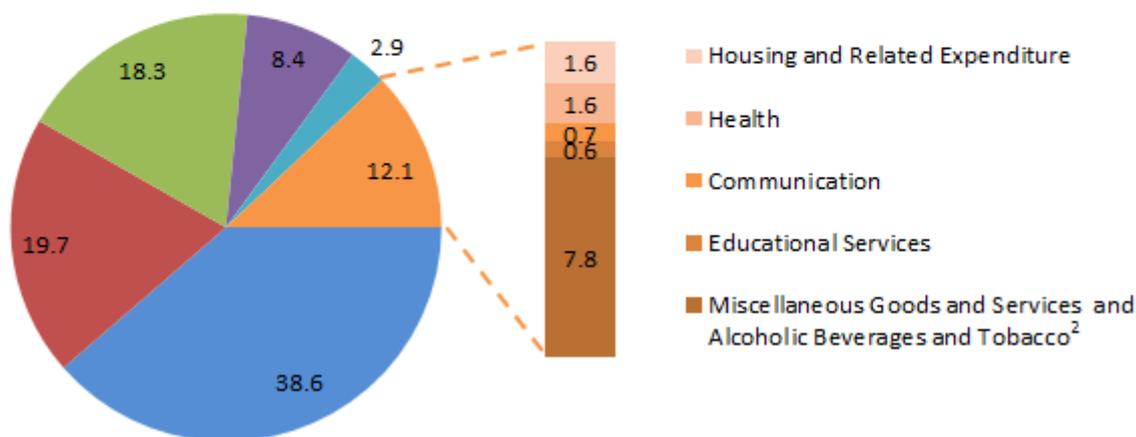
The ease and convenience of purchasing flight tickets and booking of hotel stays on the Internet contributed to the significant proportion of online purchases on transport and accommodation. Under recreation and culture, the main expenditure item incurred online was for overseas packaged holidays. Apart from travel and holidays-related expenses, clothing and footwear made up the next most significant purchases online.

CHART 9 AVERAGE MONTHLY EXPENDITURE¹ ON ONLINE PURCHASE BY BROAD TYPES OF GOODS AND SERVICES



Distribution of Online Purchases (%)

Distribution (Percent)



¹ Expenditure data exclude imputed rental of owner-occupied accommodation.

² Miscellaneous goods and services include personal care services such as hairdressing, social support services and insurance.

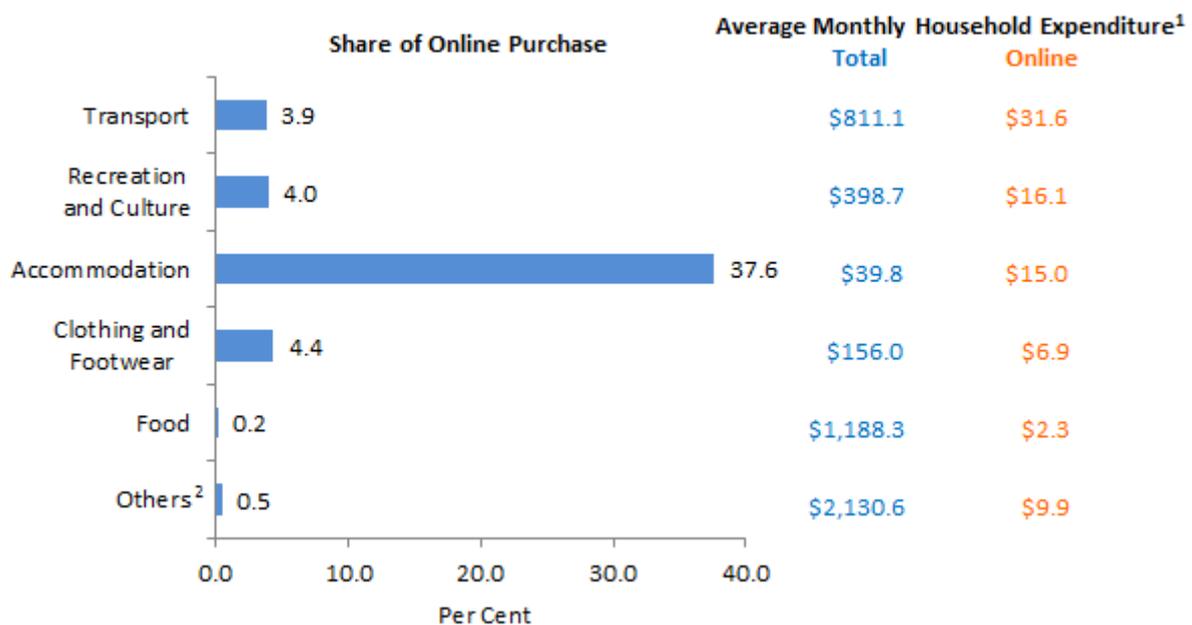
Online Purchases by Types of Goods and Services

Although the value of online purchases may not be significant relative to the households' overall expenditure, the share of online expenditure is considerable for selected items. Notably, 38 per cent of the households' expenditure on accommodation, largely attributed by hotel bookings, was made online (Chart 10).

Concluding Remarks

As online purchases were captured for the first time in the HES in 2012/13, comparison over time is currently not available. The relevance of the information and the way data are captured will be further evaluated and fine-tuned in future HESs while balancing the potential response burden for reporting households.

CHART 10 ONLINE PURCHASE BY BROAD TYPES OF GOODS AND SERVICES



¹ Expenditure data exclude imputed rental of owner-occupied accommodation.

² Others include housing and related expenditure, health, communication, educational services, miscellaneous goods and services and alcoholic beverages and tobacco.



Access key Singapore official statistics while on-the-go with the **SingStat** mobile application!

The application has some 200 charts from 25 data categories, including Gross Domestic Product, Population, Prices, Labour, Manufacturing, Services and International Trade. You can customise the viewing of the statistics to display information of your choice, such as by data frequency and presentation of data.

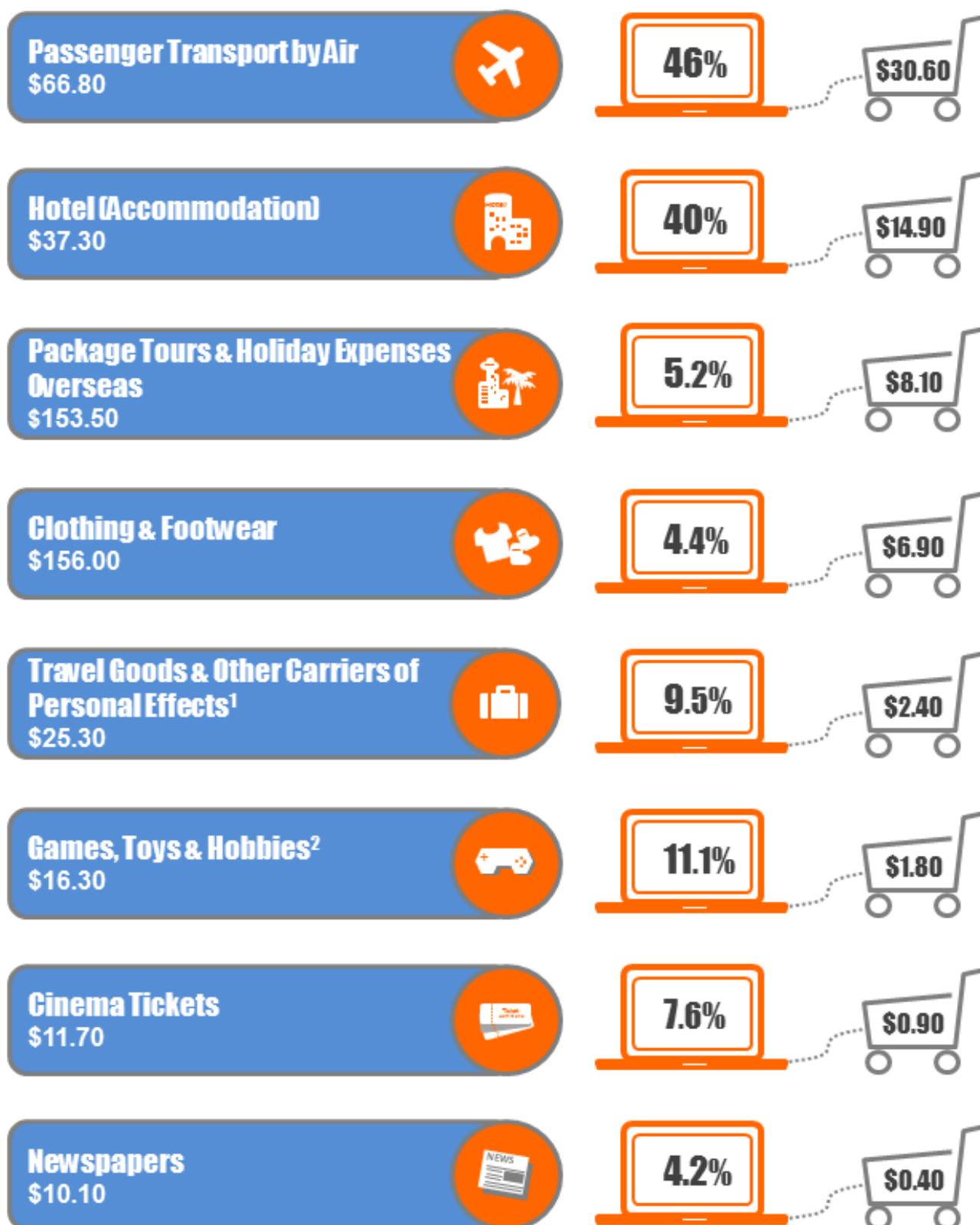
For more information, visit www.singstat.gov.sg/services/singstat-mobile-app.

Download the free **SingStat** mobile application via the Apple App Store or Google Play today!

Online Purchases by Types of Goods and Services, 2012/13

AVERAGE MONTHLY HOUSEHOLD EXPENDITURE

ONLINE PURCHASES



¹ "Travel Goods & Other Carriers of Personal Effects" include handbags, wallets, purses, school bags, suitcases, travel bags, etc.

² "Games, Toys & Hobbies" include electronic/ video games, soft/plush toys, toy car/train/figurines, building set, blocks and models, etc.