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Prevalence of E-Payment Transactions – Findings from the Household Expenditure Survey 2017/18

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Introduction

The Singapore Department of Statistics (DOS) conducts the Household Expenditure Survey (HES) in Singapore once every five years starting from 1972/73. The HES collects information on households' expenditure and socio-economic characteristics, as well as ownership of consumer durables. The latest HES was conducted from October 2017 to September 2018.

Data compiled from the HES are used to support studies on income and expenditure, and to update the weighting pattern and the basket of goods and services for the compilation of the Consumer Price Index (CPI). The HES also provides insights on how the lifestyles and spending patterns of consumers change over time.

With the widening use of e-payments in recent years, the HES 2017/18 data facilitated the analyses of how households made payments for their purchases.

Growing Adoption of E-Payment Transactions

E-payments have grown since the early days of the introduction of credit cards, General Interbank Recurring Order (GIRO) and Electronic Fund Transfer at Point of Sale (EFTPOS) in the 1980s, and contactless stored value EZ-Link cards for use in public transit since 2002.

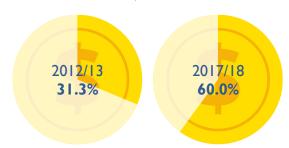
Today, more e-payment modes are available to consumers, such as mobile payment alternatives (e.g. Apple Pay, Samsung Pay, and Singtel Dash) as well as e-wallets (e.g. DBS PayLah! and GrabPay). As a result, merchants and establishments have adopted e-payment systems to meet the growing demand among their customers. Besides retail shops and restaurants, food courts and hawker centres are also offering e-payment options.

Given the widespread availability, ease and convenience of different e-payment modes for various types of purchases, more resident households have become receptive to making e-payment transactions for a growing range of products and services. The use of e-payment transactions grew in tandem with the rise of e-commerce. From the results of the HES, the proportion of households that reported making at least one online purchase rose from 31 per cent in 2012/13 to 60 per cent in 2017/18 (Chart 1).

CHART I

PROPORTION OF HOUSEHOLDS WITH

ONLINE EXPENDITURE, HES 2012/13 AND 2017/18



Information on E-Payment Transactions Collected in HES 2017/18

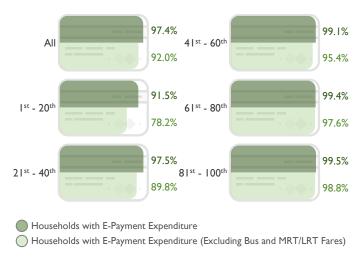
DOS collected information on e-payment transactions for the first time in HES 2017/18. In the HES, 'e-payments' refer to purchases made using non-cash or cheque payment modes such as EZ-Link card, NETS/ NETS FlashPay cards, CashCards, credit/debit cards, GIRO, Internet Banking, mobile e-wallets, etc.

The day-to-day expenses of respondents were collected for the HES over two weeks, where they were required to indicate whether each purchase was paid for using e-payment. In addition, e-payment transactions of selected big ticket ad-hoc items, e.g. overseas holidays and purchase of durable goods, were recorded via a 12-month recall¹.

However, not all information on the mode of payment is available for certain expenditure items, in particular, those captured from administrative records such as utilities, hospitalisation bills, expenditure on motor cars, motorcycles, road tax, and health insurance.

Considering that many of these expenses were expected to be paid via cashless means, for example through GIRO and credit/debit cards, the amount and share of e-payments for these items would likely be undercounted.

CHART 2 PROPORTION OF HOUSEHOLDS WITH E-PAYMENT EXPENDITURE BY INCOME QUINTILE ², HES 2017/18



Almost All Households Adopted Some Form of E-Payment

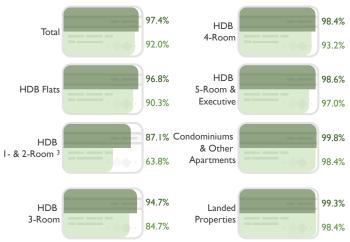
In 2017/18, almost all resident households (97 per cent) performed at least one e-payment transaction.

Across the income quintiles, the prevalence of e-payment transactions among the higher income groups was greater than that in the lower income groups (Chart 2). Nevertheless, even among households in the lowest 20% income group, 92 per cent of households recorded cashless transactions.

A similar trend is observed for the households across housing types, where the prevalence of e-payment transactions was almost universal among households living in bigger HDB flats and private properties (Chart 3). Among households staying in HDB 1- and 2-room flats, 87 per cent of households recorded e-payment transactions.

The high adoption rate of e-payment transactions could be partly attributed to the wide adoption of stored value cards and other e-payment modes used for public transportation. If the expenditure on bus and MRT/LRT fares is excluded, the total proportion of households which performed e-payment transactions in 2017/18 would be lower at 92 per cent.

CHART 3
PROPORTION OF HOUSEHOLDS WITH E-PAYMENT EXPENDITURE BY HOUSING TYPE, HES 2017/18



¹ Respondents were asked to record transactions of selected big-ticket items, such as expenditure on overseas holidays and purchase of household durable goods like television and furniture, that occurred over the past 12 months.

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

³ Includes HDB Studio Apartments.

Average Expenditure of E-Payment Transactions

Data from the HES 2017/18 showed that about 37 per cent of average monthly household expenditure or some \$1,800 was paid per month via e-payment modes (Chart 4).

CHART 4

MODE OF PAYMENT FOR AVERAGE MONTHLY
HOUSEHOLD EXPENDITURE, HES 2017/18

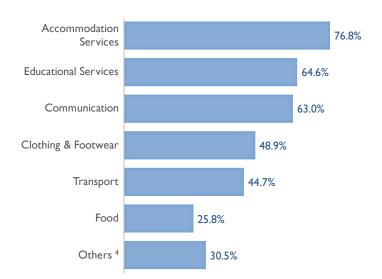


E-Payment Transactions by Types of Goods and Services

Accommodation Services, in particular hotel bookings, had the highest share of expenditure by e-payments. Close to eight in ten dollars were paid using e-payment (Chart 5). Similarly, about two-thirds of expenditures in Educational Services (65 per cent) and

CHART 5

SHARE OF E-PAYMENT EXPENDITURE FOR SELECTED TYPES OF GOODS AND SERVICES, HES 2017/18



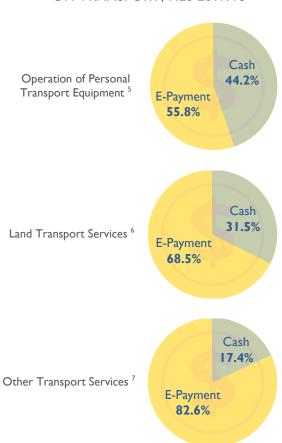
Communication (63 per cent) were transacted through e-payments. With the increasing prevalence of online purchases of clothing and footwear, e-payments accounted for about half of households' expenditure on these items.

Transport

About 45 per cent of expenditure on transport was paid via e-payment modes. A major contributor was Land Transport Services, which include public transport (Chart 6). With the introduction of ride-hailing apps, users were more likely to pay their transport fares using e-payment modes.

In addition, transport services that are commonly booked online might have contributed to the high proportion of e-payment expenditure in the Transport category. These include airfares and other holiday transport fares, such as land/coach and ferry fares.

CHART 6
SHARE OF E-PAYMENT EXPENDITURE
ON TRANSPORT, HES 2017/18



⁴ Include alcoholic beverages and tobacco, housing and related expenditure, health, recreation and culture, miscellaneous goods and services.

⁵ Includes spare parts and accessories, fuel and lubricants, maintenance and repair, and other services in respect of personal transport equipment.

⁶ Include passenger transport by railway and road, taxi and private hire fares, and overseas land/coach fares.

⁷ Include airfares, ferry fares, moving services, and delivery services.

Food

About 31 per cent of households' expenditure on Food and Non-Alcoholic Beverages was paid via e-payment modes, higher than the 24 per cent on Food Serving Services, which include meals bought from restaurants, hawker centres, food courts, etc. (Chart 7).

Within Food Serving Services, the proportion of e-payment expenditure in Restaurants, Cafes and Pubs was close to half.

The proportion of e-payment expenditure on food generally increased with household income. About 13 per cent of expenditure on food of households in the lowest 20% income group were paid for using e-payment, compared to 39 per cent for households in the top 20% income group (Chart 8).

CHART 7
SHARE OF E-PAYMENT EXPENDITURE ON FOOD
AND FOOD SERVING SERVICES, HES 2017/18

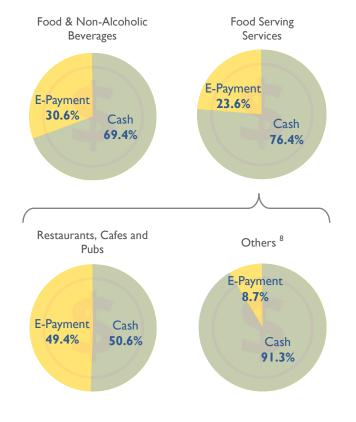
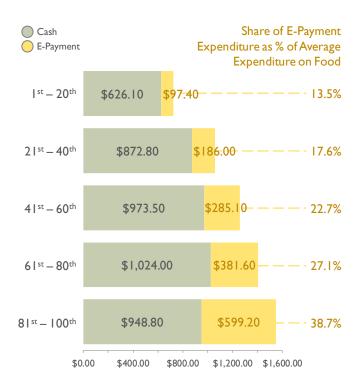


CHART 8
EXPENDITURE ON FOOD BY INCOME QUINTILE 9,
HES 2017/18



Concluding Remarks

The HES 2017/18 highlighted the emergence of e-payment transactions as a prevalent and commonly used mode of payment among Singaporean resident households.

In 2017/18, a high proportion of households across income groups and housing types reported the use of e-payment modes for at least one expenditure.

As information on e-payment transactions were captured for the first time in HES 2017/18, comparison with previous years cannot be made. The relevance of the information and data collection methodology used in HES 2017/18 will be assessed and fine-tuned in future rounds of the HES to provide up-to-date and pertinent insights into the changing lifestyles and spending patterns of households in Singapore.

⁸ Include fast food restaurants, hawker centres, food courts, coffee shops, canteens, kiosks and street vendors, other catering services (including vending machines), and food serving services not elsewhere classified.

⁹ Based on ranking of all resident households by their monthly household income from all sources per household member (including employer CPF contributions).

AVERAGE MONTHLY HOUSEHOLD EXPENDITURE ON SELECTED ITEMS BY SHARE AND AMOUNT PAID USING E-PAYMENT, HES 2017/18

	Passenger Transport by Air	78.2%	\$80.10
	Hotels	78.2%	\$51.10
	Social Services Childcare, Before/After School Care and Infant Care Service	73.7%	\$34.60
Pre	General, Vocational and Higher Education e-Primary, Primary, Secondary, Post-Secondary, Polytechnic and Un	73.4% iversity	\$162.80
	Passenger Transport by Railway and Road	69.1%	\$118.20
Pers	Information Processing Equipment sonal Computer, Laptop, Printer, Tablet, Computer Monitor and Ke	64.7% eyboard	\$10.40
	Other Personal Effects Jewellery, Clocks, Watches and Other Personal Effects	63.8%	\$30.70
	Telecommunication Services Telephone, Mobile Phone, Internet and Bundled Services	63.3%	\$140.60
X	Clothing	53.5%	\$46.50
Hai	Personal Care rdressing Salons, Personal Grooming Establishments and Electrical A	51.5% Appliances	\$67.10
	Footwear	50.8%	\$13.20
0	Restaurants, Cafes and Pubs	49.4%	\$146.10