# Singapore Longitudinal Early Development Study (SG LEADS) 



Singapore Longitudinal EArly Development Study


## Panel Survey Wave 1

# Technical Report 3: Income Data Calculation 

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In this technical note, we document the income components and how they have been processed. A total of 3483 households' data were collected as part of the Singapore Longitudinal EArly Development Study (SG LEADS) and the household income survey items are located in the household booklet section H and consist of questions H 1 through H 37 . The technical note is written based on the household booklet dataset received on $29^{\text {th }}$ June 2020. See Appendix II for the SG LEADS questionnaire and the exact wording for each question as it appeared to the respondent. There are a total of 17 income components that are related to the respondent's household income in the last 12 months at the time of the survey (November 2018 to September 2019). The respondent was the primary care giver (PCG) of the child selected for the study. These 17 income components of the respondent's household income, in the order they appear in the survey, are:

- Income from business
- Labour income
- From PCG
- From spouse
- From other household members
- Income from rent
- Income from interest
- From PCG
- From spouse
- From other household members
- Income from financial products
- From PCG
- From spouse
- From other household members
- Income from government subsidies
- Income from donations
- Support from non-HH individuals
- From relatives
- From other non-familial individuals
- Support to non-HH individuals (this amount was not included in the calculation of the itemized total income)
- Income from any other sources

For these 17 categories, the respondent is first asked a dichotomous question (Yes/No) as to whether or not his or her household has any income from that source (i.e. did you receive any income from a salaried job?). Should the respondent answer "Yes" to the dichotomous question, they would then be directed to key in the exact amount earned in an open-ended format. Should the respondent answered "Don't Know" or refused to answer the open-ended amount question, they would then be directed to a multiple-choice question offering a list of range of amounts (i.e. $\$ 6,000-\$ 7,999$ ) to choose from. Each question has 11 to 12 range categories and the ranges differ from question to question. If the respondent did not want to choose any of the range, their response will be recorded as either "Don't know" or "Refused" accordingly.

Since the recorded response for these 17 income variables vary between an exact amount or a ranged amount, we created a new variable for each different income category to combine both response types using the following logic:

1) If the respondent gave an exact value, that value will be assigned to that income variable.
2) If the respondent did not provide an exact value but with a range, we would impute the midpoint of the range to that income variable (i.e. if the range chosen was ' $\$ 24,001$ $\$ 48,000$, then $\$ 36000.50$ was imputed for that variable)'.
a. Do note that if the respondent chose an extreme end of the range choices, the value at the end point would be imputed (i.e. $\$ 240,001$ was entered if the range choice was ' $\$ 240,001$ and above').

Table 1. shows the proportion of exact and range responses along with the number of "Don't know" and "Refuse" for each of the 17 income categories. There are only four income categories that do not have any range responses, income from financial products (other HH member), income from donations, support from non-HH individuals (others) and income from any other sources. Table 2. provides the mean, median, and standard deviation of the exact, range, and combined values for each income variable for easy comparison.

Table 1. Number of Observations and percent of the exact values and ranged values for each income component variable ( $\mathrm{N}=3485$ )

|  | Exact values |  | Range values |  | Total | No. of DK \& RF |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq. | \% | Freq. | \% |  |  |
| Business income | 244 | 93.13\% | 18 | 6.87\% | 262 | 22 |
| Labour income (PCG) | 1816 | 89.77\% | 207 | 10.23\% | 2023 | 13 |
| Labour income (spouse) | 2266 | 87.46\% | 325 | 12.54\% | 2591 | 33 |
| Labour income (other HH member) | 150 | 83.80\% | 29 | 16.20\% | 179 | 35 |
| Income from rent | 148 | 96.73\% | 5 | 3.27\% | 153 | 1 |
| Interest Income (PCG) | 288 | 83.00\% | 59 | 17.00\% | 347 | 28 |
| Interest income (spouse) | 221 | 80.95\% | 52 | 19.05\% | 273 | 31 |
| Income from interest (other HH member) | 48 | 45.28\% | 58 | 54.72\% | 106 | 25 |
| Income from financial products (PCG) | 110 | 90.91\% | 11 | 9.09\% | 121 | 4 |
| Income from financial products (spouse) | 83 | 91.21\% | 8 | 8.79\% | 91 | 2 |
| Income from financial products (other HH member) | 8 | $\begin{aligned} & 100.00 \\ & \% \end{aligned}$ | 0 | 0.00\% | 8 | 0 |
| Income from government subsidies | 447 | 98.68\% | 6 | 1.32\% | 453 | 9 |
| Income from donations | 122 | $\begin{aligned} & 100.00 \\ & \% \end{aligned}$ | 0 | 0.00\% | 122 | 5 |
| Support from non-HH individuals (family) | 226 | 99.12\% | 2 | 0.88\% | 228 | 43 |
| Support from non-HH individuals (others) | 172 | $\begin{aligned} & 100.00 \\ & \% \end{aligned}$ | 0 | 0.00\% | 172 | 36 |
| Support to non-HH individuals | 1252 | 99.68\% | 4 | 0.32\% | 1256 | 6 |
| Income from any other sources | 9 | $\begin{aligned} & 100.00 \\ & \% \\ & \hline \end{aligned}$ | 0 | 0.00\% | 9 | 0 |

Table 2. Mean, Median, and Standard Deviation of the exact, range, and combined values for each income variable

|  | Exact values |  |  | Range values (mid-point of range imputation) |  |  | Exact and ranged values combined |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Median | SD | Mean | Median | SD | Mean | Median | SD |
| Income from business | 111,724.1 | 40,000 | 401,920.7 | 58,193.89 | 29,999.5 | 62,578.27 | 108,046.5 | 40,000 | 388,379.5 |
| Labour income (PCG) | 50,718.73 | 40,000 | 53,915.46 | 48,101 | 41,999.5 | 36,099.8 | 50,450.90 | 4,000 | 52,370.67 |
| Labour income (spouse) | 64,036.18 | 50,000 | 75,590.65 | 62,353.4 | 53,999.5 | 40,865.29 | 63,825.1 | 50,000 | 72,153.75 |
| Labour income (other HH member) | 32,266.45 | 24,000 | 48,153.99 | 42,102.97 | 29,999.5 | 35,455.6 | 33,860.08 | 25,000 | 46,389.43 |
| Income from rent | 20,273.53 | 8,400 | 44,078.44 | 12,599.5 | 8,999.5 | 4,929.50 | 20,022.75 | 8,999.5 | 43,376.38 |
| Income from interest (PCG) | 898.72 | 229 | 2,269.86 | 98.03 | 5 | 217.97 | 838.11 | 200 | 2,096.24 |
| Income from interest (spouse) | 1,082.34 | 200 | 4,024.21 | 74.34 | 5 | 184.98 | 890.34 | 100 | 3,641.70 |
| Income from interest (other HH member) | 1,063.04 | 50 | 6,483.49 | 49.75 | 54.5 | 49.75 | 508.60 | 54.5 | 4,367.36 |
| Income from financial products (PCG) | 4,290.38 | 1,000 | 9,633.20 | 6,545.32 | 3,000 | 8,140.63 | 4,495.38 | 1000 | 9,499.38 |
| Income from financial products (spouse) | 11,395.2 | 1,000 | 56,568.35 | 10,499.69 | 8,999.5 | 9,350.15 | 11,316.48 | 1,000 | 54,059.23 |
| Income from financial products (other HH member)^ | 19,475 | 650 | 41,889.00 | - | - | - | 19,475 | 650 | 41,889.00 |
| Income from subsidies | 3,607.00 | 3,088 | 4,119.19 | 2,499.58 | 1,999.5 | 2,612.38 | 3,592.33 | 3,000 | 4,102.93 |
| Income from donations^ | 543.11 | 200 | 1,224.22 | - | - | - | 543.11 | 200 | 1,224.22 |
| Support from non-HH individuals (family) | 5,252.29 | 200 | 22,353.96 | 874.75 | 874.75 | 883.53 | 5,234.74 | 200 | 22,306.29 |
| Support from non-HH individuals (others)^ | 719.80 | 200 | 2,555.489 | - | - | - | 719.80 | 200 | 2,555.49 |
| Income from any other sources^ | 45,977.78 | 5,000 | 93,324.62 | - | - | - | 45,977.78 | 5,000 | 93,324.62 |

## Creating total annual household income from all income sources/components

After responding to the 17 income component questions, the respondent is then asked for their total annual household income (question H37 in Appendix II). However, research has shown that asking respondents for the amount they earn in each specific income source and totalling them up yields more accurate total annual household income value than asking the respondent a single direct question on their total annual household income. Thus, we created a 'composite total annual household income' variable by adding all of the 16 income components found in Table 2 ('Support to non-HH individuals' was not included). Table 3. compares the descriptive statistics of the single question total annual household income and the newly created composite total annual household income.

Table 3. Comparing the descriptive statistics of the values in the single question of total annual household income and the total annual household income calculated from the composites of all income sources

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total annual <br> household <br> income | 3366 | $95,356.54$ | 76,000 | $114,455.1$ | 1 to 3,900,000 |
| Composite <br> total annual <br> household <br> income | 3165 | $98,138.27$ | 72,000 | $156,226.8$ | 0 to 5,290,000 |

Table 4 also compares the descriptive statistics of both total annual household income variables but this table only considers cases that has values for both total annual household income variables.

Table 4. Comparing the descriptive statistics of single question total annual household income versus composite annual total household income of only HHs that have both variables

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total annual <br> household <br> income | 3102 | $97,942.36$ | 80,000 | $117,262.8$ | 1 to 3,900,000 |
| Composite <br> total annual <br> household <br> income | 3102 | $99,334.27$ | 72,015 | $157,460.4$ | 0 to 5,290,000 |

Although the composite total annual household income is more accurate, it has more missing values than the single question total annual household income as seen in Table 3. Hence, we have created a third total household income variable called 'Calculated annual household income imputed with reported sum' following the following logic:

1) If the household has a composite total annual household income value, that value will be used ( $n=3165$ ).
2) If composite total annual household income is missing but there is a single question total household income, we will impute the latter ( $n=264$ ). Refer to Table 5 below for the descriptive statistics of these imputed cases

Table 5. Descriptive statistics of imputed cases in 'Calculated annual household income imputed with reported sum'

| Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- |
| 264 | $64,973.23$ | 45,300 | $66,882.5$ | 1 to 576,000 |

## Weights and the annual household income distributions

Since the SG LEADS project oversamples low-income population (see the technical report on sampling design), the descriptive statistics for the sample's household income needs to be weighted to properly represent the national population. The data is weighted with the sampling weights created by our SG LEADS staff to adjust for initial selection probability and response rate. Figure 1 shows the weighted income distribution of the single question total annual household income. As seen, the normal curve shows that the distribution is right-skewed. We also top-coded 32 cases at the $99^{\text {th }}$ percentile $(\$ 395,000)$ to make the graph more comprehensible which explains the spike at the far right end of the graph.


Figure 1. Weighted income distribution of single question total annual household income with 32 cases top-coded as $\$ 395,000\left(99^{\text {th }}\right.$ percentile).

Similar to Figure 1., Figure 2. shows the weighted income distribution of the composite total annual household income and both figures share a similar right-skewed normal curve. There were 28
cases top-coded at the $99^{\text {th }}$ percentile $(\$ 450,000)$ which can be seen on the far right spike. There is also a large spike of cases on the far left as compared to Figure 1.

Composite total annual household income


Figure 2. Weighted income distribution of composite total annual household income with 28 cases top-coded as $\$ 450,000\left(99^{\text {th }}\right.$ percentile).

Lastly, Figure 3. shows the weighted income distribution of calculated household annual income imputed with reported sum. This figure's normal curve is also similarly right-skewed to the first two figures and also shares a similar spike on the left side of the graph as in Figure 2. We topcoded 34 cases top-coded at the $99^{\text {th }}$ percentile $(\$ 437,200)$.


Figure 3. Weighted income distribution of calculated household annual income imputed with reported sum with 31 cases top-coded as $\$ 437,200$ ( $99^{\text {th }}$ percentile).

## Total annual household income

Table 6. Comparing the three different total annual household income variables (unweighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total annual <br> household <br> income | 3366 | $95,356.54$ | 76,000 | $114,455.1$ | 1 to 3,900,000 |
| Composite <br> total annual <br> household <br> income | 3165 | $98,138.27$ | 72,000 | $156,226.8$ | 0 to 5,290,000 |
| Calculated household <br> annual income <br> imputed with <br> reported sum | 3429 | $95,584.88$ | 70,756 | $151,487.8$ | 0 to 5,290,000 |

Table 7. Comparing the three different total annual household income variables (weighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total annual <br> household <br> income | 3366 | $11,5562.0$ | 96,000 | $115,889.5$ | 1 to 3,900,000 |
| Composite |  | $12,1245.3$ | 90,000 | $187,504.4$ | 0 to 5,290,000 |
| total annual <br> household <br> income | 3165 | $11,8819.2$ | 90,000 | $182,628.5$ | 0 to 5,290,000 |
| Calculated household <br> annual income <br> imputed with <br> reported sum | 3429 |  |  |  |  |

Table 8. Comparing the three different total annual household income variables by housing type (unweighted)

|  | Single question total annual household income |  |  | Composite total household income |  | annual | Calculated householdannual income imputedwith reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 32,486.19 | 18,000.5 | 336 | 21,298.33 | 18,649.75 | 385 | 20,936.75 | 18,570 |
| 3 room HDB flat | 929 | 61,713.02 | 50,000 | 866 | 59,982.56 | 50,000 | 943 | 58,908.23 | 50,000 |
| 4 room HDB flat | 1049 | 95,143.43 | 84,000.5 | 1002 | 96,979.4 | 83,799.5 | 1075 | 95,427.08 | 82,000 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 119,844.5 | 100,000 | 508 | 117,021.7 | 100,129.8 | 541 | 115,828.1 | 100,000 |
| Condominiums | 425 | 177,466.1 | 160,000 | 397 | 195,881.2 | 160,000 | 428 | 191,074.8 | 160,000 |
| Landed Properties | 57 | 220,884.3 | 190,000 | 56 | 305,737.1 | 195,000 | 57 | 300,390.8 | 190,000 |
| Total | 3366 | 95,356.54 | 76,000 | 3165 | 98,138.27 | 72,000 | 3429 | 95,584.88 | 70,756 |

Table 9. Comparing the three different total annual household income variables by housing type (weighted)

|  | Single question total annual household income |  |  | Composite total household income |  | annual | Calculated householdannual income imputedwith reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 33,848.82 | 20,000 | 336 | 22,464.94 | 19,570 | 385 | 21,995.23 | 19,200 |
| 3 room HDB flat | 929 | 65,273.05 | 55,000 | 866 | 61,939.21 | 52,000 | 943 | 61,248.17 | 51,000 |
| 4 room HDB flat | 1049 | 93,656.15 | 84,000 | 1002 | 93,719.6 | 80,999.5 | 1075 | 92,869.24 | 80,000 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 116,626.1 | 100,000 | 508 | 114,400.5 | 100,000 | 541 | 113,331 | 100,000 |
| Condominiums | 425 | 200,609.6 | 180,000 | 397 | 230,198.8 | 185,000 | 428 | 224,319.8 | 180,000 |
| Landed Properties | 57 | 217,271.7 | 180,000 | 56 | 281,153.9 | 200,000 | 57 | 279,357.3 | 190,000 |
| Total | 3366 | 115,562 | 96,000 | 3165 | 121,245.3 | 90,000 | 3429 | 118,819.2 | 90,000 |

Table 10. Percentile breakdown and 10/90 percentile ratio of the three total annual household income variables (unweighted)

|  | Single question total annual <br> household income | Composite total annual <br> household income |
| :--- | :--- | :--- |
| $10^{\text {th }}$ Percentile | Calculated household <br> annual income imputed <br> with reported sum |  |
| $20^{\text {th }}$ Percentile | 18,000 | 12,400 |
| $30^{\text {th }}$ Percentile | 31,200 | 28,017 |
| $40^{\text {th }}$ Percentile | 45,000 | 42,000 |
| $50^{\text {th }}$ Percentile | 60,000 | 56,650 |
| $60^{\text {th }}$ Percentile | 76,000 | 72,000 |
| $70^{\text {th }}$ Percentile | 95,000 | 96,000 |
| $80^{\text {th }}$ Percentile | 111,000 | 1100 |
| $90^{\text {th }}$ Percentile | 140,000 | 190,000 |
| $10 / 90$ percentile ratio | 0.0938 | 193,900 |

Table 11. Percentile breakdown and 10/90 percentile ratio of the three total annual household income variables (weighted)

|  | Single question total annual <br> household income | Composite total annual <br> household income |
| :--- | :--- | :--- |
|  | Calculated household <br> annual income imputed <br> with reported sum |  |
| $10^{\text {th }}$ Percentile | 28,800 | 20,000 |
| $20^{\text {th }}$ Percentile | 45,000 | 40,000 |
| $30^{\text {th }}$ Percentile | $60,000.5$ | 58,000 |
| $40^{\text {th }}$ Percentile | 80,000 | 72,000 |
| $50^{\text {th }}$ Percentile | 96,000 | 90,000 |
| $60^{\text {th }}$ Percentile | 110,000 | 110,000 |
| $70^{\text {th }}$ Percentile | $130,000.5$ | 133,000 |
| $80^{\text {th }}$ Percentile | 165,000 | 167,999 |
| $90^{\text {th }}$ Percentile | 220,000 | 228,000 |
| $10 / 90$ percentile ratio | 0.131 | 0.000 |

## Total monthly household income

Table 12. Comparing the three different total monthly household income variables (unweighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total monthly <br> household <br> income | 3366 | $7,946.38$ | $6,333.33$ | $9,537.93$ | 0.08 to 325,000 |
| Composite |  | $8,178.19$ | 6,000 | $13,018.9$ | 0 to 440,833.3 |
| total monthly <br> household <br> income | 3165 | $7,965.41$ | $5,896.33$ | $12,623.98$ | 0 to 440,833.3 |
| Calculated household <br> monthly income <br> imputed with <br> reported sum | 3429 |  |  |  |  |

Table 13. Comparing the three different total monthly household income variables (weighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total monthly <br> household <br> income | 3366 | $9,630.17$ | 8,000 | $9,657.46$ | 0.08 to 325,000 |
| Composite |  | $10,103.78$ | 7,500 | $15,625.37$ | 0 to 440,833.3 |
| total monthly <br> household <br> income | 3165 | $9,901.60$ | 7,500 | $15,219.04$ | 0 to 440,833.3 |
| Calculated household <br> monthly income <br> imputed with <br> reported sum | 3429 |  |  |  |  |

Table 14. Comparing the three different total monthly household income variables by housing type (unweighted)

|  | Single question total monthly household income |  |  | Composite total household income |  | monthly | Calculated household monthly income imputed with reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 2,707.18 | 1,500.04 | 336 | 1,774.86 | 1,554.15 | 385 | 1,744.73 | 1,547.5 |
| 3 room HDB flat | 929 | 5,142.75 | 4,166.67 | 866 | 4,998.55 | 4,166.67 | 943 | 4,909.02 | 4,166.67 |
| 4 room HDB flat | 1049 | 7,928.62 | 7,000.04 | 1002 | 8,081.62 | 6,983.29 | 1075 | 7,952.26 | 6,833.33 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 9,987.05 | 8,333.33 | 508 | 9,751.81 | 8,344.15 | 541 | 9,652.34 | 8,333.33 |
| Condominiums | 425 | 14,788.84 | 13,333.33 | 397 | 16,323.43 | 13,333.33 | 428 | 15,922.9 | 13,333.33 |
| Landed Properties | 57 | 18,407.02 | 15,833.33 | 56 | 25,478.09 | 16,250 | 57 | 25,032.57 | 15,833.33 |
| Total | 3366 | 7,946.38 | 6,333.33 | 3165 | 8,178.19 | 6,000 | 3429 | 7,965.41 | 5,896.33 |

Table 15. Comparing the three different total monthly household income variables by housing type (weighted)

|  | Single question total monthly household income |  |  | Composite total household income |  | monthly | Calculated household monthly income imputed with reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 2,820.74 | 1,666.67 | 336 | 1,872.08 | 1,630.83 | 385 | 1,832.94 | 1,600 |
| 3 room HDB flat | 929 | 5,439.42 | 4,583.33 | 866 | 5,161.60 | 4,333.33 | 943 | 5,104.01 | 4,250 |
| 4 room HDB flat | 1049 | 7,804.68 | 7,000 | 1002 | 7,809.97 | 6,749.96 | 1075 | 7,739.10 | 6,666.67 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 9,718.85 | 8,333.33 | 508 | 9,533.38 | 8,333.33 | 541 | 9,444.25 | 8,333.33 |
| Condominiums | 425 | 16,717.46 | 15,000 | 397 | 19,183.23 | 15,416.67 | 428 | 18,693.31 | 15,000 |
| Landed Properties | 57 | 18,105.97 | 15,000 | 56 | 23,429.49 | 16,666.67 | 57 | 23,279.77 | 15,833.33 |
| Total | 3366 | 9,630.17 | 8,000 | 3165 | 10,103.78 | 7,500 | 3429 | 9,901.60 | 7,500 |

Table 16. Percentile breakdown and 10/90 percentile ratio of the three total monthly household income variables (unweighted)
\(\left.$$
\begin{array}{ll|l}\hline & \begin{array}{l}\text { Single question total } \\
\text { monthly household income }\end{array} & \begin{array}{l}\text { Composite total monthly } \\
\text { household income }\end{array} \\
\hline 10^{\text {th }} \text { Percentile } & \begin{array}{l}\text { Calculated household } \\
\text { monthly income imputed } \\
\text { with reported sum }\end{array}
$$ <br>
20^{th} Percentile \& 1,500 \& 1,033.33 <br>
30^{th} Percentile \& 2,600 \& 2,334.75 <br>

40^{th} Percentile \& 3,750 \& 3,500\end{array}\right]\)| th |
| :--- |
| $50^{\text {th }}$ Percentile |
| $60^{\text {th }}$ Percentile |
| $70^{\text {th }}$ Percentile |
| $80^{\text {th }}$ Percentile |
| $90^{\text {th }}$ Percentile |
| $10 / 9,000$ |

Table 17. Percentile breakdown and 10/90 percentile ratio of the three total monthly household income variables (weighted)

|  | Single question total <br> monthly household income | Composite total monthly <br> household income |
| :--- | :--- | :--- |
| $10^{\text {th }}$ Percentile | Calculated household <br> monthly income imputed <br> with reported sum |  |
| $20^{\text {th }}$ Percentile | 2,400 | $1,666.67$ |
| $30^{\text {th }}$ Percentile | 3,750 | $3,333.33$ |
| $40^{\text {th }}$ Percentile | $5,000.04$ | $4,833.33$ |
| $50^{\text {th }}$ Percentile | $6,666.67$ | 8,000 |
| $60^{\text {th }}$ Percentile | $9,166.667$ | 7,000 |
| $70^{\text {th }}$ Percentile | $10,833.38$ | $3,249.92$ |
| $80^{\text {th }}$ Percentile | 13,750 | $4,583.33$ |
| $90^{\text {th }}$ Percentile | $18,333.33$ | $11,083.33$ |
| $10 / 90$ percentile ratio | 0.131 | $19,999.92$ |

## Total annual household income per capita

Table 18. Comparing the three different total annual household income variables per capita (unweighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total annual |  | $23,494.07$ | 17,500 | $32,185.72$ | 1 to 1,300,000 |
| household <br> income per <br> capita | 3366 |  |  |  |  |
| Composite |  | 16,740 | $35,274.26$ | 0 to 1,058,000 |  |
| total annual <br> household <br> income per <br> capita | 3165 | $23,838.21$ | 16,500 | $34,293.95$ | 0 to 1,058,000 |
| Calculated household <br> annaal income per <br> capita imputed with <br> reported sum | 3429 | $23,249.38$ |  |  |  |

Table 19. Comparing the three different total annual household income variables per capita (weighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total annual |  | $28,224.01$ | $21,600.1$ | $29,586.78$ | 1 to 1,300,000 |
| household <br> income per <br> capita | 3366 | $29,385.54$ | $20,999.88$ | $42,350.83$ | 0 to 1,058,000 |
| Composite <br> total annual |  |  |  |  |  |
| household <br> income per <br> capita | 3165 | $28,825.27$ | 20,056 | $41,327.61$ | 0 to 1,058,000 |
| Calculated household <br> annual income per <br> capita imputed with <br> reported sum | 3429 |  |  |  |  |

Table 20. Comparing the three different total annual household income per capita variables by housing type (unweighted)

|  | Single question total annual household income per capita |  |  | Composite total annual household income per capita |  |  | Calculated household annual income per capita imputed with reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 8,589.88 | 4,000 | 336 | 4,842.44 | 3,999.94 | 385 | 4,806.96 | 3,839.9 |
| 3 room HDB flat | 929 | 15,655.44 | 12,000.17 | 866 | 14,979.36 | 12,000 | 943 | 14,753.33 | 12,000 |
| 4 room HDB flat | 1049 | 23,217.57 | 19,800 | 1002 | 23,372.81 | 18,366.67 | 1075 | 22,978.73 | 18,000 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 28,294.76 | 24,600 | 508 | 28,087.93 | 23,758.06 | 541 | 27,752.29 | 23,333.33 |
| Condominiums | 425 | 45,256.46 | 40,000 | 397 | 49,128.65 | 41,440 | 428 | 48,098.46 | 40,000 |
| Landed Properties | 57 | 47,406.99 | 40,000 | 56 | 65,294.07 | 42,599.93 | 57 | 64,154.41 | 41,999.86 |
| Total | 3366 | 23,494.07 | 17,500 | 3165 | 23,838.21 | 16,740 | 3429 | 23,249.38 | 16,500 |

Table 21. Comparing the three different total annual household income per capita variables by housing type (weighted)

|  | Single question total annual household income per capita |  |  | Composite total annual household income per capita |  |  | Calculated household annual income per capita imputed with reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 9,015.65 | 4,000 | 336 | 5,187.17 | 4,000 | 385 | 5,121.57 | 4,000 |
| 3 room HDB flat | 929 | 16,767.44 | 12,880 | 866 | 15,665.91 | 12,500 | 943 | 15,550.58 | 12,214.29 |
| 4 room HDB flat | 1049 | 22,837.22 | 18,750 | 1002 | 22,647.16 | 18,000 | 1075 | 22,390.83 | 17,500 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 27,524.56 | 24,000 | 508 | 27,335.98 | 22,500 | 541 | 27,042.21 | 22,499.88 |
| Condominiums | 425 | 51,003.92 | 46,666.67 | 397 | 57,166.16 | 46,750 | 428 | 55,966.29 | 46,500 |
| Landed Properties | 57 | 47,740.45 | 40,000 | 56 | 63,352.24 | 41,999.86 | 57 | 62,948.11 | 41,999.86 |
| Total | 3366 | 28,224.0 | 21,600.1 | 3165 | 29,385.54 | 20,999.88 | 3429 | 28,825.27 | 20,056 |

Table 22. Percentile breakdown and $10 / 90$ percentile ratio of the three total annual household income per capita variables (unweighted)

|  | Single question total annual <br> household income per <br> capita | Composite total annual <br> household income per <br> capita |
| :--- | :--- | :--- |
| $10^{\text {th }}$ Percentile | Calculated household <br> annual income per capita <br> imputed with reported <br> sum |  |
| $20^{\text {th }}$ Percentile | 3,500 | 2,750 |
| $30^{\text {th }}$ Percentile | 7,000 | 6,000 |
| $40^{\text {th }}$ Percentile | 10,000 | 9,000 |
| $50^{\text {th }}$ Percentile | $13,714.29$ | 12,750 |
| $60^{\text {th }}$ Percentile | 17,500 | 16,740 |
| $70^{\text {th }}$ Percentile | 22,400 | 21,800 |
| $80^{\text {th }}$ Percentile | 28,000 | 27,800 |
| $90^{\text {th }}$ Percentile | $35,833.33$ | $35,416.54$ |
| $10 / 90$ percentile ratio | 50,000 | 50,000 |

Table 23. Percentile breakdown and 10/90 percentile ratio of the three total annual household income per capita variables (weighted)

|  | Single question total annual <br> household income per <br> capita | Composite total annual <br> household income per <br> capita |
| :--- | :--- | :--- |
| $10^{\text {th }}$ Percentile | Calculated household <br> annual income per capita <br> imputed with reported <br> sum |  |
| $20^{\text {th }}$ Percentile | 6,000 | $4,085.71$ |
| $30^{\text {th }}$ Percentile | 10,000 | $8,571.43$ |
| $40^{\text {th }}$ Percentile | 14,000 | 12,575 |
| $50^{\text {th }}$ Percentile | 17,500 | 16,520 |
| $60^{\text {th }}$ Percentile | $21,600.1$ | $20,999.88$ |
| $70^{\text {th }}$ Percentile | $27,000.13$ | $26,666.67$ |
| $80^{\text {th }}$ Percentile | $32,500.13$ | 12,400 |
| $90^{\text {th }}$ Percentile | $40,000.17$ | 52,640 |

## Total monthly household income per capita

Table 24. Comparing the three different total monthly household income variables per capita (unweighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total monthly |  | $1,957.84$ | $1,458.33$ | $2,682.14$ | 0.014 to |
| household <br> income per <br> capita | 3366 | $1,986.52$ | 1,395 | $108,333.3$ |  |
| Composite <br> total monthly <br> household <br> income per | 3165 | $1,937.45$ | 1,375 | $2,939.52$ | 0 to 88,166.66 |
| capita |  |  | $2,857.83$ | 0 to 88,166.66 |  |
| Calculated household <br> monthly income per <br> capita <br> reported sum with | 3429 |  |  |  |  |

Table 25. Comparing the three different total monthly household income variables per capita (weighted)

|  | Freq. | Mean | Median | SD | Range |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Single question <br> total monthly |  | $2,352.00$ | $1,800.01$ | $2,465.57$ | 0.014 to |
| household <br> income per <br> capita | 3366 | $2,448.80$ | $1,750.00$ | $108,333.3$ |  |
| Composite <br> total monthly <br> household <br> income per <br> capita | 3165 | $2,402.11$ | $1,671.33$ | $3,529.24$ | 0 to 88,166.66 |
| Calculated household <br> monthly income per <br> capita imputed with <br> reported sum | 3429 |  |  |  |  |

Table 26. Comparing the three different total monthly household income per capita variables by housing type (unweighted)

|  | Single question total monthly household income per capita |  |  | Composite total monthly household income per capita |  |  | Calculated household monthly income per capita imputed with reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 715.82 | 333.33 | 336 | 403.54 | 333.33 | 385 | 400.58 | 319.99 |
| 3 room HDB flat | 929 | 1,304.62 | 1,000.01 | 866 | 1,248.28 | 1,000 | 943 | 1,229.44 | 1,000 |
| 4 room HDB flat | 1049 | 1,934.80 | 1,650 | 1002 | 1,947.73 | 1,530.56 | 1075 | 1,914.89 | 1,500 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 2,357.90 | 2,050 | 508 | 2,340.66 | 1,979.84 | 541 | 2,312.69 | 1,944.44 |
| Condominiums | 425 | 3,771.37 | 3,333.33 | 397 | 4,094.05 | 3,453.33 | 428 | 4,008.21 | 3,333.33 |
| Landed Properties | 57 | 3,950.58 | 3,333.33 | 56 | 5,441.17 | 3,549.99 | 57 | 5,346.20 | 3,499.99 |
| Total | 3366 | 1,957.84 | 1,458.33 | 3165 | 1,986.52 | 1,395 | 3429 | 1,937.45 | 1,375 |

Table 27. Comparing the three different total monthly household income per capita variables by housing type (weighted)

|  | Single question total monthly household income per capita |  |  | Composite total monthly household income per capita |  |  | Calculated household monthly income per capita imputed with reported sum |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Freq | Mean | Median | Freq | Mean | Median | Freq | Mean | Median |
| 1-2 room HDB flat | 375 | 751.30 | 333.33 | 336 | 432.26 | 333.33 | 385 | 426.80 | 333.33 |
| 3 room HDB flat | 929 | 1,397.29 | 1073.33 | 866 | 1,305.49 | 1,041.67 | 943 | 1,295.88 | 1,017.86 |
| 4 room HDB flat | 1049 | 1,902.27 | 1562.5 | 1002 | 1,887.26 | 1,500 | 1075 | 1,865.90 | 1,458.33 |
| 5 room HDB flat \& |  |  |  |  |  |  |  |  |  |
| Executive Flats | 531 | 2,293.71 | 2000 | 508 | 2,278.00 | 1,875 | 541 | 2,253.52 | 1,874.99 |
| Condominiums | 425 | 4,250.33 | 3,888.89 | 397 | 4,763.85 | 3,895.83 | 428 | 4,663.56 | 3,875 |
| Landed Properties | 57 | 3,978.37 | 3,333.33 | 56 | 5,279.35 | 3,499.99 | 57 | 5,245.68 | 3,499.99 |
| Total | 3366 | 2,352.00 | 1,800.01 | 3165 | 2,448.80 | 1,750.00 | 3429 | 2,402.11 | 1,671.33 |

Table 28. Percentile breakdown and $10 / 90$ percentile ratio of the three total monthly household income per capita variables (unweighted)

|  | Single question total monthly household income per capita | Composite total monthly household income per capita | Calculated household monthly income per capita imputed with reported sum |
| :---: | :---: | :---: | :---: |
| $10^{\text {th }}$ Percentile | 291.67 | 229.17 | 203.70 |
| $20^{\text {th }}$ Percentile | 583.33 | 500 | 466.67 |
| $30^{\text {th }}$ Percentile | 833.33 | 750 | 729.17 |
| $40^{\text {th }}$ Percentile | 1,142.86 | 1,062.5 | 1,033.33 |
| $50^{\text {th }}$ Percentile | 1,458.33 | 1,395 | 1,375 |
| $60^{\text {th }}$ Percentile | 1,866.67 | 1,816.667 | 1,750 |
| $70^{\text {th }}$ Percentile | 2,333.33 | 2,316.67 | 2,250 |
| $80^{\text {th }}$ Percentile | 2,986.11 | 2,951.38 | 2,899.98 |
| $90^{\text {th }}$ Percentile | 4,166.67 | 4,166.67 | 4,124.99 |
| 10/90 percentile ratio | 0.0700 | 0.055 | 0.0494 |

Table 29. Percentile breakdown and 10/90 percentile ratio of the three total monthly household income per capita variables (weighted)

|  | Single question total <br> monthly household income <br> per capita | Composite total monthly <br> household income per <br> capita |
| :--- | :--- | :--- |
| $10^{\text {th }}$ Percentile | Calculated household <br> monthly income per <br> capita imputed with <br> reported sum |  |
| $20^{\text {th }}$ Percentile | 500 | 340.48 |
| $30^{\text {th }}$ Percentile | 833.33 | 714.29 |
| $40^{\text {th }}$ Percentile | $1,166.67$ | $1,047.92$ |
| $50^{\text {th }}$ Percentile | $1,458.33$ | $1,376.67$ |
| $60^{\text {th }}$ Percentile | $1,800.01$ | $1,749.99$ |
| $70^{\text {th }}$ Percentile | $2,250.01$ | $2,222.22$ |
| $80^{\text {th }}$ Percentile | $2,708.34$ | 2,720 |
| $90^{\text {th }}$ Percentile | $3,333.35$ | $3,499.99$ |
| $10 / 90$ percentile ratio | $0,722.22$ | $4,900.83$ |

## Comparison of total monthly household income between SG LEADS' sample and the Department of Statistics Singapore Household Expenditure Survey

We also compared our household income variables against the national mean household income found in the 2017/2018 Household Expenditure Survey from the Department of Statistics Singapore (DOS) in Table 30. (Downloaded from the DOS website on 20 July 2020).

Table 30. Comparing the means between the three total monthly household income variables (weighted) and the 2017/18 Household Expenditure Survey by housing type


From Table 30., we observed that the mean monthly household income of the SG LEADS sample is lower than that reported by DOS and there are several reasons for this discrepancy. Firstly, the SG LEADS' sample consists of families with young children aged zero to below seven years old whose parents would be predominately younger Singaporeans. The average age of mothers and fathers in our sample is 34 and 36 years old respectively while that for the Singapore population is 42 years old. One's age correlates positively with one's income which thus contributes to the lower total family income in the SG LEADS sample. Secondly, DOS includes employer CPF contribution to the total monthly household income while our survey did not explicitly ask respondent to include this component.

Lastly, there are a number of government transfers that the Household Expenditure Survey includes in their calculation of the total household income that we were not able to capture accurately in a household survey even though this study asked about government subsidies including in-kind transfers. We believe the respondents had difficulty recalling, or knowing, the amount of subsidies (particularly the in-kind subsidies), scholarship, and so forth. These factors can at least partially explain why the SG LEADS total family income on average is lower than that reported in the 2017/18 Household Expenditure Survey.

For a full comparison of the income items included between the SG LEADS survey and the DOS's Household Expenditure Survey, please refer to Annex II and III respectively.

## Appendix I - STATA syntax for creating household income variables

```
Variable that combines both exact and ranged values (PCG labour used as an example)
//Generating new variable, using cases that have responded with exact value
gen labourincome_pcg = HB_H6_SGD
//Now we need to include the cases that have responded with range responses to our new variable
//Will be using mid-point of range imputation for each range category, e.g. if range was $12,000 to
$23,999, then $17999.50 was imputed for that variable)'.
//The next few command lines will be imputing the mid-point of range values for the various range
categories
replace labourincome_pcg=3000 if HB_H6_SGD==. & HB_H6_A==1
replace labourincome_pcg=8999.5 if HB_H6_SGD==. & HB_H6_A==2
replace labourincome_pcg=17999.5 if HB_H6_SGD==. & HB_H6_A==3
replace labourincome_pcg=29999.5 if HB_H6_SGD==. & HB_H6_A==4
replace labourincome_pcg=41999.5 if HB_H6_SGD==. & HB_H6_A==5
replace labourincome_pcg=53999.5 if HB_H6_SGD==. & HB_H6_A==6
replace labourincome_pcg=65999.5 if HB_H6_SGD==. & HB_H6_A==7
replace labourincome_pcg=77999.5 if HB_H6_SGD==. & HB_H6_A==8
replace labourincome_pcg=89999.5 if HB_H6_SGD==. & HB_H6_A==9
replace labourincome_pcg=107999.5 if HB_H6_SGD==. & HB_H6_A==10
replace labourincome_pcg=131999.5 if HB_H6_SGD==. & HB_H6_A==11
//For the largest range choice, the value at the end point would be imputed e.g. for \(\$ 144,000\) and above, \(\$ 144,000\) was imputed
replace labourincome_pcg=144000 if HB_H6_SGD==. \& HB_H6_A==12
```


## Composite total annual household income

//This variable is created by adding up all 16 individual income categories
//STATA has a command called egen that is able to sum up the row total of all 16 income categories and place the summed total into a new variable called total_income_composite egen total_income_composite = rowtotal(incomebusiness labourincome_pcg labourincome_spouse labourincome_other interest_pcg interest_spouse interest_other finprod_pcg finprod_spouse finprod_other donation subsidy support_from_family support_from_others other_income rent), missing

## Calculated annual household income imputed with reported sum

//Generating new variable, beginning with cases that have a composite total annual household income value
gen total_income_imputed = total_income_composite
//For cases that do not have a composite total annual household income value, we will impute the single question total annual household income value if that case has a non-missing value replace total_income_imputed= total_income if total_income_imputed==. \& total_income!=.

## Appendix II - SG LEADS income-related survey questions

## Section H of the Household Booklet - Family Income and Housing

Now we would like to ask some questions about the sources of income in your family. Your answers will be kept in strict confidence.

## Self-Employed Business

H1. [Self-administered] Did you or any family members in the current household own a business at any time in the past 12 months or have a financial interest in any business enterprise?

1. Yes
2. No $\rightarrow \mathbf{G O}$ TO H5

H2. [Self-administered] In the past 12 months, how many businesses or financial interests (in any business enterprises) in total did you/family members in your current household manage?
$\qquad$ (\# of business / financial interest in any business enterprises)

H3. [Self-administered] In the past 12 months, which family member(s) in your household own business or financial interest in any business enterprises? (SELECT ALL THAT APPLY).
$\square$ (To load the family members in the household for the respondent to select)

H4. [Self-administered] After deducting the cost, what was the total net income from the business /financial interest in the past 12 months?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H4a

Notice for interviewers:
(1) If the business was run jointly with non-family members or members not in the current household, report only the next income earned by the family members. Wages/salaries do not count.
(2) If this business was in deficit, record negative numbers. For example, if the net loss of the business was 30,000 Singapore dollars, record "-30,000".

H4a. [Self-administered] Which range does the net income from the business /financial interest (after deducting the cost) in the past 12 months fall into?

1. Less than 0
2. $0-5,000$
3. $5,000-9,999$
4. $10,000-49,999$
5. $50,000-99,999$
6. 100,000 $-199,999$
7. 200,000-399,999
8. 400,000-599,999
9. 600,000-799,999
10. 800,000 - 999,999
11. 1,000,000 and above

## Labour income

H5. [Self-administered] In the past 12 months, did you have any earnings from working on any jobs? (Besides the self-employed business we have just talked about)

1. Yes
2. No $\rightarrow$ GO TO H7 RULE

H6. [Self-administered] In the past 12 months, how much did you earn altogether from your work, including wages/salaries, bonus and Annual Wage Supplement (AWS), overtime payment, commissions, tips, and part-time jobs earnings, before anything was deducted for taxes or other things?

Record: $\qquad$ Singapore dollars $\rightarrow \mathbf{G O}$

## TO H7

0. [No earnings]// 9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H6a

H6a. [Self-administered] Which range does your past year's earnings from jobs fall into?

1. Less than 6,000
2. $60,000-71,999$
3. $6,000-11,999$
4. $72,000-83,999$
5. $12,000-23,999$
6. 84,000-95,999
7. $24,000-35,999$
8. 96,000-119,999
9. $36,000-47,999$
10. 120,000 - 143,999
11. $48,000-59,999$
12. 144,000 and above

## H7 RULE:

Primary caregiver lives with spouse/partner $\rightarrow \mathbf{G O}$ TO H7
Primary caregiver does not live with spouse/partner $\rightarrow$ GO TO H9 RULE

H7. [Self-administered] In the past 12 months, did your spouse/partner have earnings in the past year from working on any jobs? (Besides the self-employed business we have just talked about)

1. Yes
2. No $\boldsymbol{\rightarrow} \mathbf{G O}$ TO H9 RULE

H8. [Self-administered] In the past 12 months, how much did he/she earn altogether from work?

Record: $\qquad$ Singapore dollars $\rightarrow \mathbf{G O}$

## TO H9 RULE

0. [No earnings]// 9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H8a

H8a. [Self-administered] Which range does your spouse/partner's earnings in the past year from jobs fall into?

1. Less than 6,000
2. 60,000-71,999
3. $6,000-11,999$
4. 72,000-83,999
5. $12,000-23,999$
6. 84,000-95,999
7. $24,000-35,999$
8. 96,000 - 119,999
9. $36,000-47,999$
10. 120,000 - 143,999
11. $48,000-59,999$
12. 144,000 and above

## H9 RULE:

Primary caregiver lives with other family members $\rightarrow$ GO TO H9
Primary caregiver does not live with other family members $\rightarrow$ GO TO H11

H9. [Self-administered] In the past 12 months, did any other family members in your household have earnings from any jobs in the past year? (Besides the self-employed business we have just talked about)

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O} \mathbf{~ T O ~ H 1 1 ~}$

H9a. [Self-administered] Who is it / are they? (SELECT ALL THAT APPLY)

H10. [Self-administered] How much did (he/she/they) earn from all his/her/their jobs in the past year?

Record: $\qquad$ Singapore dollars $\rightarrow \mathbf{G O}$

## TO H11

9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H10a

H10a. [Self-administered] Which range did his/her past year's earnings from all jobs fall into?

1. Less than 6,000
2. 60,000-71,999
3. $6,000-11,999$
4. $72,000-83,999$
5. $12,000-23,999$
6. 84,000-95,999
7. $24,000-35,999$
8. 96,000 - 119,999
9. $36,000-47,999$
10. 120,000 - 143,999
11. $48,000-59,999$
12. 144,000 and above

## Rent

H11. [Self-administered] In the past 12 months, did you or your family members in the current household receive any income from rent?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O} \mathbf{~ T O ~ H 1 3}$

H12. [Self-administered] In the past 12 months, how much did you and your family members in the current household earn from rent?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H12a

H12a. [Self-administered] Which range does the income from rent in the past 12 months fall into?

1. Less than 6,000
2. 60,000-71,999
3. 6,000-11,999
4. 72,000-83,999
5. $12,000-23,999$
6. 84,000-95,999
7. $24,000-35,999$
8. 96,000 - 119,999
9. $36,000-47,999$
10. 120,000 - 143,999
11. $48,000-59,999$
12. 144,000 and above

Interest

H13. [Self-administered] In the past 12 months, did you receive any income from interest (e.g. from the savings accounts)?

1. Yes
2. No $\rightarrow$ GO TO H15 RULE

H14. [Self-administered] In the past 12 months, how much did you earn from interest?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H14a

H14a. [Self-administered] Which range does your income from interest in the past 12 months fall into?

1. Less than 10
2. $500-599$
3. $10-99$
4. $600-699$
5. $100-199$
6. $700-799$
7. $200-299$
8. $800-899$
9. $300-399$
10. 900 - 999
11. $400-499$
12. 1,000 and above
```
H15 RULE:
Primary caregiver lives with spouse/partner \(\rightarrow\) GO TO H15
Primary caregiver does not live with spouse/partner \(\rightarrow\) GO TO H17 RULE
```

H15. [Self-administered] In the past 12 months, did your spouse/partner receive any income from interest (e.g. from the saving accounts)?

1. Yes
2. No $\rightarrow$ GO TO H17 RULE

H16. [Self-administered] In the past 12 months, how much did your spouse/partner earn from interest?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H16a

H16a. [Self-administered] Which range does your spouse/partner's income from interest in the past 12 months fall into?

1. Less than 10
2. $500-599$
3. $10-99$
4. $600-699$
5. $100-199$
6. $700-799$
7. $200-299$
8. $800-899$
9. $300-399$
10. 900 - 999
11. $400-499$
12. 1,000 and above

## H17 RULE:

Primary caregiver lives with other family member(s) $\rightarrow$ GO TO H17
Primary caregiver does not live with other family member(s) $\rightarrow$ GO TO H19

H17. [Self-administered] In the past 12 months, did any other family members in your current household receive any income from interest (e.g. from the saving accounts)?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O} \mathbf{~ T O ~ H 1 9}$

H17a. [Self-administered] Who is it / are they? (SELECT ALL THAT APPLY)

H18. [Self-administered] In the past 12 months, how much did he/she/they earn from interest?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H18a

H18a. [Self-administered] Which range does his/her/their income from interest in the past 12 months fall into?

1. Less than 10
2. $500-599$
3. $10-99$
4. $600-699$
5. $100-199$
6. $700-799$
7. $200-299$
8. $800-899$
9. $300-399$
10. $900-999$
11. $400-499$
12. 1,000 and above

## Financial products

H19. [Self-administered] In the past 12 months, did you receive any income from financial products, for example, trust funds, stock, government bonds, foreign exchange products and so forth?
(1) Yes
(2) $\mathrm{No} \rightarrow$ GO TO H21 RULE

H20. [Self-administered] In the past 12 months, how much did you earn from financial products?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H20a

H20a. [Self-administered] Which range does your income from financial products in the past 12 months fall into?

1. Less than 6,000
2. 6,000-11,999
3. $12,000-23,999$
4. $24,000-35,999$
5. $36,000-47,999$
6. $48,000-59,999$
7. $60,000-71,999$
8. 72,000-83,999
9. 84,000-95,999
10. 96,000-119,999
11. 120,000 - 143,999
12. 144,000 and above

## H21 RULE:

Primary caregiver lives with spouse/partner $\rightarrow$ GO TO H21
Primary caregiver does not live with spouse/partner $\rightarrow$ GO TO H23 RULE

H21. [Self-administered] In the past 12 months, did your spouse/partner receive any income from financial products, for example, trust funds, stock, government bonds, foreign exchange products and so forth?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O}$ TO H23 RULE

H22. [Self-administered] In the past 12 months, how much did your spouse/partner earn from financial products?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H22a

H22a. [Self-administered] Which range does your spouse/partner's income from financial products in the past 12 months fall into?

1. Less than 6,000
2. $60,000-71,999$
3. 6,000-11,999
4. 72,000-83,999
5. $12,000-23,999$
6. 84,000-95,999
7. $24,000-35,999$
8. $96,000-119,999$
9. $36,000-47,999$
10. 120,000 - 143,999
11. $48,000-59,999$
12. 144,000 and above

## H23 RULE: <br> Primary caregiver lives with other family member(s) $\rightarrow$ GO TO H23 <br> Primary caregiver does not live with other family member(s) $\rightarrow$ GO TO H24

H23. [Self-administered] In the past 12 months, did any other family members in your current household receive any income from financial products, for example, trust funds, stock, government bonds, foreign exchange products and so forth?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O} \mathbf{~ T O ~ H 2 5}$

H23a. [Self-administered] Who is it / are they? (SELECT ALL THAT APPLY)

H24. [Self-administered] In the past 12 months, how much did he/she/they earn from financial products?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H24a

H24a. [Self-administered] Which range does his/her/their income from financial products in the past 12 months fall into?

1. Less than 6,000
2. $60,000-71,999$
3. $6,000-11,999$
4. $72,000-83,999$
5. $12,000-23,999$
6. 84,000-95,999
7. $24,000-35,999$
8. 96,000-119,999
9. $36,000-47,999$
10. 120,000 - 143,999
11. $48,000-59,999$
12. 144,000 and above

## Government subsidies

H25. [Self-administered] In the past 12 months, did you or your family members in the current household receive government subsidies (e.g. basic living allowances, unemployment subsidies)?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O} \mathbf{~ T O} \mathbf{H 2 7}$

H25a. [Self-administered] Who is it / are they? (SELECT ALL THAT APPLY)

H26. [Self-administered] In the past 12 months, including cash and converted noncash subsidy, how much government subsidy did you and your family members in the current household receive in total?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H26a

H26a. [Self-administered] Which range do the government subsidies you and/or your coresident family members received in the past 12 months fall into?

1. Less than 500
2. 5,000-5,999
3. $500-999$
4. 6,000-6,999
5. $1,000-1,999$
6. 7,000-7,999
7. $2,000-2,999$
8. $8,000-8,999$
9. $3,000-3,999$
10. 9,000-9,999
11. $4,000-4,999$
12. 10,000 and above

## Donations

H27. [Self-administered] In the past 12 months, did you or your family members in the current household receive any cash or non-cash donations (for example, foods, clothes, etc.)?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O}$ TO H29

H27a. [Self-administered] Who is it / are they? (SELECT ALL THAT APPLY)

H28. [Self-administered] In the past 12 months, what was the total amount of donations (including cash and converted non-cash donation) you or your family members in the current household received?

Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H28a

H28a. [Self-administered] Which range do the donations you and/or your coresident family members received in the past 12 months fall into?

1. Less than 500
2. 5,000-5,999
3. $500-999$
4. 6,000-6,999
5. $1,000-1,999$
6. 7,000-7,999
7. $2,000-2,999$
8. 8,000-8,999
9. $3,000-3,999$
10. 9,000-9,999
11. $4,000-4,999$
12. 10,000 and above

## Support from non-coresident family members and relatives, friends and colleagues

H29. [Self-administered] In the past 12 months, how much financial support or gifts did you or your family members in the current household receive from other non-coresident family members and relatives (i.e. who do not live in this household)? (Convert gifts to Singapore Dollars)

Record: $\qquad$ Singapore dollars

Notice for interviewers:
Enter " 0 " if "no remittance" $\rightarrow$ GO TO H30
999997. Not applicable; 999998. Don’t know; 999999.refuse to answer $\boldsymbol{\rightarrow} \mathbf{G O}$ TO H29a

H29a. [Self-administered] In the past 12 months, which range does the financial support or gifts you and/or your coresident family members received from other noncoresident family members or relatives fall into?

1. Less than 500
2. 5,000-5,999
3. $500-999$
4. 6,000-6,999
5. $1,000-1,999$
6. 7,000-7,999
7. $2,000-2,999$
8. 8,000-8,999
9. $3,000-3,999$
10. 9,000-9,999
11. $4,000-4,999$
12. 10,000 and above

H30. [Self-administered] In the past 12 months, how much financial support or gifts did you or your family members in the current household receive from anyone else (such as friends and colleagues)? (Convert gifts to Singapore Dollars)

Record: $\qquad$ Singapore dollars

Notice for interviewers:
Enter "0" if "no remittance" $\rightarrow$ GO TO H32
999997. Not applicable; 999998. Don’t know; 999999.refuse to answer $\rightarrow$ GO TO H30a

H30a. [Self-administered] In the past 12 months, which range does the financial support or gifts you and/or your coresident family members received from others (e.g. friends and colleagues) fall into?

1. Less than 500
2. 5,000-5,999
3. $500-999$
4. 6,000-6,999
5. $1,000-1,999$
6. 7,000-7,999
7. $2,000-2,999$
8. $8,000-8,999$
9. $3,000-3,999$
10. 9,000-9,999
11. $4,000-4,999$
12. 10,000 and above

H31. [Self-administered] What is the financial support mentioned above received by you and your family members in the current household mostly used for?
[Notice for interviewers: Please record everything the respondent mentioned.]

## Financial support to family members and relatives

H32. [Self-administered] In the past 12 months, have you or your family members in the current household ever provided any financial support or sent any gift to your non-coresident family members and relatives (i.e. who do not stay in the current household)?

1. Yes
2. $\mathrm{No} \rightarrow$ GO TO H35

H32a. [Self-administered] In the past 12 months, who have received financial support or gifts the most frequently from you and/or your family members in the current household? (What's the relationship between this family member/relative and you?) (LIST ALL THAT APPLY)

H33. [Self-administered] How often do you and/or your family member in the current household provide financial support or send any gift to non-coresident family members/relatives?

1. Less than once a year
2. Once a year
3. Several times a year
4. Once a month
5. Several times a month
6. Once a week

H34. [Self-administered] In the past 12 months, what is the total value of the money you remitted and the gifts you sent to non-coresident family members/relatives? (Convert gifts to Singapore Dollars)

Record: $\qquad$ Singapore dollars
[Notice for interviewers: Enter " 0 " if "no remittance".] 999997. Not applicable; 999998. Don’t know; 999999.refuse to answer $\rightarrow$ GO TO H34a

H34a. [Self-administered] In the past 12 months, which range does the financial support or gifts you and/or your coresident family members provided to noncoresident family members or relatives fall into?

1. Less than 500
2. 5,000-5,999
3. $500-999$
4. 6,000-6,999
5. $1,000-1,999$
6. 7,000-7,999
7. $2,000-2,999$
8. 8,000-8,999
9. $3,000-3,999$
10. 9,000-9,999
11. $4,000-4,999$
12. 10,000 and above

H35. [Self-administered] Did you or your family members in the current household receive any other income that we have not talked about (such as inheritance) in the past year?

1. Yes
2. $\mathrm{No} \rightarrow \mathbf{G O} \mathbf{~ T O} \mathbf{H 3} 7$

H35a. [Self-administered] What was it?

H36. [Self-administered] How much was it in the past year?
Record: $\qquad$ Singapore dollars
9999997. [Not applicable]// 9999998. [Not clear] // 9999999. [Refuse to answer] $\rightarrow$ GO TO H36a

H36a. [Self-administered] Which range does other income (including inheritance) you and/or your coresident family members received in the past 12 months fall into?

1. Less than 1000
2. $1,000-1,999$
3. 10,000-19,999
4. $2,000-3,999$
5. $20,000-29,999$
6. $4,000-5,999$
7. 30,000-39,999
8. $6,000-7,999$
9. 40,000-49,999
10. $8,000-9,999$
11. 50,000 - 99,999
12. 100,000 and above

## Estimated total family income

H37. [Self-administered] How much is the total family income in your current household last year? Including salary of family members in the household; operating revenue; interest, stock, rent; government subsidies (basic living allowances, unemployment subsidies); income from any other sources. Your answer will be kept in strict confidentiality.

Record: $\qquad$ Singapore dollars $\rightarrow \mathbf{G O}$

## TO H38

99999997. Not applicable// 99999998. Not clear// 99999999. Refuse to answer $\rightarrow$ GO TO H37a

H37a. [Self-administered] In the past 12 months, which range does the total income of the family members in your current household fall into?

1. Below 12,000
2. 120,001-140,000
3. $120,001-24,000$
4. 140,001-160,000
5. $24,001-48,000$
6. 160,001-180,000
7. $48,001-72,000$
8. 180,001-210,000
9. 72,001-96,000
10. 210,001-240,000
11. $96,001-120,000$
12. 240,001 and above

# Appendix III - Income items included in the total household income calculation of the Household Expenditure Survey 

## Household Income from All Sources

Household income from all sources refers to recurrent and regular income from employment, business, as well as income from investment, rental and other sources such as cash contributions from relatives/friends who are not members of the household, pension and regular government transfers. Irregular receipts or one-off payments such as proceeds from sale of properties, capital gains from trading of stocks and shares, windfalls, non-recurring insurance payouts and lump sum Central Provident Fund (CPF) withdrawals are excluded.

## Employment Income:

This refers to the income received by working members of the household from employment during the month preceding the survey month, before tax or loan repayment. It includes the basic wage or salary, employer's and employee's CPF contributions, leave allowance and overtime pay, commissions, tips, wage supplements, as well as income in kind provided by the employer, e.g. food, transport and lodging. One-twelfth of the annual bonus as well as regular income received from secondary employment are also included. It excludes income received by maids in the household

## Business Income:

This refers to the average monthly receipts or profits a person earns from business, trade or profession, after deducting all operating expenses incurred such as purchases of materials and services, rent for premises or machineries, cost of repair of machineries and fixtures. When a person's income is derived from a partnership, his income refers to his share of the net profit. Also included are the regular incomes received from any secondary business engagements, estimated value of goods (at current retail price) taken from shop or farm for household's own consumption, as well as royalties received.

## Others:

## Rental Income

This refers to the gross monthly rentals received from renting out houses, including subletting of rooms, shops or other fixed assets (e.g. equipment, machinery).

## Investment Income

- Interest: This refers to monthly interests received or credited for saving/fixed deposits with banks, finance companies, as well as interest received from Government securities. Interests on loans extended to any persons who are not members of the same household are included.

Interests earned from the balances in CPF accounts are not included.

- Dividends: This refers to the average monthly amount of dividends received from stocks and shares, Singapore Saving Bonds (SSB), exchange traded funds (ETF), growth funds and unit trusts in the twelve months preceding the survey period.


## Other Sources

- Contributions: This refers to the average monthly cash contributions given by any persons who are not members of the same household, e.g. children, relatives and friends staying in another household. It includes alimony or regular money allowance received by the divorcee.
- Pension: This refers to the monthly payment received by the retired person under the Pensions Act. Gratuity received on retirement in lump sum is excluded.
- Social Welfare Grants: This refers to public assistance or regular allowances received by the household or person from the government or charitable organisations. It includes receipts during the survey month in cash or in kind.
- Bursary, Scholarship and Fellowship: This refers to the average monthly grants from such awards received by students or persons for studying, training or research in educational institutions, training or research centres.
- Payouts from Annuities, CPF Retirement Sum Scheme (RSS) and CPF Lifelong Income For the Elderly (CPF LIFE): This refers to the annuities payments from private insurance schemes and banks, as well as regular payouts from CPF RSS and CPF LIFE. Lump sum withdrawals from CPF on reaching 55 years are excluded.
- Regular Payment from Insurance Protection Policies: This refers to the regular (income loss) compensation payout due to critical illness, disability or other conditions covered by the insurance protection policy. Non-recurring insurance claims and payouts/cash-back from savings and endowment policies are excluded.
- Regular Government Transfers: This refers to government transfers given on a regular basis and not tied to any particular expenditure item, e.g. Workfare Income Supplement, Edusave Pupils Fund, Utilities rebates, GST Vouchers.

Besides regular transfers, some government transfers are disbursed on an ad-hoc, irregular basis over a specific period or at specific life stages. Examples include Top-Ups to CPF and Medisave Accounts, Baby Bonus, National Service (NS) Bonus, Senior Citizen Bonus, CPF LIFE Deferment Bonus. Such irregular transfers are excluded from the households' income reported in the HES.

Other transfers that lead to a direct reduction in expenditure incurred by households are reflected as lower expenditure reported by respondents in the HES and not reflected in income. Examples include rebates on Service and Conservancy Charges (S\&CC), centre-based infant and childcare subsidies, education subsidies, public rental subsidies, subsidies under the Community Health Assist Scheme (CHAS) and inpatient and outpatient care subsidies under the Pioneer Generation Package.

