**CHAPTER 6 : THE LABOUR SECTOR**

### Summary

* *The labour market was under pressure in the early months of 2022 amid the fifth wave of the local epidemic, but improved subsequently in the rest of the year as domestic economic activities gradually revived alongside the generally stable local epidemic situation. The Government’s support measures rolled out during the year also helped. The seasonally adjusted unemployment rate rose notably to a high of 5.4% in February – April 2022, and then fell successively to 3.5% in the fourth quarter. The underemployment rate also rose to a high of 3.8% in February – April, before declining to 1.5% in the fourth quarter.*
* *The unemployment rates of most major sectors fell in the fourth quarter compared with February – April, particularly those of the decoration, repair and maintenance for buildings sector, the food and beverage service activities sector, and the arts, entertainment and recreation sector. The unemployment rates of both the lower-skilled and higher-skilled workers declined notably.*
* *Establishment surveys indicated that growth in nominal wages and labour earnings generally accelerated in the first three quarters of 2022. The year-on-year increase in average nominal wage rate accelerated from 1.8% in March to 2.3% in September, while that in payroll per person engaged picked up from 0.8% in the first quarter to 2.0% in the third quarter. More recent General Household Survey (GHS) data indicated that median monthly employment earnings of full-time employees (excluding foreign domestic helpers) recorded steady growth through 2022, increasing by 5.0% in the fourth quarter. Meanwhile, the median monthly household income (excluding foreign domestic helpers) increased by 3.3% in the fourth quarter.*

**Overall labour market situation(1)**

6.1 The labour market was under pressure in the early months of 2022 amid the fifth wave of the local epidemic, but improved subsequently in the rest of the year as domestic economic activities gradually revived alongside the generally stable local epidemic situation. The Government’s support measures rolled out during the year also helped. The seasonally adjusted *unemployment rate*(2) rose notably to a high of 5.4% in February – April 2022, and then fell successively to 3.5% in the fourth quarter. The *underemployment rate*(3) also rose to a high of 3.8% in February – April, before declining to 1.5% in the fourth quarter. The seasonally adjusted unemployment rate and the underemployment rate in the fourth quarter of 2022 were lower than their respective levels of 4.0% and 1.7% a year earlier. The unemployment rates of most major sectors fell in the fourth quarter compared with February *–* April, particularly those of the decoration, repair and maintenance for buildings sector, the food and beverage service activities sector, and the arts, entertainment and recreation sector. The unemployment rates of both the lower-skilled and higher-skilled workers declined notably, with the former being still visibly higher than the latter. Establishment surveys indicated that growth in nominal wages and labour earnings generally accelerated in the first three quarters of 2022. The year-on-year increase in average nominal wage rate accelerated from 1.8% in March to 2.3% in September, while that in payroll per person engaged picked up from 0.8% in the first quarter to 2.0% in the third quarter. More recent statistics compiled from the GHS indicated that median monthly employment earnings of full-time employees (excluding foreign domestic helpers) recorded steady growth through 2022, increasing by 5.0% in nominal terms in the fourth quarter. Meanwhile, the median monthly household income (excluding foreign domestic helpers) showed a year-on-year increase of 3.3% in the fourth quarter of 2022.



Note : # Provisional figures.

**Table 6.1 : The unemployment rate (seasonally adjusted), underemployment rate and long-term unemployment rate**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Unemployment rate\* (%) | Underemployment rate (%) | Long-term unemployment rate (%) |
|  |  |  |  |
| 2021 Annual | 5.2 | 2.6 | 2.2 |
|  |  |  |  |
| Q1 | 6.8 | 3.8 | 2.8 |
| Q2 | 5.4 | 2.5 | 2.4 |
| Q3 | 4.5 | 2.1 | 2.0 |
| Q4 | 4.0 | 1.7 | 1.4 |
|  |  |  |  |
| 2022 Annual# | 4.3 | 2.3 | 1.1 |
|  |  |  |  |
| Q1 | 5.0 | 3.1 | 1.2 |
| Q2 | 4.7 | 3.0 | 1.2 |
| Q3 | 3.9 | 1.8 | 1.0 |
| Q4 | 3.5 | 1.5 | 1.1 |
|  |  |  |  |

Notes : \* Seasonally adjusted (except for annual figures).

# Provisional figures.

Source : General Household Survey, Census and Statistics Department.

**Labour force and total employment**

6.2 The *labour force*(4) continued to decline entering 2022, to a low of 3 745 200 in March – May. This reflected partly a decline in labour force participation rate as a result of some people choosing to leave the labour force and the persistent drag from population ageing, and partly a fall in the working-age population (i.e. land-based non-institutionalised population aged 15 and above). The labour force then rose back in the rest of the year to 3 791 300 in the fourth quarter, partly because improved employment conditions attracted more people to enter or re-join the labour market. Analysed by contributing factor, the labour force participation rate rose back from the record low of 58.1% in March – May to 58.3% in the fourth quarter. The working-age population also increased from 6 444 300 to 6 504 000 over the same period.

6.3 *Total employment*(5) also reached a low of 3 553 800 in March – May, before rising back to 3 665 300 in the fourth quarter. Most major sectors saw increases in employment in the fourth quarter compared with March – May, particularly for the arts, entertainment and recreation sector, the food and beverage service activities sector, and the decoration, repair and maintenance for buildings sector.

**Table 6.2 : The labour force, and persons employed,**

**unemployed and underemployed**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Labour force | Persons employed | Persons  unemployed(a) | Persons underemployed |
|  |  |  |  |  |
| 2021 Annual | 3 870 400 (-1.2) | 3 670 200 (-0.6) | 200 300 | 98 900 |
|  |  |  |  |  |
| Q1 | 3 888 500 (-0.8) | 3 627 600 (-3.4) | 260 900 | 148 600 |
| Q2 | 3 885 700 (-0.5) | 3 671 100 (0.3) | 214 500 | 95 800 |
| Q3 | 3 874 000 (-0.8) | 3 693 100 (1.2) | 181 000 | 80 200 |
| Q4 | 3 850 900 (-1.3) | 3 705 600 (1.3) | 145 200 | 66 700 |
|  |  |  |  |  |
| 2022 Annual# | 3 781 200 (-2.3) | 3 619 100 (-1.4) | 162 100 | 88 200 |
|  |  |  |  |  |
| Q1 | 3 799 000 (-2.3) | 3 610 500 (-0.5) | 188 500 | 117 000 |
| Q2 | 3 750 200 (-3.5) | 3 571 600 (-2.7) | 178 600 | 111 600 |
| Q3 | 3 784 200 (-2.3) | 3 628 900 (-1.7) | 155 300 | 69 000 |
| Q4 | 3 791 300 (-1.5) | 3 665 300 (-1.1) | 126 000 | 55 300 |
|  | <0.2> | <1.0> |  |  |

Notes : (a) These include first-time job-seekers and re-entrants into the labour force.

(  ) % change over a year earlier.

  Quarter-to-quarter % change for the fourth quarter of 2022.

# Provisional figures.

Source : General Household Survey, Census and Statistics Department.



**Table 6.3 : Labour** **force participation rates by gender and by age group (%)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2018 | 2019 | 2020 | 2021 | 2022# | 2022 Q4 |
| Male |  |  |  |  |  |  |
| 15-24 | 39.2 | 39.2 | 35.4 | 34.4 | 32.3 | 31.5 |
| *of which:* |  |  |  |  |  |  |
| *15-19* | *10.3* | *11.3* | *7.3* | *6.6* | *7.2* | *6.9* |
| *20-24* | *60.1* | *59.6* | *56.5* | *57.2* | *54.5* | *53.2* |
| 25-29 | 92.9 | 91.3 | 90.8 | 91.7 | 89.8 | 90.2 |
| 30-39 | 96.4 | 95.9 | 95.0 | 95.2 | 94.3 | 94.9 |
| 40-49 | 95.2 | 93.9 | 93.5 | 93.5 | 93.4 | 93.3 |
| 50-59 | 86.9 | 85.2 | 84.8 | 85.4 | 85.3 | 85.4 |
| ≥ 60 | 32.2 | 32.0 | 31.6 | 31.0 | 31.9 | 32.2 |
|  |  |  |  |  |  |  |
| Overall | 68.6 | 67.6 | 66.3 | 65.8 | 64.8 | 64.5 |
|  |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| 15-24 | 40.9 | 40.5 | 36.6 | 35.3 | 33.6 | 33.6 |
| *of which:* |  |  |  |  |  |  |
| *15-19* | *11.9* | *11.6* | *7.2* | *7.8* | *7.8* | *6.9* |
| *20-24* | *60.4* | *60.1* | *57.8* | *57.5* | *55.5* | *55.4* |
| 25-29 | 86.8 | 87.5 | 87.5 | 88.2 | 86.7 | 87.3 |
| 30-39 | 79.6 | 79.3 | 79.1 | 79.3 | 79.3 | 79.4 |
| 40-49 | 74.3 | 73.7 | 73.6 | 74.3 | 74.1 | 74.8 |
| 50-59 | 61.6 | 62.3 | 62.9 | 64.0 | 64.9 | 65.0 |
| ≥ 60 | 14.7 | 15.7 | 15.6 | 16.3 | 16.5 | 17.0 |
|  |  |  |  |  |  |  |
| Overall | 55.3 | 55.1 | 54.3 | 54.2 | 53.2 | 53.2 |
|  |  |  |  |  |  |  |
| Both genders combined |  |  |  |  |  |  |
| 15-24 | 40.0 | 39.8 | 36.0 | 34.9 | 32.9 | 32.5 |
| *of which:* |  |  |  |  |  |  |
| *15-19* | *11.1* | *11.5* | *7.3* | *7.2* | *7.5* | *6.9* |
| *20-24* | *60.3* | *59.9* | *57.2* | *57.4* | *55.0* | *54.3* |
| 25-29 | 89.6 | 89.2 | 89.0 | 89.8 | 88.2 | 88.6 |
| 30-39 | 86.3 | 86.0 | 85.6 | 85.9 | 85.6 | 85.9 |
| 40-49 | 82.8 | 82.0 | 81.8 | 82.1 | 82.0 | 82.3 |
| 50-59 | 73.3 | 72.7 | 72.7 | 73.4 | 73.7 | 73.8 |
| ≥ 60 | 23.0 | 23.5 | 23.2 | 23.3 | 23.8 | 24.2 |
|  |  |  |  |  |  |  |
| Overall | 61.3 | 60.7 | 59.7 | 59.4 | 58.4 | 58.3 |

Note : # Provisional figures.

Source : General Household Survey, Census and Statistics Department.

**Profile of unemployment**

6.4 The seasonally adjusted unemployment rate rose to a high of 5.4% in February – April, and then fell successively to 3.5% in the fourth quarter. Compared with a high level of 206 100 in February – April, the number of unemployed persons (not seasonally adjusted) decreased notably by 38.8% (or 80 000) to 126 000 in the fourth quarter.

6.5 The unemployment rates of most major sectors declined notably in the fourth quarter as compared with February – April, particularly for those sectors that saw notable increases in early 2022, such as the decoration, repair and maintenance for buildings sector (down 8.5 percentage points to 7.3%), the food and beverage service activities sector (down 7.9 percentage points to 5.0%), and the arts, entertainment and recreation sector (down 6.6 percentage points to 5.1%). For the *low-paying sectors*(6) as a whole, the unemployment rate went down by 3.0 percentage points to 2.9%.

6.6 Analysed by skill segment, the unemployment rate of the lower-skilled workers fell by 3.0 percentage points from February – April to 3.5% in the fourth quarter, and that of the higher-skilled workers declined by 1.1 percentage points to 2.3%. The unemployment rate of the lower-skilled workers was still visibly higher than that of the higher-skilled workers.

6.7 Analysed by other socio-economic attributes, persons of all age groups and all levels of educational attainment saw lower unemployment rates in the fourth quarter compared with February – April, notably for those aged 15-19 (down 5.4 percentage points to 11.8%), and those with lower secondary education (down 4.3 percentage points to 4.1%) and primary and below education (down 3.6 percentage points to 2.8%).





**Table 6.4 : Unemployment rates by major economic sector**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2021 | | | | | 2022 | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Annual | Q1 | Q2 | Q3 | Q4 | Annual# | Q1 | Q2 | Q3 | Q4 |
|  |  |  |  |  |  |  |  |  |  |  |
| Import/export trade and wholesale | 4.8 | 6.3 | 4.7 | 4.1 | 3.8 | 3.4 | 3.9 | 3.4 | 3.2 | 2.9 |
|  |  |  |  |  |  |  |  |  |  |  |
| Retail, accommodation and food services | 8.0 | 10.8 | 8.4 | 7.1 | 5.5 | 6.7 | 8.9 | 7.4 | 5.8 | 4.7 |
| *of which:* |  |  |  |  |  |  |  |  |  |  |
| *Retail* | *6.9* | *8.8* | *7.4* | *6.2* | *5.3* | *6.2* | *7.7* | *6.6* | *5.7* | *4.6* |
|  |  |  |  |  |  |  |  |  |  |  |
| *Accommodation services* | *7.0* | *10.2* | *7.4* | *5.7* | *4.1* | *4.9* | *5.6* | *5.7* | *4.5* | *3.9* |
|  |  |  |  |  |  |  |  |  |  |  |
| *Food and beverage service activities* | *9.5* | *13.4* | *9.9* | *8.5* | *6.0* | *7.7* | *11.0* | *8.6* | *6.2* | *5.0* |
|  |  |  |  |  |  |  |  |  |  |  |
| Transportation, storage, postal and courier services | 6.0 | 7.3 | 6.6 | 5.0 | 4.9 | 5.1 | 5.3 | 5.9 | 5.0 | 4.0 |
|  |  |  |  |  |  |  |  |  |  |  |
| Information and communications | 4.7 | 5.9 | 4.8 | 4.3 | 4.0 | 4.0 | 4.6 | 4.2 | 3.8 | 3.4 |
|  |  |  |  |  |  |  |  |  |  |  |
| Financing and insurance | 3.0 | 3.9 | 3.1 | 2.7 | 2.2 | 2.3 | 2.3 | 2.5 | 2.3 | 2.1 |
|  |  |  |  |  |  |  |  |  |  |  |
| Real estate | 3.0 | 4.2 | 3.0 | 2.6 | 2.0 | 2.6 | 2.4 | 3.0 | 2.7 | 2.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| Professional and  business services | 4.7 | 5.7 | 5.3 | 4.3 | 3.8 | 3.0 | 3.4 | 3.3 | 2.8 | 2.5 |
|  |  |  |  |  |  |  |  |  |  |  |
| Public administration, social and personal services | 2.4 | 3.5 | 2.7 | 2.0 | 1.6 | 2.5 | 3.1 | 3.0 | 2.3 | 1.7 |
| *of which:* |  |  |  |  |  |  |  |  |  |  |
| *Education* | *3.5* | *5.2* | *3.8* | *3.0* | *2.3* | *3.0* | *3.8* | *3.9* | *2.6* | *1.6* |
|  |  |  |  |  |  |  |  |  |  |  |
| *Arts, entertainment and recreation* | *8.5* | *12.6* | *10.8* | *6.8* | *4.0* | *7.4* | *11.3* | *8.0* | *5.7* | *5.1* |
|  |  |  |  |  |  |  |  |  |  |  |
| Manufacturing | 6.5 | 6.6 | 6.9 | 6.8 | 5.6 | 5.2 | 5.5 | 5.5 | 5.2 | 4.7 |
|  |  |  |  |  |  |  |  |  |  |  |
| Construction | 8.1 | 11.5 | 8.9 | 6.7 | 5.2 | 6.5 | 8.0 | 7.3 | 6.0 | 4.8 |
| *of which:* |  |  |  |  |  |  |  |  |  |  |
| *Decoration, repair and maintenance for buildings* | *11.4* | *16.2* | *12.7* | *10.0* | *5.9* | *10.7* | *13.4* | *13.0* | *9.1* | *7.3* |
|  |  |  |  |  |  |  |  |  |  |  |
| Overall\* | 5.2 | 6.7 | 5.5 | 4.7 | 3.8 | 4.3 | 5.0 | 4.8 | 4.1 | 3.3 |
|  |  | (6.8) | (5.4) | (4.5) | (4.0) |  | (5.0) | (4.7) | (3.9) | (3.5) |

Notes : \* Including first-time job-seekers and re-entrants into the labour force.

( ) Seasonally adjusted unemployment rates.

# Provisional figures.

Source : General Household Survey, Census and Statistics Department.



**Table 6.5 : Unemployment rates**\* **by skill segment**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2021 | | | | | 2022 | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Annual | Q1 | Q2 | Q3 | Q4 | Annual# | Q1 | Q2 | Q3 | Q4 |
|  |  |  |  |  |  |  |  |  |  |  |
| Higher-skilled segment | 3.4 | 4.4 | 3.6 | 3.1 | 2.5 | 2.8 | 3.2 | 3.0 | 2.6 | 2.3 |
|  |  |  |  |  |  |  |  |  |  |  |
| Managers | 2.7 | 3.5 | 3.1 | 2.0 | 2.1 | 2.2 | 2.7 | 2.4 | 2.1 | 1.8 |
|  |  |  |  |  |  |  |  |  |  |  |
| Professionals | 2.4 | 3.0 | 2.6 | 2.3 | 1.7 | 1.9 | 2.0 | 2.0 | 1.9 | 1.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| Associate professionals | 4.5 | 5.7 | 4.5 | 4.1 | 3.3 | 3.6 | 4.1 | 4.0 | 3.3 | 3.0 |
|  |  |  |  |  |  |  |  |  |  |  |
| Lower-skilled segment^ | 5.7 | 7.6 | 6.1 | 4.8 | 4.0 | 4.8 | 5.7 | 5.4 | 4.4 | 3.5 |
|  |  |  |  |  |  |  |  |  |  |  |
| Clerical support workers | 5.1 | 6.1 | 5.2 | 4.4 | 4.3 | 4.2 | 4.6 | 4.2 | 4.7 | 3.4 |
|  |  |  |  |  |  |  |  |  |  |  |
| Service and sales workers | 7.0 | 10.0 | 7.1 | 6.2 | 4.7 | 5.7 | 7.5 | 6.7 | 4.7 | 4.1 |
|  |  |  |  |  |  |  |  |  |  |  |
| Craft and related workers | 7.5 | 10.5 | 8.4 | 6.1 | 4.8 | 7.0 | 8.8 | 7.5 | 6.9 | 4.9 |
|  |  |  |  |  |  |  |  |  |  |  |
| Plant and machine operators and assemblers | 4.5 | 5.9 | 4.9 | 3.5 | 3.3 | 3.8 | 4.1 | 4.5 | 3.7 | 2.7 |
|  |  |  |  |  |  |  |  |  |  |  |
| Elementary occupations | 4.3 | 5.7 | 5.1 | 3.5 | 3.1 | 3.6 | 4.0 | 4.4 | 3.2 | 2.7 |

Notes : \* Not seasonally adjusted, and not including first-time job-seekers and re-entrants into the labour force.

^ Including other occupations.

# Provisional figures.

Source : General Household Survey, Census and Statistics Department.

**Table 6.6 : Unemployment rates**\* **by age and educational attainment**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2021 | | | | | 2022 | | | | |
|  |  |  |  |  |  |  |  |  |  |  |
|  | Annual | Q1 | Q2 | Q3 | Q4 | Annual# | Q1 | Q2 | Q3 | Q4 |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 12.8 | 13.5 | 13.7 | 15.2 | 8.8 | 10.8 | 10.5 | 11.7 | 12.0 | 9.1 |
| *of which:* |  |  |  |  |  |  |  |  |  |  |
| *15-19* | *15.6* | *16.3* | *18.1* | *16.5* | *11.9* | *15.2* | *14.3* | *18.4* | *16.1* | *11.8* |
|  |  |  |  |  |  |  |  |  |  |  |
| *20-24* | *12.5* | *13.3* | *13.3* | *15.0* | *8.5* | *10.3* | *10.1* | *11.0* | *11.4* | *8.9* |
|  |  |  |  |  |  |  |  |  |  |  |
| 25-29 | 6.1 | 7.4 | 6.3 | 6.2 | 5.0 | 5.7 | 5.9 | 5.7 | 5.9 | 5.1 |
|  |  |  |  |  |  |  |  |  |  |  |
| 30-39 | 3.9 | 5.2 | 4.2 | 3.5 | 3.0 | 3.2 | 3.7 | 3.7 | 3.2 | 2.4 |
|  |  |  |  |  |  |  |  |  |  |  |
| 40-49 | 4.3 | 5.5 | 4.7 | 3.6 | 3.2 | 3.5 | 4.2 | 4.2 | 2.9 | 2.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| 50-59 | 5.5 | 7.7 | 5.9 | 4.3 | 3.7 | 4.4 | 5.5 | 4.8 | 4.0 | 3.3 |
|  |  |  |  |  |  |  |  |  |  |  |
| ≥ 60 | 4.6 | 6.7 | 4.9 | 3.6 | 3.2 | 3.9 | 4.9 | 4.4 | 3.6 | 2.8 |
| Educational attainment |  |  |  |  |  |  |  |  |  |  |
| Primary education and below | 5.4 | 8.5 | 5.6 | 4.2 | 3.0 | 4.1 | 5.8 | 4.9 | 2.7 | 2.8 |
|  |  |  |  |  |  |  |  |  |  |  |
| Lower secondary education | 6.6 | 8.7 | 7.1 | 5.7 | 4.7 | 5.7 | 7.2 | 6.5 | 5.2 | 4.1 |
|  |  |  |  |  |  |  |  |  |  |  |
| Upper secondary education^ | 5.4 | 7.2 | 5.9 | 4.5 | 3.9 | 4.5 | 5.4 | 5.2 | 4.2 | 3.2 |
|  |  |  |  |  |  |  |  |  |  |  |
| Post-secondary education | 4.5 | 5.4 | 4.6 | 4.6 | 3.5 | 3.7 | 3.7 | 3.9 | 3.9 | 3.3 |
|  |  |  |  |  |  |  |  |  |  |  |

Notes : \* Not seasonally adjusted, but including first-time job-seekers and re-entrants into the labour force.

^ Including craft courses.

# Provisional figures.

Source : General Household Survey, Census and Statistics Department.

6.8 Indicators for the intensity of unemployment showed diverse performance in the fourth quarter as compared with February – April. The long-term unemployment rate (i.e. the proportion of persons unemployed for six months or longer in the labour force) fell by 0.2 percentage point from February – April to 1.1% in the fourth quarter, and the number of long-term unemployed persons declined by 16.9% (or 8 400) to 41 500. Yet, the share of long-term unemployed persons in total unemployment rose by 8.7 percentage points to 32.9%. The median duration of unemployment lengthened by 13 days to 86 days. The proportion of dismissal or lay-offs in the total number of unemployed persons (not including first-time job-seekers and re-entrants into the labour force) rose by 3.0 percentage points to 53.9%.

**Profile of underemployment**

6.9 The underemployment rate went up markedly to 3.8% in February – April, and then declined successively to 1.5% in the fourth quarter. Compared with a high level of 142 000 in February – April, the number of underemployed persons fell markedly by 61.1% (or 86 700) to 55 300 in the fourth quarter. Analysed by sector, the underemployment rates of all major sectors declined during the period, notably for the arts, entertainment and recreation sector (down 10.5 percentage points to 2.3%) and the food and beverage service activities sector (down 10.3 percentage points to 1.4%). Analysed by skill segment, the underemployment rate of the lower-skilled workers fell by 3.1 percentage points to 1.9%, and that of the higher-skilled workers declined by 1.2 percentage points to 0.8%.

**Profile of employment in establishments**

6.10 The quarterly statistics collected from private sector establishments on employment, vacancies, wages and payroll are available up to September 2022. Attempts have been made to bring the analysis more up-to-date by drawing reference to information from supplementary sources wherever possible.

6.11 Employment situation improved in the third quarter of 2022 as domestic economic activities gradually revived. Compared with three months ago on a seasonally adjusted basis, total private sector employment resumed an increase of 0.2% in September after decreasing by 1.0% and 0.3% in March and June respectively. On a year-on-year comparison, total private sector employment (not seasonally adjusted) declined by a narrowed 1.1% to 2 686 900 in September. Analysed by sector, employment in a majority of selected industries (not seasonally adjusted) increased over three months ago, notably for construction sites (covering manual workers only), and food and beverage services. On a year-on-year comparison, employment in around half of the selected industries increased in September, more notably for wholesale, construction sites (covering manual workers only) and human health services. Some other selected industries saw narrowed declines in employment, though the declines in accommodation services and manufacturing were still notable.

**Table 6.7 : Employment by major economic sector**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2021 | | | | | 2022 | | |
|  | Annual |  |  |  |  |  |  |  |
|  | average | Mar | Jun | Sep | Dec | Mar | Jun | Sep |
| Import/export trade and wholesale | 436 000  (-3.6) | 434 600  (-8.6) | 434 900  (-3.4) | 435 100  (-2.2) | 439 500  (0.1) | 438 300  (0.8) | 434 800  (§) | 432 700  (-0.6) |
|  |  |  |  |  |  |  |  |  |
| *of which:* |  |  |  |  |  |  |  |  |
| *Wholesale* | *50 500*  *(-3.9)* | *50 600*  *(-8.4)* | *50 900*  *(-2.9)* | *49 800*  *(-4.1)* | *50 700*  *(0.1)* | *52 700*  *(4.1)* | *52 200*  *(2.6)* | *52 800*  *(6.1)* |
|  |  |  |  |  |  |  |  |  |
| Retail | 249 500  (-0.6) | 249 900  (-2.0) | 248 100  (-0.5) | 248 500  (-0.5) | 251 400  (0.5) | 245 200  (-1.9) | 244 800  (-1.3) | 245 200  (-1.3) |
|  |  |  |  |  |  |  |  |  |
| Accommodation services(a) | 36 000  (1.1) | 34 400  (-9.4) | 37 000  (3.1) | 36 900  (5.0) | 35 800  (7.0) | 35 400  (2.8) | 33 400  (-9.8) | 33 600  (-9.0) |
|  |  |  |  |  |  |  |  |  |
| Food and beverage services | 214 000  (1.4) | 205 500  (-7.2) | 215 000  (1.0) | 217 600  (5.2) | 217 800  (7.4) | 204 700  (-0.4) | 217 200  (1.0) | 222 000  (2.0) |
|  |  |  |  |  |  |  |  |  |
| Transportation, storage, postal and courier services | 166 900  (-4.0) | 165 500  (-6.7) | 168 700  (-4.2) | 167 200  (-4.4) | 166 000  (-0.4) | 164 400  (-0.6) | 162 500  (-3.7) | 164 000  (-1.9) |
|  |  |  |  |  |  |  |  |  |
| Information and communications | 108 600  (-1.4) | 109 300  (-0.4) | 108 800  (-1.8) | 108 400  (-1.7) | 108 100  (-1.7) | 107 200  (-1.9) | 106 100  (-2.4) | 105 300  (-2.9) |
|  |  |  |  |  |  |  |  |  |
| Financing, insurance, real estate, professional and business services | 767 900  (0.8) | 761 600  (0.4) | 765 700  (0.8) | 772 000  (1.0) | 772 400  (1.2) | 766 600  (0.7) | 750 500  (-2.0) | 751 800  (-2.6) |
|  |  |  |  |  |  |  |  |  |
| Social and personal services | 534 500  (0.5) | 534 700  (0.5) | 532 500  (0.3) | 533 600  (0.3) | 537 300  (0.8) | 532 900  (-0.3) | 533 900  (0.3) | 536 400  (0.5) |
|  |  |  |  |  |  |  |  |  |
| *of which:* |  |  |  |  |  |  |  |  |
| *Human health services* | *145 500*  *(2.9)* | *145 300*  *(4.0)* | *145 100*  *(3.3)* | *145 800*  *(2.9)* | *146 000*  *(1.6)* | *148 600*  *(2.3)* | *148 400*  *(2.2)* | *149 300*  *(2.4)* |
|  |  |  |  |  |  |  |  |  |
| Manufacturing | 78 800  (-5.5) | 81 200  (-3.6) | 79 200  (-6.0) | 78 400  (-5.9) | 76 500  (-6.7) | 75 800  (-6.7) | 74 900  (-5.3) | 74 400  (-5.1) |
|  |  |  |  |  |  |  |  |  |
| Construction sites (covering manual workers only) | 105 400  (8.5) | 102 700  (1.6) | 106 100  (8.6) | 106 300  (13.2) | 106 600  (10.9) | 98 300  (-4.3) | 103 400  (-2.5) | 109 700  (3.2) |
|  |  |  |  |  |  |  |  |  |
| **All establishments surveyed in the private sector(b)** | **2 709 100**  **(-0.4)** | **2 690 700**  **(-2.7)**  **<0.6>** | **2 707 300**  **(-0.4)**  **<0.6>** | **2 715 500**  **(0.3)**  **<0.1>** | **2 722 900**  **(1.3)**  **<-0.1>** | **2 680 500**  **(-0.4)**  **<-1.0>** | **2 673 200**  **(-1.3)**  **<-0.3>** | **2 686 900**  **(-1.1)**  **<0.2>** |
|  |  |  |  |  |  |  |  |  |
| *Civil service(c)* | *176 900*  *(-0.2)* | *177 600*  *(-0.1)* | *176 900*  *(-0.3)* | *176 400*  *(-0.2)* | *176 600*  *(-0.2)* | *176 200*  *(-0.7)* | *175 200*  *(-1.0)* | *174 000*  *(-1.3)* |

Notes : Employment figures enumerated from business establishments, as obtained from the Quarterly Survey of Employment and Vacancies, are somewhat different from those enumerated from households, as obtained from the General Household Survey. This is mainly due to the difference in sectoral coverage: while the former survey covers selected major sectors, the latter survey covers all sectors in the economy.

(a) Accommodation services sector covers hotels, guesthouses, boarding houses and other establishments providing short-term accommodation.

(b) The total figures on private sector employment cover also employment in mining and quarrying; and in electricity and gas supply, and waste management, besides employment in the major sectors indicated above.

(c) These figures cover only those employed on civil service terms of appointment. Judges, judicial officers, ICAC officers, locally engaged staff working in the Hong Kong Economic and Trade Offices outside Hong Kong, and other government employees such as non‑civil service contract staff are not included.

(  ) % change over a year earlier.

< > Seasonally adjusted % change compared with the level three months ago.

§ Change within ±0.05%.

Sources : Quarterly Survey of Employment and Vacancies, Census and Statistics Department.

Quarterly Employment Survey of Construction Sites, Census and Statistics Department.

**Vacancies**

6.12 Compared with three months ago on a seasonally adjusted basis, the number of private sector vacancies decreased by 10.1% in March 2022 before increasing by 14.6% and 14.7% in June and September. On a year-on-year comparison, the number of private sector vacancies continued to register a visible increase of 37.2% to 74 840 in September 2022.

6.13 In September 2022, the numbers of vacancies in almost all selected sectors increased as compared to the levels three months ago and a year earlier. Analysed by occupational category, the numbers of vacancies in the lower-skilled and higher skilled segments rose further by 20.5% and 18.7% respectively over three months ago, and were 43.1% and 30.2% higher than the corresponding levels a year earlier.

6.14 The manpower balance situation has tightened since March 2022. The ratio of job vacancies per 100 unemployed persons increased from 28 in March to 35 in June and further to 48 in September. Analysed by skill segment, the ratio in the higher-skilled segment went up from 49 in March to 60 in June and 83 in September, while the ratio in the lower-skilled segment increased from 23 to 29 and 43 during the same period. Manpower shortage situation remained acute in the human health services sector, and the residential care and social work services sector, with the ratios increasing further to 270 and 202 in September respectively.

**Table 6.8 : Vacancies by major economic sector**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2021 | | | | | | 2022 | | |
|  | Annual |  |  |  |  |  | |  |  |
|  | average | Mar | Jun | Sep | Dec | Mar | | Jun | Sep |
|  |  |  |  |  |  |  | |  |  |
| Import/export trade and wholesale | 3 880  (12.4) | 3 510  (-13.9) | 3 840  (4.8) | 4 070  (27.9) | 4 090  (41.9) | 2 920  (-16.9) | | 3 600  (-6.3) | 4 110  (1.0) |
|  |  |  |  |  |  |  | |  |  |
| *of which:* |  |  |  |  |  |  | |  |  |
| *Wholesale* | *520*  *(13.1)* | *460*  *(-7.3)* | *500*  *(4.7)* | *610*  *(38.1)* | *510*  *(20.5)* | *320*  *(-31.2)* | | *600*  *(21.2)* | *740*  *(22.3)* |
|  |  |  |  |  |  |  | |  |  |
| Retail | 4 100  (33.9) | 2 970  (-2.6) | 3 450  (9.4) | 4 710  (49.8) | 5 270  (81.4) | 3 710  (25.1) | | 4 880  (41.3) | 5 000  (6.1) |
|  |  |  |  |  |  |  | |  |  |
| Accommodation services(a) | 1 200  (83.2) | 700 (-0.6) | 1 090  (53.9) | 1 380  (94.5) | 1 650  (225.5) | 1 410  (100.7) | | 1 790  (63.4) | 2 030  (47.9) |
|  |  |  |  |  |  |  | |  |  |
| Food and beverage services | 3 750  (72.3) | 2 060 (-6.7) | 3 230  (51.9) | 4 380  (77.4) | 5 310  (180.3) | 2 410  (17.2) | | 4 700  (45.5) | 5 540  (26.4) |
|  |  |  |  |  |  |  | |  |  |
| Transportation, storage, postal and courier services | 2 900  (32.8) | 2 520  (-2.9) | 2 930  (28.5) | 2 580  (23.4) | 3 560  (101.9) | 3 550  (41.1) | | 3 740  (27.5) | 7 520  (191.6) |
|  |  |  |  |  |  |  | |  |  |
| Information and communications | 2 090  (9.5) | 1 670  (-24.1) | 1 930  (-5.5) | 2 290  (31.8) | 2 460  (49.6) | 2 790  (67.6) | | 2 780  (44.2) | 3 020  (31.9) |
|  |  |  |  |  |  |  | |  |  |
| Financing, insurance, real estate, professional and business services | 15 080  (15.9) | 12 980  (-11.4) | 14 000  (13.3) | 16 000  (22.5) | 17 330  (45.0) | 16 580  (27.7) | | 17 020  (21.6) | 18 540  (15.9) |
|  |  |  |  |  |  |  | |  |  |
| Social and personal services | 15 630  (38.3) | 11 970  (5.1) | 13 550  (16.3) | 17 570  (52.9) | 19 430  (82.3) | 18 410  (53.8) | | 21 370  (57.8) | 26 270  (49.5) |
|  |  |  |  |  |  |  | |  |  |
| *of which:* |  |  |  |  |  |  | |  |  |
| *Human health services* | *3 740*  *(68.4)* | *2 410*  *(3.0)* | *2 160*  *(3.6)* | *4 840*  *(113.8)* | *5 540*  *(152.9)* | *5 050*  *(109.8)* | | *5 860*  *(171.7)* | *9 380*  *(94.1)* |
|  |  |  |  |  |  |  | |  |  |
| Manufacturing | 1 030  (45.4) | 690  (-9.0) | 940  (24.4) | 1 150  (50.7) | 1 350  (139.5) | 1 400  (103.6) | | 1 640  (74.8) | 1 830  (59.7) |
|  |  |  |  |  |  |  | |  |  |
| Construction sites (covering manual workers only) | 190  (-22.0) | 80  (-84.3) | 250  (2.5) | 160  (14.7) | 260  (232.1) | 270  (244.9) | | 630  (153.6) | 640  (291.5) |
|  |  |  |  |  |  |  | |  |  |
| **All establishments surveyed in the private sector(b)** | **50 080**  **(28.9)** | **39 350**  **(-6.9)**  **<14.2>** | **45 440**  **(16.2)**  **<13.9>** | **54 560**  **(40.2)**  **<15.7>** | **60 980**  **(74.0)**  **<15.6>** | **53 700**  **(36.5)**  **<-10.1>** | | **62 500**  **(37.5)**  **<14.6>** | **74 840**  **(37.2)**  **<14.7>** |
|  |  |  |  |  |  |  | |  |  |
| *Civil service(c)* | *15 660*  *(24.6)* | *15 140*  *(42.0)* | *15 540*  *(37.3)* | *15 960*  *(20.6)* | *15 980*  *(6.3)* | *16 800*  *(10.9)* | | *17 490*  *(12.5)* | *18 230*  *(14.2)* |
|  |  |  |  |  |  |  | |  |  |

Notes : (a) Accommodation services sector covers hotels, guesthouses, boarding houses and other establishments providing short-term accommodation.

(b) The total figures on private sector vacancies cover also vacancies in mining and quarrying; and in electricity and gas supply, and waste management, besides vacancies in the major sectors indicated above.

(c) These figures cover only vacancies for those staff to be employed on civil service terms of appointment.

(  ) % change over a year earlier.

< > Seasonally adjusted % change compared with the level three months ago.

Sources : Quarterly Survey of Employment and Vacancies, Census and Statistics Department.

Quarterly Employment Survey of Construction Sites, Census and Statistics Department.



6.15 Information on job vacancies in the private sector received by the Labour Department (LD) could provide some indications on the latest developments in the labour market. The number of such vacancies decreased by 8% from the preceding quarter to a monthly average of 101 200 in the fourth quarter of 2022, and was 6% lower than the level a year earlier.

**Wages and earnings**

6.16 Growth in nominal wages and labour earnings generally accelerated in the first three quarters of 2022. The year-on-year increase in average nominal wage rate, as measured by the nominal wage index for all selected industry sections which covers regular payment to employees at the supervisory level or below, accelerated from 1.8% in March to 1.9% in June and further to 2.3% in September. After discounting for headline *inflation*(7), wages fell by 6.0% in real terms in September 2022, as the year-on-year increase in the headline Consumer Price Index (A) in the respective period was enlarged by the low base of comparison caused by the Government’s one-off relief measures implemented a year earlier.

6.17 The average nominal wage rates in all selected sectors saw year-on-year increases in September 2022, particularly for financial and insurance activities (up 3.3%), real estate leasing and maintenance management (up 2.9%), transportation (up 2.6%) and professional and business services (up 2.5%). Analysed by occupation, all occupations recorded increases in average nominal wage rates, more visibly for clerical and secretarial workers (up 3.0%), operatives (up 2.9%) and miscellaneous non-production workers (up 2.8%).

6.18 *Labour earnings*(8), as measured by the index of payroll per person engaged for all selected industry sections which covers basic wage, overtime pay, discretionary bonuses and other irregular payments, showed an accelerated nominal year-on-year increase of 2.0% in the third quarter of 2022 after the increases of 0.8% in the first quarter and 1.7% in the second quarter. After discounting for headline inflation, labour earnings decreased by 0.7% in real terms in the third quarter, as the year-on-year increase in the headline Composite Consumer Price Index (CCPI) in the respective period was enlarged by the low base of comparison caused by the Government’s one-off relief measures implemented a year earlier.

6.19 Nominal payroll per person engaged in all selected sectors recorded year-on-year growth in the third quarter of 2022, particularly for accommodation and food service activities (up 3.1%), information and communications (up 2.9%), financial and insurance activities (up 2.9%), professional and business services (up 2.9%), and sewerage, waste management and remediation activities (up 2.9%).



Note : The year-on-year rates of change of the CPIs from the fourth quarter of 2020 onwards are computed from the new 2019/20-based series, and those before are from the old 2014/15-based series.

6.20 More recent statistics compiled from the GHS, though not strictly comparable to those from the business establishment surveys, indicated that median monthly employment earnings of full-time employees (excluding foreign domestic helpers) recorded steady growth through 2022, increasing by 5.0% in nominal terms in the fourth quarter. The pace of increase continued to be faster than the headline inflation rate (as measured by the year-on-year rate of change in the headline CCPI) of 1.8%. Meanwhile, the median monthly household income (excluding foreign domestic helpers) increased by 3.3% in the fourth quarter.

**Highlights of labour-related measures and policy developments in 2022**

6.21 In response to the fifth wave of the local epidemic, the Government implemented various measures in 2022 to support the labour market and help the unemployed. Specifically, under the sixth round of the Anti-epidemic Fund, the Government launched the third round of Job Creation Scheme in February 2022. By the end of 2022, around 30 000 jobs were created, comprising around 20 000 jobs in the government sector and around 10 000 jobs in the non-governmental sector. Separately, the Temporary Unemployment Relief (TUR) Scheme was launched in March 2022 to provide a one-off subsidy of $10,000 to people who have lost their jobs due to the fifth wave of the local epidemic. The TUR Scheme was concluded in July 2022, having disbursed $3.5 billion to about 350 000 persons. Moreover, the 2022 Employment Support Scheme (ESS) was launched to provide wage subsidies to eligible employers for three months from May to July 2022. By the end of 2022, about 170 000 employers received wage subsidies for May to July 2022 totalling $36.6 billion, benefitting 1.57 million employees. Meanwhile, one-off subsidy was granted to 98 000 eligible self-employed persons, involving a total subsidy of over $780 million. Separately, the fifth and sixth tranches of the Love Upgrading Special Scheme were launched by the Employees Retraining Board in January and July 2022 respectively. Each tranche lasted for six months and provided 20 000 training places with allowance.

6.22 To enhance the economy’s competitiveness, the Chief Executive (CE) announced in his 2022 Policy Address an array of measures to proactively attract talents and enterprises from the Mainland and overseas to Hong Kong. Many of these measures have already been put into implementation. In so far as talent attraction is concerned, the online platform of the Hong Kong Talent Engage (HKTE) was launched in December 2022, providing one-stop electronic services for talents from around the world. Dedicated Teams for Attracting Businesses and Talents were also set up in the Government’s Mainland Offices and overseas Economic and Trade Offices to proactively reach out to target enterprises and talents. The Top Talent Pass Scheme was launched on 28 December 2022 to attract talents of high salary and graduates of the world’s top 100 universities to pursue careers in Hong Kong, and various enhancements to the existing talents admission schemes became effective on the same day. Separately, eligible incoming talents will be allowed to, upon becoming Hong Kong Permanent Residents, apply for a refund of the extra stamp duty paid for purchasing residential property in Hong Kong, [subject to the passage of amendments to the Stamp Duty Ordinance](https://www.ird.gov.hk/eng/faq/index.htm#et).

6.23 The Government will also continue to groom local talents. Specifically, the Government will step up STEAM (Science, Technology, Engineering, the Arts and Mathematics) education in primary and secondary schools. Also, the number of University Grants Committee-funded research postgraduate places will be increased by about 1 600 to 7 200 in the 2024/25 academic year. Moreover, the number of subsidised places for self-financing higher-diploma and undergraduate programmes will be increased by 3 000, from 5 000 to 8 000.

6.24 In early 2022 when the local epidemic situation was severe, LD organised online job fairs and continued to provide employment and recruitment services through telephone and online platforms such as the Interactive Employment Service website. As the situation stabilised, LD gradually resumed the organisation of district-based job fairs in LD’s job centres, recruitment activities in industry-based recruitment centres and large-scale job fairs. In 2022, LD organised 10 large-scale physical job fairs and three online job fairs. A total of 241 organisations participated in the physical job fairs, offering more than 15 000 vacancies. Separately, over 8 000 vacancies were provided by 161 organisations joining the online job fairs. The job opportunities were from various industries including retail, property management, catering, transport, etc. LD also organised in 2022 more than 600 district-based job fairs at its job centres offering more than 125 000 vacancies.

6.25 The CE in Council adopted the recommendation of the Minimum Wage Commission (MWC) to raise the Statutory Minimum Wage (SMW) rate from its prevailing level of $37.5 per hour to $40 per hour, an increase of $2.5 or 6.7%. Subject to the approval of the Legislative Council, the revised SMW rate will come into force on 1 May 2023. The CE also tasked MWC to conduct a study on how to enhance the SMW review mechanism, and required MWC to submit a report on the study by end-October 2023.

6.26 The Employment and Retirement Schemes Legislation (Offsetting Arrangement) (Amendment) Bill 2022 to abolish the use of the accrued benefits of employers’ mandatory contributions under the Mandatory Provident Fund System to offset severance payment and long service payment (the offsetting arrangement) was passed by the Legislative Council in June 2022. The Government will implement the abolition of the offsetting arrangement not later than 2025 in tandem with the full operation of the eMPF Platform of the Mandatory Provident Fund Schemes Authority.

**Notes :**

(1) Labour force statistics enumerated from the General Household Survey are statistics which involve the use of the population figures in the compilation process. The statistics of the three-month periods of May – July 2021 to October – December 2021 have been revised to take into account the final end-2021 population estimates.

The classification of occupation adopted by the Census and Statistics Department follows the International Standard Classification of Occupations (ISCO), which is used to classify the occupation of an employed person or the previous occupation of an unemployed person. The occupation classification adopted in the General Household Survey has been enhanced since January – March 2022 to follow the International Standard Classification of Occupations 2008 (ISCO-08) more closely. The series has been backcasted to the quarter of January – March 2016. Starting from the reference quarter of January – March 2016, all the labour force statistics by occupation, unless otherwise specified, are compiled based on the revised classification.

(2) For a person aged 15 or above to be classified as unemployed, he or she should: (a) not have a job and not be performing any work for pay or profit during the reference period (i.e. seven days before enumeration); (b) be available for work during the reference period; and (c) be seeking work during the 30 days before enumeration.

Notwithstanding the above, the following types of persons are also considered unemployed: (a) persons without a job, having sought work but not available for work because of temporary sickness; (b) persons without a job, available for work but not having sought work because they will take up new jobs or start business at a subsequent date, or expect to return to their original jobs; and (c) discouraged workers not having sought work because they believe work is not available to them.

Even at full employment, some frictional unemployment is bound to exist as workers move between jobs in order to obtain better terms of employment. The precise level of unemployment which can be described as purely frictional varies amongst economies, depending on the structure and characteristics of their labour markets.

The seasonally adjusted series is compiled using the X-12 ARIMA method, which is a standard method applied in compiling seasonally adjusted statistical data series.

(3) The main criteria for an employed person aged 15 or above to be classified as underemployed are: involuntarily working less than 35 hours during the reference period (i.e. seven days before enumeration), and either available for additional work during the reference period or seeking additional work during the 30 days before enumeration.

Following these criteria, employed persons taking no‑pay leave due to slack work during the reference period are also classified as underemployed if they had worked less than 35 hours or were on leave for the entire reference period.

(4) The labour force, or the economically active population, is defined to include all persons aged 15 or above who either were engaged in productive work during the reference period (i.e. seven days before enumeration) or would otherwise have been engaged in productive work but were unemployed.

(5) Figures enumerated from household data. The employed population is defined here to include those persons aged 15 or above who performed work for pay or profit or had a formal job attachment during the reference period (i.e. seven days before enumeration).

(6) The low-paying sectors as identified by the Minimum Wage Commission include:   
(i) retail (including supermarkets and convenience stores, and other retail stores);   
(ii) food and beverage services (including Chinese restaurants, non-Chinese restaurants, fast food cafes, Hong Kong style tea cafes, and other food and beverage services);   
(iii) estate management, security and cleaning services (including real estate maintenance management, security services, cleaning services and membership organisations);  
(iv) other low-paying sectors, including  
 - elderly homes;  
 - laundry and dry cleaning services;  
 - hairdressing and other personal services;  
 - local courier services; and  
 - food processing and production.

(7) Different consumer price indices (CPIs) are used for compiling the real indices of labour earnings and wages, taking into account their relevance to the respective occupation coverage. Specifically, the headline Composite CPI, being an indicator of overall consumer prices, is taken as the price deflator for earnings received by employees at all levels of the occupational hierarchy. The headline CPI(A), being an indicator of consumer prices for the relatively low expenditure group, is taken as the price deflator for wages in respect of employees engaged in occupations up to the supervisory level.

(8) In addition to wages, which include all regular and guaranteed payments like basic pay and stipulated bonuses and allowances, earnings also cover overtime pay and other non-guaranteed or irregular bonuses and allowances, except severance pay and long service payment. Because of this difference, as well as the difference in sectoral and occupational coverage, the movements in average earnings, as measured by payroll per person engaged, do not necessarily match closely with those in wage rates.