

Analytical Approaches to Assessing Labour Market Conditions and Implications to Monetary Policy

Analysis on the extent of slack or tightness in the labour market, and whether they are easing or increasing, are key assessments informing the growth and inflation outlook. In Malaysia, the strong economic recovery has contributed to the narrowing of slack in the labour market since the fourth quarter of 2021. Labour market developments and outlook are one of the many pieces of information that the Monetary Policy Committee (MPC) considers before arriving at its decision to raise the Overnight Policy Rate (OPR) in 2022. This article presents new indicators and analytical approaches the Bank has undertaken in assessing labour market conditions since the COVID-19 pandemic.¹ It also discusses nuances that shed light on how reports of labour shortages are viewed against the overall assessment of continuing slack.² Finally, this article provides insights on how labour market developments inform monetary policy considerations in balancing the risks to inflation and growth.

Assessment on labour market slack informs the degree of capacity utilisation³ in the economy. During the pandemic, this was key in deploying adequate support to mitigate the impact of economic shocks

In assessing the strength of the economic recovery and developments in prices, labour market conditions provide crucial pieces of information. Workers' income is a key driver of private consumption, which makes up almost 60% of Malaysia's Gross Domestic Product (GDP). The strength of wage growth is also factored into inflation forecasts, as firms may pass on higher wage costs in the form of higher product prices, particularly if wage acceleration exceeds productivity. Labour utilisation, which measures the degree to which available labour supply is employed, also provides key insights. High labour utilisation (tight labour markets) may prompt employers to raise wages to attract labour supply. On the other hand, slack in the labour market may suggest prevalent labour underutilisation posing risks to growth. Taken together, the extent of slack in the labour market is a key consideration on whether monetary policy adjustments are needed to provide the appropriate conditions for sustainable growth, and low and stable inflation.

Slack in the labour market may be formally defined as the shortfall in demand for labour, relative to the supply of available workers in the economy. This happens when firms require fewer workers given lower demand for goods and services, compared to a relatively abundant labour force who are available and willing to work. When slack or 'spare capacity' prevails in the labour market, this would typically manifest in a high unemployment rate and low wage growth.⁴ This, in turn, points to weaker GDP growth and downward pressure on inflation. Conversely, when the need for labour is higher due to stronger demand for workers beyond what is available, the labour market is said to be tight, with low unemployment and high wage growth. This would indicate stronger GDP growth and upward pressure on inflation. The labour market can be said to be at equilibrium when the demand for labour is roughly equal to the supply of workers. At equilibrium, economic demand matches the amount of goods and services that can be produced with available workers, while employment and wages sustain growth without increasing inflationary pressures. The economy can be said to be operating at 'full employment'.

¹ Assessments contained within this box article are meant to provide insights on the approaches Bank Negara Malaysia has undertaken to assess labour market conditions. Discussions on outlook are limited to Bank Negara Malaysia's assessment on the likely path of improvement for the labour market. They are not intended as guidance and should not be taken to infer future MPC decisions.

² Throughout this article, comparisons are drawn mostly against the US, which has been featured prominently in international discussions on labour utilisation during the pandemic and recovery period.

³ Capacity utilisation measures the intensity with which an economy makes use of its resources, namely labour and capital, to produce output.

⁴ A possible situation in which slack prevails yet unemployment rate is relatively low is when slack manifests itself in the form of higher underemployment or labour force exits. This is discussed later in the article.

The unemployment rate is the most conventional measure of labour utilisation.⁵ A more analytical approach to measuring slack compares the current state of labour utilisation to what it would be if the economy were operating at equilibrium. In this regard, a standard measure is the ‘unemployment gap’, which refers to the difference between the actual unemployment rate, and the estimated non-accelerating inflation rate of unemployment (NAIRU).⁶ However, the COVID-19 pandemic called into question the reliability of unemployment gap estimates, as the economic shock led to a few measurement complications. Specifically, there is difficulty in estimating NAIRU, which is typically estimated using methods such as pure statistical filtering and the commonly-adopted Kalman filter.⁷ Economic shocks, however, tend to result in significant revisions to these NAIRU estimates, rendering them less reliable for policy assessment. Such significant revisions are a common drawback of statistical filters, particularly around turning points in the business cycle.⁸

Measuring slack directly using the unemployment rate during the pandemic shock was also problematic. This arises from the direct and idiosyncratic impact of the pandemic and the impact of the containment measures on the labour market. Beyond increases in unemployment, pandemic-induced shocks led to other sources of labour underutilisation. Restrictions on economic activity and movements resulted in an unprecedented increase in underemployment.⁹ Additionally, many individuals also exited the labour force during the height of the pandemic.¹⁰ These workers would have worked full time under normal economic conditions and might quickly return when demand and hiring conditions improve as restrictions were lifted. Thus, they may still be considered as part of a broader ‘potential’ labour supply when assessing labour utilisation. The normal headline unemployment rate, which only measures the extent the available labour force is employed, does not capture these nuances. Therefore, the unemployment rate is not very descriptive of the true extent of labour market slack during this period.

In view of these issues, several central banks started complementing the conventional unemployment rate in their assessment of labour market slack with supplementary labour utilisation indicators. One approach is to widen the coverage of underutilised workers to include, first, a broader segment of the working age population beyond those who are actively seeking employment, and second, underemployed persons. This was particularly relevant with falling labour force participation and higher incidence of discouraged workers due to the adverse economic shocks. The US Bureau of Labor Statistics (BLS) produces the U-6 unemployment rate (Chart 1), which goes beyond the unemployed to include persons marginally attached to the labour force and part-time employment due to economic reasons.¹¹ Another example is the Eurostat’s labour market slack indicator (Chart 2), which aims to measure the total sum of all unmet need for employment. The unemployment rate is supplemented by an extended labour force, which includes underemployed part-time workers, persons seeking work but are not immediately available, and persons available for work but not seeking work due to the economic downturn.

⁵ The use of the unemployment rate as a measure of slack is underpinned by the Phillips curve relationship, which is the historically observed trade-off between inflation and unemployment. The intuitive explanation is that lower unemployment rates signal higher labour demand, which can put upward pressures on wages and inflation. However, there has also been growing evidence that this relationship has weakened (i.e., flattening Phillips curve) over time; example: Gali and Gambetti (2019).

⁶ Sometimes referred to as ‘structural unemployment’, the NAIRU is theoretically the lowest rate of unemployment that can be sustained (given prevailing economic conditions) without leading to wage increases and consequently inflation. True values of NAIRU are unknown and unobservable.

⁷ Kalman filter is an algorithm that enables estimation of unobservable variables, using a series of observed measurements over time. The estimation is conducted in state-space format, which consists of a ‘signal’ equation (which in this case, relates the unemployment gap and inflation as per the Phillips curve), and a ‘state’ equation (which generally models NAIRU as a random walk).

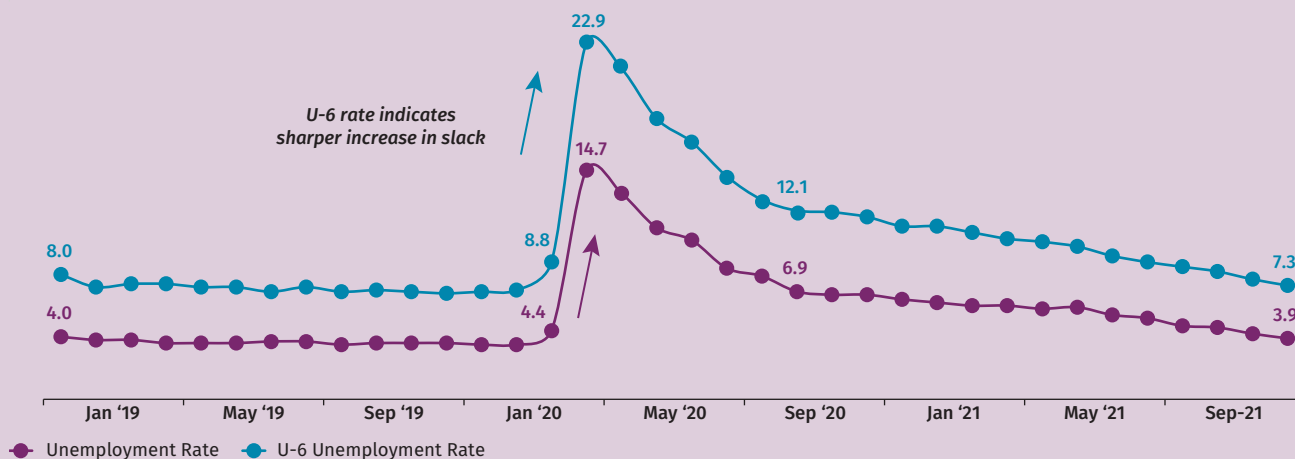
⁸ These issues have caused a rethinking of how to estimate NAIRU, such as incorporating other demand or labour market indicators, and introducing structural breaks. Examples: Ruberl et al. (2021); Guillemette (2021).

⁹ Time-related underemployment is defined as those who were employed less than 30 hours per week due to the nature of their work or because of insufficient work and were able and willing to accept additional hours of work. Source: Department of Statistics, Malaysia.

¹⁰ Likely discouraged by the lack of economic opportunities or inhibited due to increase in caregiving obligations. For further discussion on the impact of the pandemic on the labour market, please refer to “Getting the Great Reset Right: Structural Issues in the Labour Market in the Post-COVID-19 World” in Bank Negara Malaysia’s Economic and Monetary Review 2020.

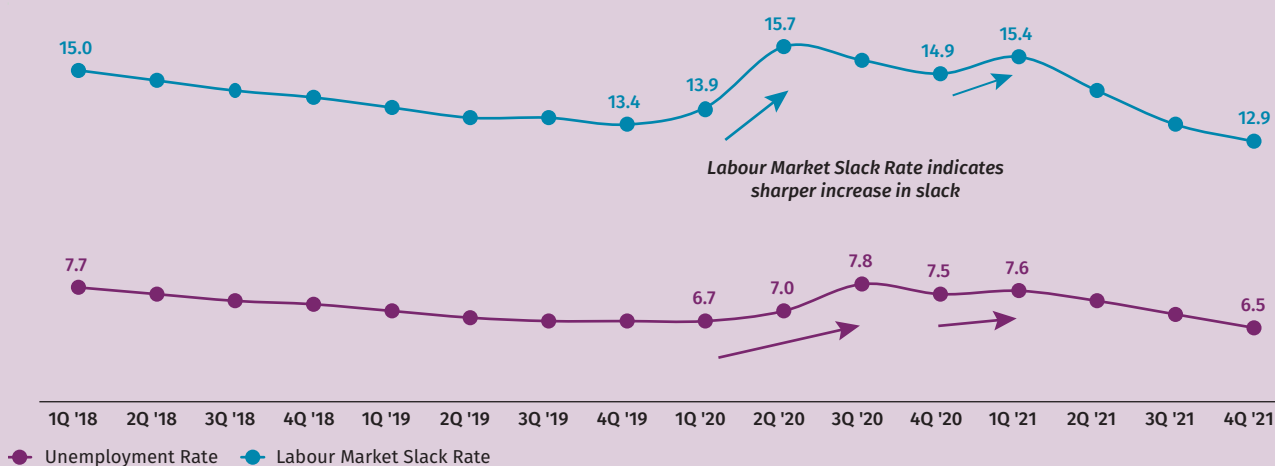
¹¹ Persons marginally attached to the labour force are those who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the past 12 months. Meanwhile, persons employed part-time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule. Both measures are estimated from household survey data. Source: Employment Situation Summary, US Bureau of Labor Statistics.

Chart 1: US: Unemployment Rate vs. U-6 Rate



Source: Federal Reserve Economic Data

Chart 2: EU: Unemployment Rate vs. Labour Market Slack Rate

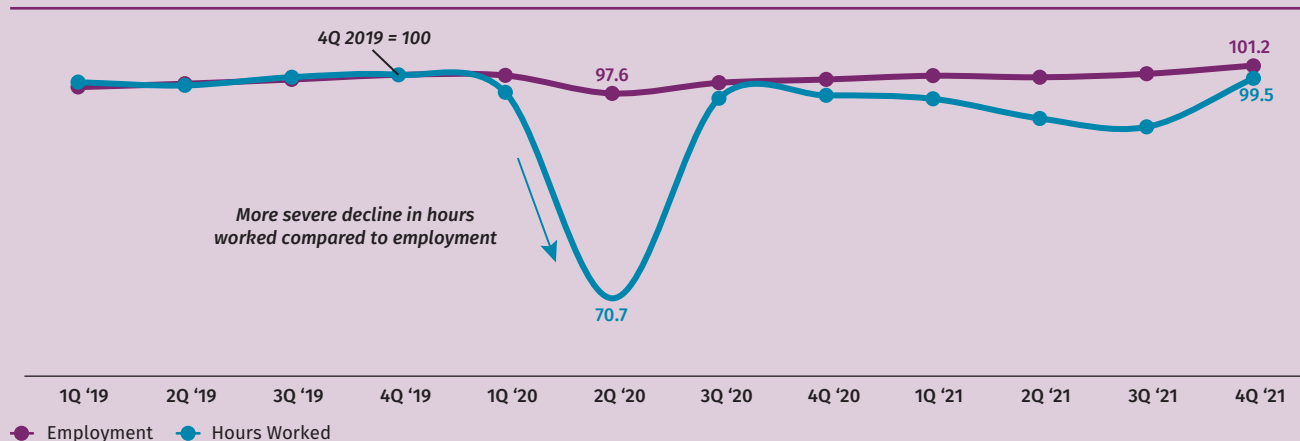


Source: Eurostat

In both cases, the broader measures of underutilisation showed that the impact of containment measures led to significantly greater slack in the labour market than suggested by the unemployment rate. In the second quarter of 2020, for example, while the unemployment rate increased by 10.3 percentage points (ppt) in the US, the U-6 increased more significantly, by 14.6 ppt. Similarly in the EU, the unemployment rate increased only by 0.3 ppt while the labour market slack rate jumped 1.8 ppt. As the pandemic progressed, differences in how these supplementary slack measures evolved demonstrated differing policy choices. In the US, an earlier economic reopening and resumption of economic activities led to steady and synchronised declines in both the unemployment rate and the U-6. Meanwhile, in the EU, re-impositions of containment measures amid the Delta wave led to a second and more pronounced increase in the labour market slack rate in the first quarter of 2021 compared to the unemployment rate. Subsequently, both rates declined steadily as European economies fully reopened.

For Malaysia, the onset of the pandemic resulted in a significant decline in hours worked, following the implementation of the first Movement Control Order (MCO 1.0) in the second quarter of 2020. This decline cannot be fully accounted for by the increase in unemployment alone (Chart 3). In fact, the labour force also suffered a decline, while the population outside the labour force (POLF) increased significantly during the same period

Chart 3: Malaysia: Employment vs. Hours Worked (Indexed, 4Q 2019 = 100)



Note: Y-axis = Indexed levels, with 4Q19 = 100. Indexed levels are estimated by Bank Negara Malaysia staff using data from Department of Statistics, Malaysia.
Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

Chart 4: Malaysia: Labour Force vs. Population Outside the Labour Force (POLF) (Indexed, 4Q 2019 = 100)



Note: Y-axis = Indexed levels, with 4Q '19 = 100. Indexed levels are estimated by Bank Negara Malaysia staff using data from Department of Statistics, Malaysia.
Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

Chart 5: Malaysia: Unemployed vs. Underemployed Workers (Indexed, 4Q 2019 = 100)

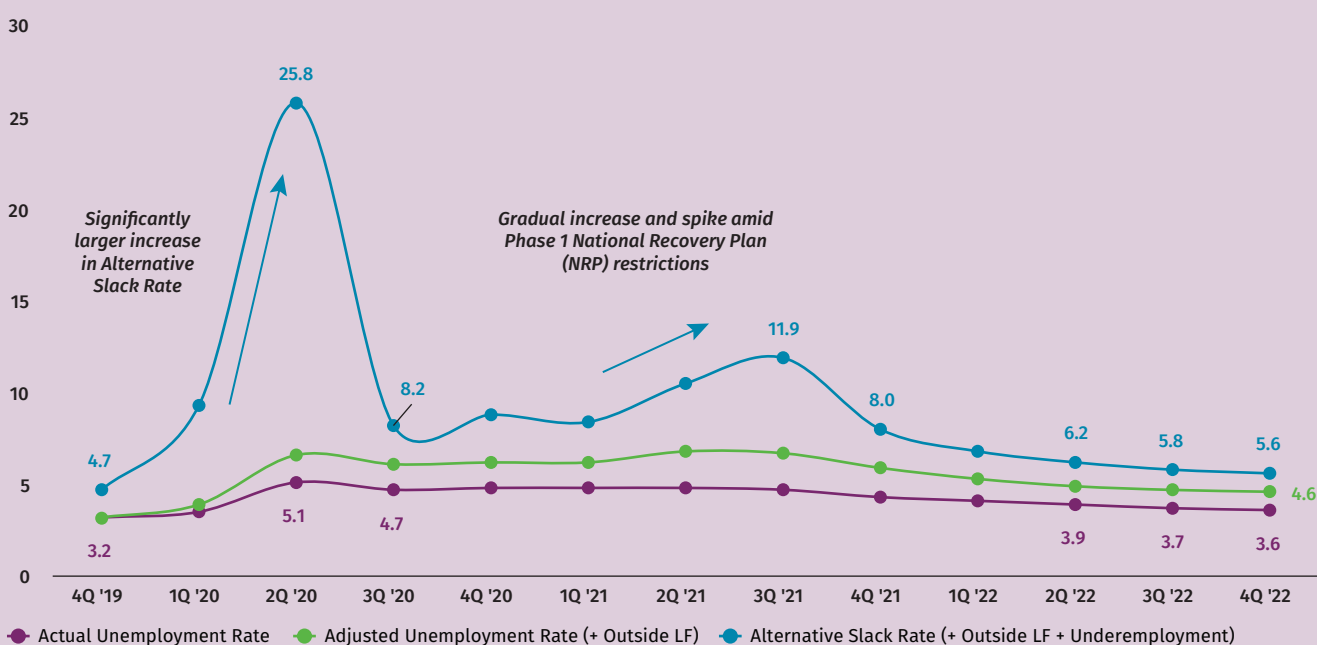


Note: Y-axis = Indexed levels, with 4Q19 = 100. Indexed levels are estimated by Bank Negara Malaysia staff using data from Department of Statistics, Malaysia.
Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

(Chart 4). This likely reflects greater labour force exits, which add to the ‘shadow labour force’.¹² Additionally, the pandemic resulted in a significant increase in underemployed persons among workers who remained employed (Chart 5). Such observations suggest that these groups should be included in broader labour utilisation measures to further account for potential spare capacity.

To better account for the situations described above, the Bank developed supplementary labour utilisation rates by adding to the pool of unemployed workers: i) workers who exited the labour force due to the pandemic to derive the ‘adjusted unemployment rate’, and; ii) workers who became underemployed to derive the ‘alternative slack rate’. Both measures are expressed as a proportion of a ‘potential’ labour force¹³ (Chart 6).

Chart 6: Malaysia: Unemployment Rate vs. Supplementary Labour Utilisation Rates



Note: Adjusted Unemployment Rate and Alternative Slack Rate are estimated by Bank Negara Malaysia staff using data from Department of Statistics, Malaysia. Bank Negara Malaysia estimates of underemployment include employed persons who were temporarily not working due to movement controls.

Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

Similar to the advanced economies (AEs), these broader measures of labour utilisation suggest that slack increased much more significantly than indicated by the unemployment rate during the onset of the pandemic in the second quarter of 2020. When restrictions were progressively tightened beginning the fourth quarter of 2020 amid the Delta wave, the alternative slack rate rose steadily. It spiked further when containment measures were re-imposed under National Recovery Plan (NRP) Phase 1 in the third quarter of 2021. In both periods, the spikes were noticeable despite the relatively flat unemployment rate. Since the gradual lifting of restrictions in the fourth quarter of 2021 and full reopening of economic activities in the first quarter of 2022, the unemployment, adjusted unemployment, and alternative slack rates declined simultaneously. This was in line with improvements in other headline labour market indicators.¹⁴ As the recovery continues and economic activity strengthens further, it is expected that all three measures of labour utilisation would improve and converge to pre-pandemic levels.

¹² The ‘shadow labour force’ is defined as persons who are not looking for work but may do so if the job market recovers. This group would not be accounted for in the unemployment rate under formal and internationally adopted standards. This is because by not looking for work, the ‘shadow labour force’ is not defined to be in the labour force, and therefore this group is not considered to be unemployed. The International Labour Organization (ILO) defines unemployment as the share of the labour force that is without work but available for and seeking employment.

¹³ ‘Potential’ labour force = Labour force + ‘Shadow labour force’ (i.e., increase in population outside official labour force due to COVID-19)

¹⁴ These include rising employment, labour force expansion, and decline in the population outside labour force.

For Malaysia, while slack is diminishing in 2022, labour market conditions are far from tight, as evidenced by forthcoming labour supply and relatively moderate wage recovery

Towards the end of 2021 and in 2022, the focus of labour market analyses globally shifted from establishing the extent of slack, towards assessing the extent of tightness in the labour market. This shift took place following the steady reopening of economies – first with the AEs beginning in mid-2021, followed by emerging market economies (EMEs) at end-2021 and early-2022. The pickup in economic activity and spending had led to strong labour demand amid labour shortages, leading to tightening labour markets and escalating wage growth, particularly in the AEs. Coupled with the on-going supply constraints¹⁵ and escalating commodity prices, tight labour market conditions resulted in a quick rise in inflationary pressures globally.¹⁶ In the US, as economic activities rebounded, strong demand and escalating consumer prices were accompanied by unemployment falling below pre-pandemic rates (Dec 2022: 3.5%; 2015-2019 average: 4.4%), increasing reports of labour shortages,¹⁷ and heightened labour demand. Taken together with decades-high wage growth,¹⁸ these developments indicate rapidly increasing labour market tightness. This is due mainly to constraints on labour supply, attributable to a surge in excess retirements¹⁹ and decline in immigration to the US.²⁰ Labour force re-entries have been further constrained by health issues ('Long-COVID'²¹) and the so-called 'Great Resignation'.²² This is evidenced by the labour force participation rate which has remained below pre-pandemic levels (62.3% in Dec 2022; 4Q 2019: 63.3%).²³

In assessing the extent of tightness, the unemployment rate is complemented by measures to gauge the strength of labour demand and turnover, like the unemployment-to-vacancies and quits rates. In recovering from the crisis, these indicators demonstrated improvement in the labour market at varying paces, which is a departure from trends before the pandemic, when labour market indicators tended to move together relatively consistently. Differing recovery dynamics aside, another consideration is determining suitable thresholds beyond which a certain indicator signals slack or tightness. A simple example of such a threshold is comparing against the pre-pandemic level, such as the fourth quarter of 2019 or the 2015-2019 average. This is commonly used as a quick method to assess the extent of labour market recovery and by extension, the pace at which slack in the labour market is reducing. In the context of recovery, however, analysis has shifted from using simple averages to determining a range in which the labour market is roughly in balance. For this, a statistical threshold may be used, by comparing standardised measures of various indicators against a 'normal' range of historical observation. Thresholds for slackness or tightness would then border this 'normal' range, which typically aims to capture approximately 95% of historical observations.

Taking the case of the US labour market again (illustrated in Chart 7), the unemployed-to-job openings and quits rates exhibited faster improvement in 2021, approaching tightness thresholds earlier compared to the unemployment rate. Towards the end of the sample period, the quits and job openings rates breached the

¹⁵ Supply chains were disrupted by COVID-19 lockdowns restricting labour movement and production activity since mid-2020. Subsequently, these supply constraints were exacerbated by the military conflict in Ukraine through blockage of shipments from Ukraine and sanctions imposed on Russia, and the COVID-19 resurgence in China.

¹⁶ Headline inflation had been trending upwards from the first quarter of 2021 until the third quarter of 2022. This is especially apparent in the advanced economies and reflects the higher energy prices in Europe and more persistent core inflation globally.

¹⁷ As of November 2022, the Federal Reserve Beige Book still notes that labour markets are tight, despite easing hiring and retention difficulties.

¹⁸ As of the fourth quarter of 2022, growth in Employment Cost Index (ECI) is 5.1% (2010-2019 average: 2.2%). The Employment Cost Index is a quarterly measure of the change in price of labour, defined as compensation per hour worked. It is an indicator of cost pressures within companies that could lead to price inflation for finished goods and services.

¹⁹ Montes et al. (2022) showed that more than half of the increase in retired share of population are 'excess retirements' that would likely not have occurred in the absence of the pandemic. According to the Federal Reserve (2023), potential factors behind the excess retirements are health concerns, difficulty in getting re-employed for older workers, and increases in wealth fueled by stock market gains.

²⁰ In 2020 and 2021, the number of immigrant visas issued at foreign service posts plummeted (2021: 285,069; 2020: 240,526; 2019: 462,422). This has since rebounded to 493,448 in 2022. Source: U.S. State Department.

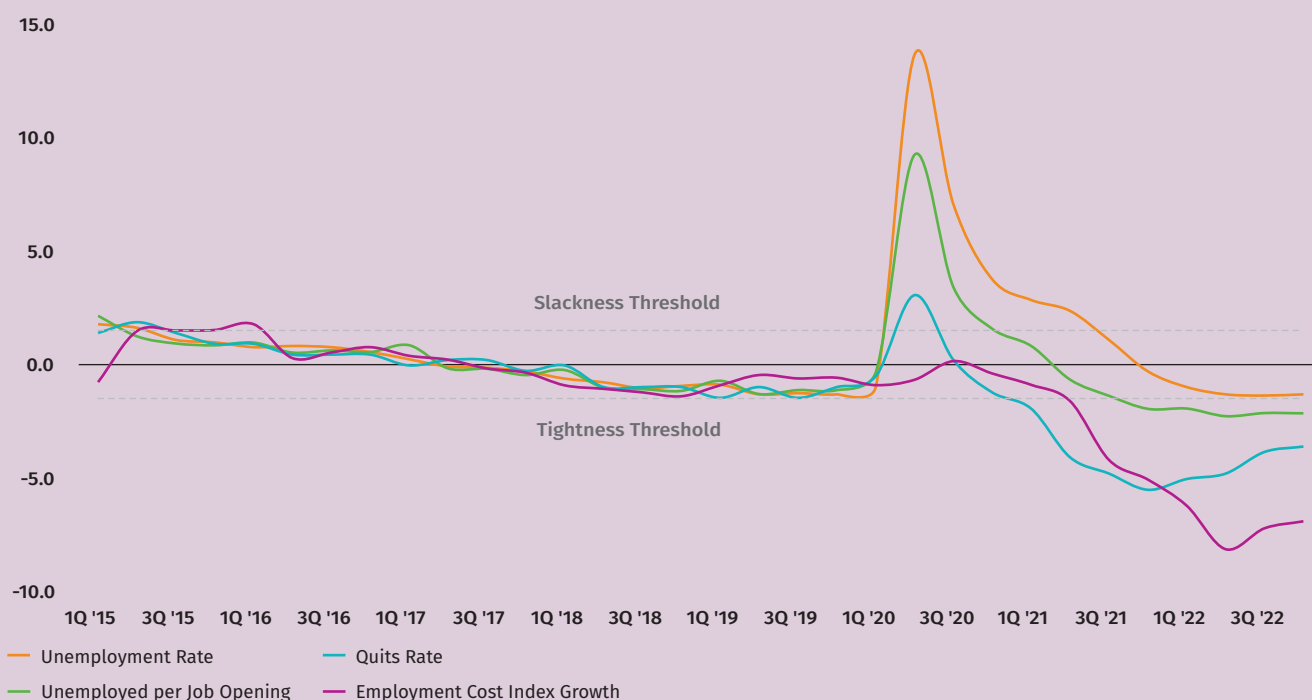
²¹ Long COVID, otherwise known as Post-COVID conditions, is a wide range of new, returning, or ongoing health problems that people experience after being infected with the virus that causes COVID-19. Source: Centers for Disease Control and Prevention.

²² The Great Resignation is the observed phenomenon in which a high volume of workers have quit or voluntarily resigned from their jobs. Empirical studies by the Federal Reserve Bank of Cleveland (Sahin and Tasci, 2022) and the US Bureau of Labor Statistics (Gittleman, 2022) reveal that while quits are typically higher during a recovery period, the recent quits rates in the US are higher than expected from the labour market tightness. Other than possibly contributing to higher labour force exits, this phenomenon is accompanied by higher job-to-job movements, which also affects stability of labour supply.

²³ While participation for prime-age (25 to 54-year-old) workers has mostly returned to pre-pandemic levels, further increases would likely only gradually reduce the overall labour force shortfall, as the reversal of excess retirements seems unlikely at the current juncture. Therefore, overall labour force participation rate is expected to remain below its pre-pandemic level. Source: The Federal Reserve (2023).

tightness threshold and were much more consistent with decades-high wage growth. These developments suggested the labour market was tighter than indicated by the unemployment rate alone. Thus, indicators like the quits and job openings rate should also be given due consideration in assessing labour market tightness going forward in addition to the unemployment rate, at least in the case of the US.

Chart 7: US: Indicators of Labour Market Tightness (Standardised, Z-scores)



Note: Higher value indicates more slack. Means and standard deviations are calculated based on 2015-2019 observations. Z-scores for the quits rate and Employment Cost Index (ECI) growth are inverted.

Source: Federal Reserve Economic Data, U.S. Bureau of Labor Statistics, and Bank Negara Malaysia estimates

For Malaysia, since the economy was fully reopened and restrictions were lifted beginning fourth quarter of 2021, economic activity rebounded strongly. In the labour market, the unemployment rate declined steadily, amid strong employment recovery momentum.²⁴ Private sector wage growth²⁵ also started showing improvements, trending closer to and eventually exceeding pre-pandemic averages in the second and third quarter of 2022. Despite unemployment remaining above pre-pandemic levels, recovering demand conditions amid a robust employment recovery raised concerns over whether the labour market was tight and would fuel further inflationary pressures.²⁶ In particular, there were rising concerns over whether wage pressures would become excessive, amid factors such as the substantial hike in minimum wage,²⁷ reports of labour shortages, and strengthening labour demand.

Overall, the indicators do suggest that slack is lessening as the labour market strengthens and economic activity improves. Evidence suggesting tightness, however, is mixed (Chart 8). While the unemployment-to-vacancies ratio moves closer to the tightness threshold, the unemployment rate continues to suggest that slack prevails. A key factor underlying the difference between Malaysia and the US is labour supply. While the US faces labour constraints, labour supply in Malaysia has remained relatively forthcoming as evidenced by the labour

²⁴ Seasonally adjusted month-on-month employment growth was 0.25% on average between January and December 2022, while the pre-pandemic average is 0.15%.

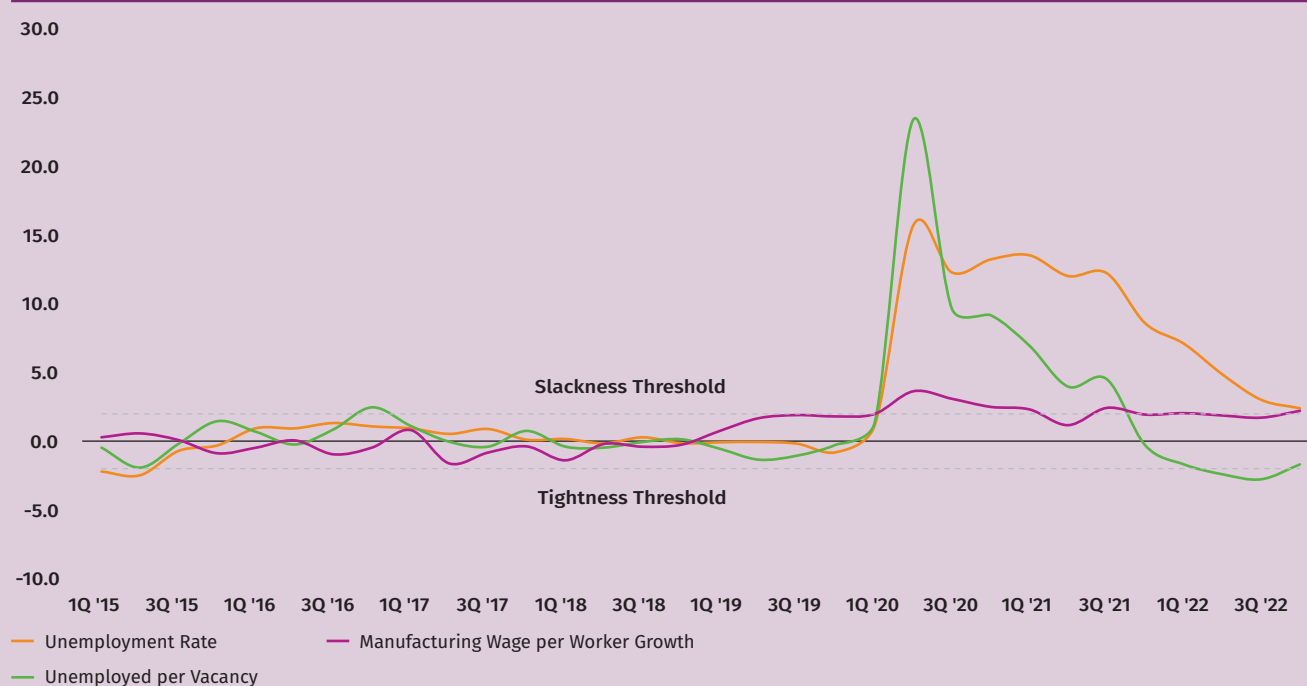
²⁵ Refers to nominal aggregate wages in the *manufacturing* and *services* sectors. Average wages per worker growth remained below pre-pandemic averages except in the third quarter of 2022.

²⁶ Average inflation rate was 2.5% and 4.2% in 1H and 2H 2022 respectively (2015-2019 avg.: 1.9%).

²⁷ In 2022, the minimum wage was increased from RM1,100 (or RM1,200 in major urban areas) to RM1,500, which took effect on 1 May 2022 for large, medium, and small enterprises. For micro-enterprises, the order has been delayed to 1 July 2023.

force participation rate rising steadily to 69.5% of the working-age population in the fourth quarter of 2022, even exceeding the pre-pandemic rate (4Q 2019: 69.1%). Compared to the US where many of the labour force exits were driven by retirements, exits from the Malaysian labour force were mainly attributed to temporary factors, such as the lack of economic opportunities or increase in caregiving obligations²⁸ during the pandemic. As restrictions were lifted, many of these workers returned to the labour force as economic activity picked up. The more conclusive indicator, however, is wage growth itself. Although it improved in 2021, wage per worker growth has trended around slackness threshold for most of the year in 2022.

Chart 8: Malaysia: Indicators of Labour Market Tightness (Standardised, Z-scores)



Note: Unemployed per vacancy is estimated by Bank Negara Malaysia staff using data from Department of Statistics, Malaysia and JobStreet. Means and standard deviations are calculated based on 2015-2019 observations. Z-scores for manufacturing wage per worker growth are inverted.

Source: Department of Statistics, Malaysia, JobStreet, and Bank Negara Malaysia estimates

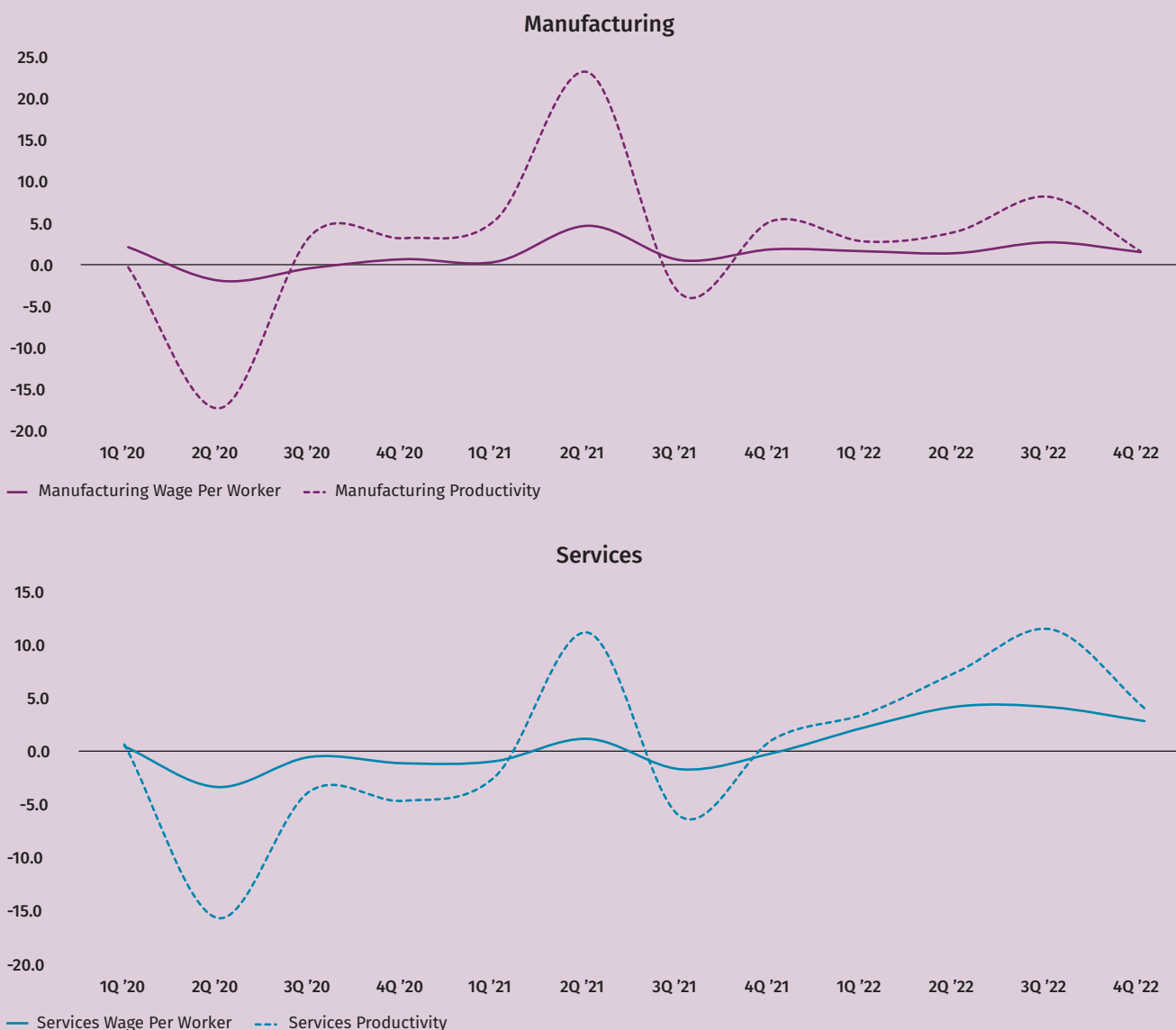
Additionally, improvements to wages have been much less forthcoming compared to production (Chart 9). In the *manufacturing* sector, the translation from strong production performance since the fourth quarter of 2021 to aggregate wage growth has remained relatively muted throughout 2022. In June-September 2022, for example, despite production performance growing by 2-3 times of its pre-pandemic rate, aggregate manufacturing wage growth remained below the 2015-2019 average.²⁹ For the *services* sector, the more recent above-average aggregate wage growth has brought nominal wage to just exceed pre-pandemic level in the second quarter of 2022. Wage improvements seen thus far are assessed to be mainly driven by the robust employment recovery and strong production activity, while the risk of excessive wage growth momentum is assessed to be minimal.³⁰ Wages in the *services* sector also benefitted from the reopening of international borders and resumption of tourism-related activities, as employers sought to scale up their operations amid increasing demand.

²⁸ MCO 1.0 included the closure of all nurseries, kindergartens, government and private schools.

²⁹ On a year-on-year basis, manufacturing wages only grew by 5.4-7.5% in June-September 2022 (2015-2019 average: 7.3%), despite manufacturing production index growing by 10.4-15.2% (2016-2019 average: 4.7%).

³⁰ On a seasonally-adjusted quarter-on-quarter basis, private sector wage growth momentum slowed towards the end of the year (4Q 2022: -0.2%; 2015-2019 average: 1.3%).

Chart 9: Productivity vs. Wage Per Worker Year-on-Year Growth, Manufacturing and Services Sectors



Note: The dip in year-on-year productivity growth in the second quarter of 2020 was a result from the contraction in GDP following the imposition of MCO 1.0, which was significantly larger than the contraction in employment in the same period. The subsequent spike in the second quarter of 2021 reflects productivity improvements from the recovery in GDP, and also corresponds to the low base in the second quarter of 2020.

Source: Department of Statistics, Malaysia and Bank Negara Malaysia estimates

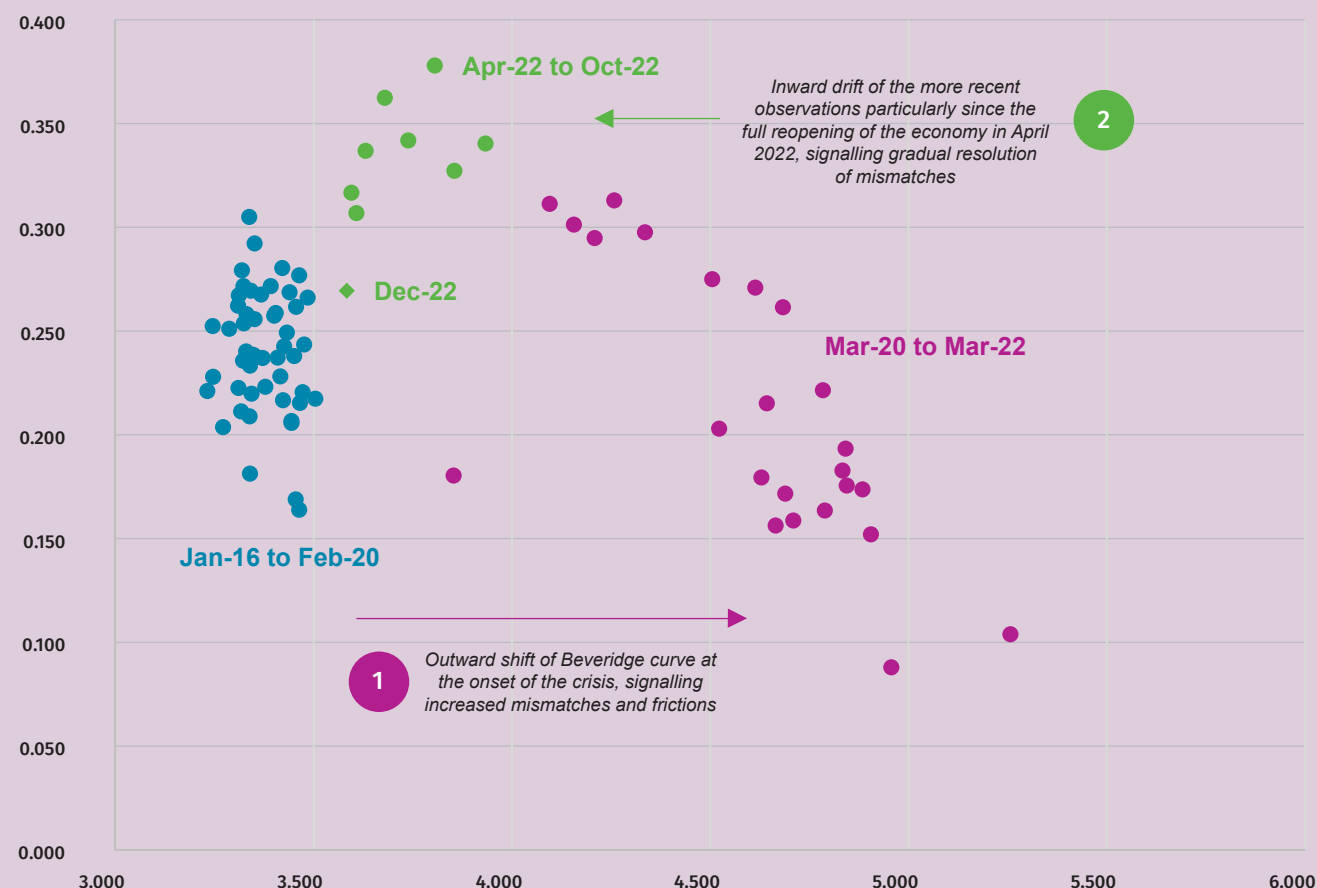
News reports and the Bank’s engagements with industry players³¹ suggested that employers were facing substantial hiring difficulties, particularly in the low- to mid-skilled occupations. This was due in large part to foreign worker shortages, mainly in the agriculture, construction, and selected manufacturing industries, as a large number of them exited the country during the pandemic. These shortages have affected firms’ ability to fully meet the recovery in demand, and firms indicated that this situation had prompted them to advertise higher wages to attract local workers. Nonetheless, this has not led to any noticeable broad-based acceleration in the growth of individual wages.³² These shortages are likely a result of frictions in certain labour market segments, amid the delay in foreign worker entries earlier in the year. A review of the Beveridge

³¹ Direct engagements with the business community under Bank Negara Malaysia’s Regional Economic Surveillance programme are built on mutual trust and insights gained are treated with strict confidentiality.

³² In the third quarter of 2022, private wage per worker growth was 3.6%, which is only slightly higher than the 2015-2019 average of 3.3%. In the fourth quarter of 2022, it moderated to 2.4%.

Curve³³ showed an apparent outward shift (Chart 10), corresponding to higher unemployment rates for a given vacancy rate in the economy. Combined, these observations implied mismatches are elevated in the labour market, leading to hiring difficulties despite the pool of underutilised workers. Going forward, most of these shortages are expected to dissipate with the gradual re-entry of foreign workers and normalisation in labour demand. In the second half of 2022, the Bank’s engagements with industry players indicated that hiring difficulties were easing upon the gradual return of foreign workers. This is also seen in the gradual inward drift of more recent observations in the Beveridge Curve, alluding to mismatches in the economy being progressively resolved.

Chart 10: Beveridge Curve (Job Vacancy Rate vs. Unemployment Rate), Jan-16 to Dec-22



Note: X-axis = Unemployment rate; Y-axis = Job vacancy rate. Job vacancy rate = ratio of vacancies to total labour demand. Total labour demand is estimated by Bank Negara Malaysia staff as the sum of job openings from JobStreet and private employment from Department of Statistics, Malaysia.

Source: Department of Statistics, Malaysia, JobStreet, and Bank Negara Malaysia estimates

At the same time, the direct impact felt from the minimum wage hike was relatively muted, as some employers had already adjusted wages due to labour shortages in some segments. Less than 15%³⁴ of employees were estimated to have been directly affected by the hike. Given that these workers are concentrated on the lowest end of the wage spectrum, the impact to aggregate wages is not likely to be large. Where cascading impacts from the minimum wage increase is concerned, engagements with industry players³⁵ suggests that this is also contained to selected groups, and the quantum is relatively modest.

³³ The Beveridge curve captures the inverse relationship between the job vacancy rate and the unemployment rate. Moving from upper left to lower right along the curve, higher vacancy rates and lower unemployment rates correspond to a tight labour market, and vice versa. Meanwhile, shifts to the entire curve reflect changes in job matching efficiency. An outward/right-ward shift, for instance, indicates a higher unemployment rate for a given vacancy rate. This, in turn, implies lower efficiency in allocating available workers to vacant job positions, or higher mismatches.

³⁴ Bank Negara Malaysia estimates based on limited-release data on the distribution of wages among private sector employees shared bilaterally by the Employees Provident Fund (EPF).

³⁵ Please refer to the mini-box titled "Industry Engagements: Insights on Key Labour Concerns" later in this section.

In summary, there is limited evidence from the data to suggest that Malaysia’s labour market is tight, particularly when compared to the experience of other countries such as the US (Table 1). Overall, slack is assessed to still prevail in the Malaysian labour market, although the extent of slack is narrowing. While labour demand has strengthened amid the increase in economic activity, wage growth remains relatively moderate, as labour supply continues to remain forthcoming. Critical labour shortages are assessed to be limited to certain labour market segments. Additionally, structural factors in the labour market also contribute to reducing the flexibility of wages in adjusting to higher labour demand and prices (discussed in further detail in the next segment).

Table 1

Summary of Labour Market Developments, Malaysia vs. US

	Malaysia	US
Overall assessment	Declining slack in the labour market. There is limited evidence of tightness, however, as wage recovery remains relatively moderate, largely attributable to forthcoming labour supply.	Clear indications of tight labour market. The unemployment rate close to historical low (since 1950s) and wage growth at historical highs (since early 2000s), largely due to labour constraints.
Unemployment	While improving, as of December 2022, both the unemployment rate and alternative slack rate have remained above pre-pandemic average since its peak in May 2020.	Both the unemployment rate and U-6 rate have fallen below pre-pandemic 2015-2019 average since November 2021.
Labour force participation rate (LFPR)	Labour force reverted to pre-crisis levels as early as July 2020. LFPR exceeded the pre-pandemic level in November 2021 and has increased steadily since then.	Labour force recovery is on-going but constrained as many workers retired during the pandemic. Although labour force levels just returned to pre-pandemic levels in August 2022, the LFPR has not returned to its pre-pandemic rate since the trough in April 2020.
Wage growth	Wage growth has picked up but remains well within 'normal' range of historical observation. While wages are recovering, improvements to wage growth lag that of production and labour productivity.	Wage growth has trended higher and remains above the 'normal' range of historical observation. Additionally, year-on-year labour productivity growth has been on a declining trend.

Industry Engagements: Insights on Key Labour Concerns

During the pandemic, the Bank ramped up its efforts to engage with industry, to better understand how evolving developments affect economic agents on the ground, in the absence of real-time macro data on various issues.³⁶ Six cycles a year, the Bank’s Regional Economic Surveillance (RES) team conducts field interviews and surveys with the business community. Insights gained from these engagements supplement analytical assessments and forecasts that are discussed at the Monetary Policy Committee (MPC) meetings. These included labour-related issues such as the extent of the labour shortages, the impact of these shortages and the minimum wage hikes on business operations, production and costs. These insights are summarised in Table 2.

³⁶ For further details and examples on how the Bank’s industrial engagements support surveillance and research activities, please refer to the box article titled “Taking the Pulse of the Economy during the Pandemic” in Bank Negara Malaysia’s Annual Report 2021.

Table 2a: Insights on Labour Market Issues from Industrial Engagements

Hiring intentions and labour shortages

- Hiring intentions improved and remained favourable throughout 2022, despite increased hiring difficulties and labour costs (Chart 11).
- Hiring difficulties were mainly concentrated in the low- and mid-skilled occupations. Shortages in foreign workers were mainly in the *agriculture* and *construction* sectors, and selected manufacturing activities. As economic recovery picked up, shortages extended to mid-skilled services occupations as well, for example, sales associates and workers for food and beverages (F&B) and accommodation facilities.
- These difficulties led to various challenges including rerouting of orders, labour poaching, and inability to fully capitalise on the recovery in demand.
- In the absence of foreign workers, firms' primary coping mechanisms were to increase hours for existing staff, raise advertised wages, and automate production processes.
- These difficulties have started to ease towards the end of the year, as firms corroborated reports of gradual re-entries of foreign workers, with the reopening of borders (Chart 12).

Chart 11: Hiring Intention Outlook Index

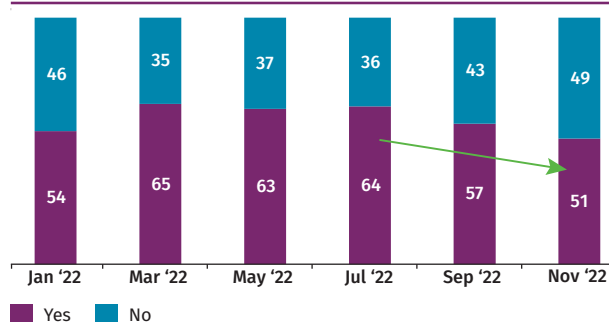


Dec '19 May '20 Oct '20 Mar '21 Aug '21 Jan '22 Jun '22 Nov '22

Note: Participants were surveyed on hiring intentions outlook for 3 months ahead. A higher value indicates greater hiring intentions.

Source: RES Industrial Engagements

Chart 12: Difficulty in Hiring (% of Respondents)



Jan '22 Mar '22 May '22 Jul '22 Sep '22 Nov '22

Note: Firms surveyed were asked whether they face any difficulties in getting workers.

Source: RES Industrial Engagements

Table 2b: Insights on Labour Market Issues from Industrial Engagements

Lack of high-skilled talent

- The pandemic resulted in more companies digitalising their businesses, adopting technological solutions and automating routine and repetitive processes.
- This has resulted in increased need for information technology (IT) and tech talent across a broad range of sectors.
- While shortages of high-skilled talent with specialised skills have been a key concern for some time, these shortages became more apparent during the period of recovery from COVID-19.

Impact of minimum wage increase³⁷

- Most firms engaged were directly affected³⁸ by the minimum wage hike, but to varying degrees. Smaller firms in less urbanised areas had larger shares of their work forces earning less than RM1,500.
- The impact of the minimum wage hike may also extend to workers who were earning close to the new minimum wage. On this, larger firms in more urbanised regions reported they were more likely to undertake cascading wage adjustments.
 - Around half of the firms surveyed reported that they would conduct immediate cascading adjustments in 2022. This adjustment is expected to only affect a limited segment of workers.³⁹
 - Among the remaining half, some firms indicated that adjustments would take place during the increment cycle in 2023 instead, if at all.
- Some firms opted to consolidate variable pay and allowances to comply with the new minimum wage requirements and expand workers' job scopes to improve productivity.

³⁷ The national minimum wage level was raised to RM1,500 beginning in May 2022, from the previous RM1,100 (RM1,200 for selected cities and municipalities).

³⁸ This meant that the firm had workers earning below RM1,500 prior to the minimum wage hike.

³⁹ The cascading adjustment is mainly concentrated among those earning below RM3,000. The quantum is expected to be a flat rate of RM100 to RM300, with those earning higher getting a lower adjustment.

Slack in the labour market is expected to narrow further in 2023, albeit at a more gradual pace as conditions normalise. Monetary policy would continue to support sustainable growth while managing risks to inflation

Improvement and lessening slack in the labour market alongside strengthening economic activity was a key consideration in the Bank’s decision to gradually raise the OPR in 2022. In assessing the growth-inflation trade-off, risks to inflation must also be considered. Generally, a key inflation-related concern in an environment of both rising consumer prices and nominal wages is the risk of a wage-price spiral. This occurs when there is a self-reinforcing loop in which inflation leads to higher wage growth, fuelling even higher consumer prices through greater wage costs and demand for higher wages. However, the risk of a wage-price spiral for Malaysia is remote, due to a few key factors. Firstly, real private wage per worker growth has been negative throughout most of 2021 and 2022 (-3.7% and -0.1%, respectively, for the *services* and *manufacturing* sectors), indicating real wages remain below pre-pandemic levels for the individual worker. As such, a catch-up in wages is not likely to pose significant wage-price spiral risks. This is given the considerable gap between wages and prices, which allow nominal wages to catch up without leading to significant demand-driven pressures on wages.⁴⁰ Second, unit labour costs⁴¹ have been on a declining trend throughout 2021 and 2022 (Chart 13), due to productivity outpacing wage growth. This reflects higher production efficiency, whereby lower wages are needed per unit of production.

Third, structural features restrain the risk of excessive wage growth. In particular, the relatively low wage bargaining power of workers slows the adjustments of wages to factors like inflation and productivity. For example, this includes the absence of wage indexation⁴² practices, which reduces the flexibility of wages in adjusting to higher labour demand and prices. Additionally, unionisation and collective bargaining are limited in Malaysia. As of 2019, union membership across government, the private sector and statutory bodies comprises only around 6.3% of total employment.⁴³ This is in contrast to the 9.8% in the US, as well as other EMEs such as Indonesia (13.0%), India (19.8%), and Vietnam (49.6% in 2018).⁴⁴

Chart 13: Unit Labour Costs

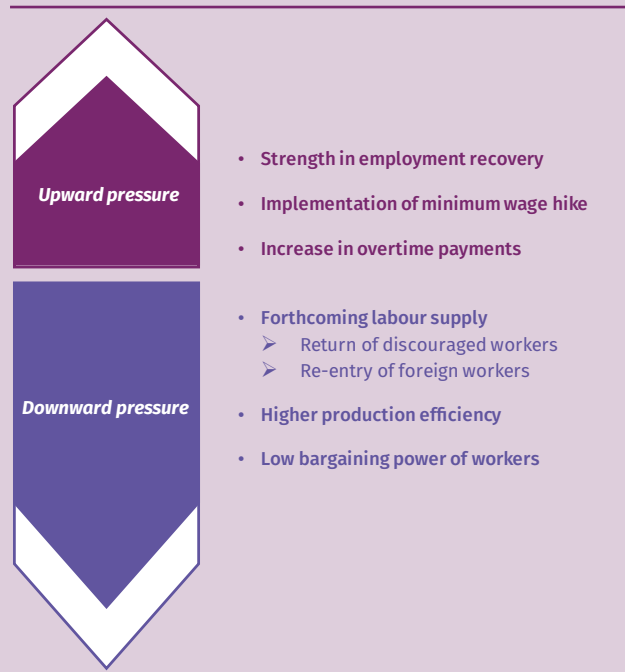


Note: Unit labour cost is estimated by Bank Negara Malaysia staff using data on salaries and wages and value added from Department of Statistics, Malaysia. Source: Department of Statistics, Malaysia, Haver Analytics, and Bank Negara Malaysia estimates

⁴⁰ Recently, wage growth being more moderate relative to inflation has been a common observation in AEs besides the US. Source: Boissay et al. (2022). “Are major advanced economies on the verge of a wage-price spiral?”, Bank for International Settlements Bulletin.
⁴¹ Unit labour cost refer to the amount a business pays its workers to produce one unit of output. Mathematically, Unit Labour Cost = Compensation / Output = (Compensation / Worker) / (Output / Worker). In other words, this means that unit labour cost can also measure the relative movements of wage and productivity in per worker terms.
⁴² Wage indexation refers to an explicit provision that automatically links changes in money wages to changes in a general price index (e.g., consumer price index).
⁴³ Source: Department of Trade Union Affairs, Ministry of Human Resources, Department of Statistics, Malaysia, Bank Negara Malaysia estimates.
⁴⁴ Source: ILOSTAT, International Labour Organization.

Going forward, continued expansion in economic activity is expected to take place, albeit at a lower rate compared to 2022. Slack in the labour market therefore is expected to reduce further as well, supported by continued strength in the employment recovery momentum. Nevertheless, Malaysia’s labour market is still some way away from tightness. Specifically, there remains some degree of underutilisation, given the high labour force participation, as well as a small number of workers who have remained outside the labour force due to COVID-19 (i.e., ‘potential’ labour force). This is supported in part by the gradual re-entry of foreign workers alleviating residual labour shortages.⁴⁵ Moreover, there is some room for salaries and wages (and therefore, incomes) of Malaysian workers to increase before exerting significant pressure on prices. In fact, the ratio of Compensation of Employees (COE) to GDP declined in 2021 to 34.8%, a reversal of trends observed prior to the pandemic (2020: 37.1%; 2019: 35.9%). Moreover, the uneven recovery continues to impact vulnerable groups such as women, youth, and low-skilled workers.

Diagram 1: Factors Contributing to Slack or Tightness in 2023



Conclusion

To support monetary policy considerations, the COVID-19 pandemic necessitated the expansion of the Bank’s surveillance tools in assessing labour market conditions. This article elaborated on a few of the most notable items, including the use of supplementary slack rates to provide a more nuanced assessment of labour underutilisation, beyond the unemployment rate. Additionally, the use of industry insights has allowed more timely on-the-ground feedback on key issues that are not directly observable from aggregate data, including reports of hiring difficulties and impact of the minimum wage hike. More comprehensive and nuanced assessments on overall labour market conditions contribute towards supporting evidence-based monetary policy decisions.

⁴⁵ Dynamics of foreign workers in the Malaysian labour market extend beyond their implications to slackness or tightness in the labour market. To ensure optimal functioning of the labour market, prudent and equitable management of foreign workers is warranted. For further discussion, please refer to “Low-Skilled Foreign Workers’ Distortions to the Economy” in Bank Negara Malaysia’s Annual Report 2017.

Although monetary policy is primarily a countercyclical tool, it is heavily interdependent with structural policies, which affect an economy's ability to withstand shocks. A sustainable recovery has a higher chance of being more enduring when it is further facilitated by complementary structural reforms. The COVID-19 pandemic represents a critical turning point and an opportunity to address structural issues inhibiting the Malaysian labour market since before the crisis. These include an over-reliance on the low-cost production model, the low creation of high-skilled jobs, and significant skills mismatches. Unaddressed, these issues will continue to constrain wage levels, and amplify the negative impact of shocks such as COVID-19 to households' incomes. Economic policies, therefore, should be geared towards creating high-skilled and high-paying jobs through quality investments, developing a dynamic and high-calibre workforce, accelerating adoption of technology and digitalisation, and strengthening the social protection system.⁴⁶ Ultimately, we must ensure that economic gains are translated to commensurate pay for workers. Notably, the wage-productivity linkage must be strengthened.⁴⁷ It is also recognised that considerable challenges remain including low worker bargaining power and frictions in enforcing labour contracts. The relatively muted recovery of wages observed post-pandemic emphasises the urgent need to overcome such challenges. The conclusion remains that Malaysia would need to accelerate reforms to ensure our long-term growth is sustainable and inclusive, in addition to building household and labour market resilience against shocks.

⁴⁶ For further details on structural labour market and social protection reforms, please refer to the box articles titled "Getting the Great Reset Right: Structural Labour Market Issues in the Post-COVID-19 World" and "A Vision for Social Protection" in Bank Negara Malaysia's Economic and Monetary Review 2020.

⁴⁷ For further details on the linkage between wages, productivity, and equity, please refer to the box article titled "Are Malaysian Workers Paid Fairly?: An Assessment of Productivity and Equity" in Bank Negara Malaysia's Annual Report 2018.

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