Labour market structure and wage dynamics in Thailand

Country note for Annual Meeting of Emerging Market Deputy Governors
16–17 March 2023

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Key takeaways

- The Thai labour market usually has a low and stable unemployment rate, along with sluggish wage growth. This is attributed to four key features: (i) high demand for low-skilled workers; (ii) flexibility of labour supply; (iii) a small share of wage earners; and (iv) low bargaining power of workers.

- During the pandemic, traditional indicators were not sufficient for monitoring Thai labour market developments. Hence, new indicators were introduced eg under-employed workers and income losses.

- Wage growth in Thailand can be explained by labour market slack, inflation, employees' characteristics and the minimum wage. The impact of each factor on particular groups of employees varies significantly.

- The chance of a wage-price spiral occurring in Thailand is small due to the small share of wage earners with low bargaining power; remaining slack in the labour market; the low share of labour cost to total cost of production; and limitations on the ability of firms to mark up prices.

The Thai labour market was hit hard during the pandemic as 20% of total employment was in tourism-related sectors. Despite the increase in labour market slack, the informal sector has played an important role in absorbing shocks in the labour market. At the onset of surging inflation and economic recovery, concerns for entrenched inflation grew in many economies (Bluedorn et al (2022)). However, the occurrence of a wage-price spiral is not a primary concern in Thailand, given a number of distinct features in the Thai labour market. In this paper, we review these specific characteristics of the Thai labour market, which have affected employment and wage dynamics as well as the wage-price spiral mechanism, and highlight how the Bank of Thailand (BOT) has monitored labour market developments since the pandemic.

Thai labour market structure

The Thai labour market has four key distinguishing features that imply different employment and wage dynamics, as well as different policy responses, compared with other countries.

First, a high share of workers are concentrated in low-skilled occupations. Around three quarters of employees work in low-skilled occupations such as construction workers, drivers and janitors, which is high compared to the OECD countries' average at 57.8%.[2] Besides, this structure has not changed for a decade, including throughout the pandemic (Graph 1.A). Since these occupations do not require a high level of education, workers can switch jobs easily, generating a degree of labour market flexibility.
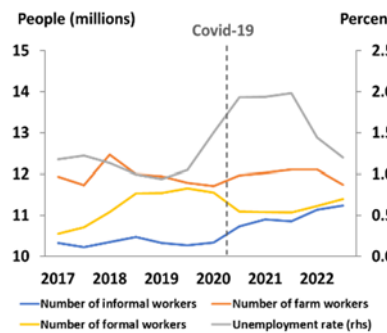

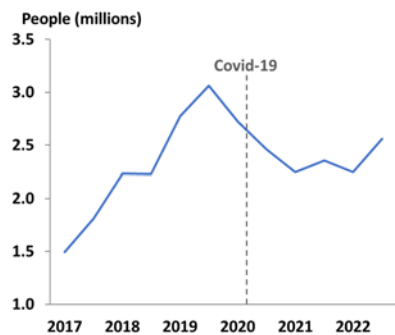Salient features of the Thai labour market   Graph 1

A. Employees' occupation by skill[1]   B. Thai workers in agricultural sector   C. Number of total legal migrant
                                            (formal and informal)[2,3]   workers[3]

[1] According to International Labour Organization (2012), low-skilled occupations include those which require a secondary education degree or lower, while skilled occupations require a tertiary level degree or more.

[2] According to Lathalipat and Chucherd (2013), non-farm informal sector workers comprise two groups: self-employed workers and private employees in small firms with fewer than five workers. The number of non-farm informal sector workers accounts for 40% of total non-farm employment (average of 2021). Formal workers refers to insured persons under the social security system that are employees in private companies.

[3] Data are represented on a semi annual basis.

Sources: National Statistical Office (NSO); Foreign Workers Administration Office and BOT calculations.

Second, labour supply in Thailand is relatively flexible, reflecting two main features:

- The Thai labour market has been able to absorb adverse economic shocks through the informal sector, particularly in agriculture. For example, whereas formal employment declined sharply during the pandemic, the number of farm employment and non-farm informal workers increased significantly (Graph 1.B). As a result, the unemployment rate increased only modestly during the pandemic as many workers maintained their employment status. However, these workers

[2]   Share of employees whose education is below the upper-secondary level to working age population in 2021 (OECD data).

still faced compensation losses from working in lower-paid jobs, experiencing uncertain income streams and an absence of social security benefits.

- Legal migrant workers[3] are an essential source of labour supply in labour-intensive sectors especially those characterised by the three Ds – difficult, dirty and dangerous – in which Thai workers hesitate to work such as agriculture, fishing, construction and food manufacturing (Graph 1.C).
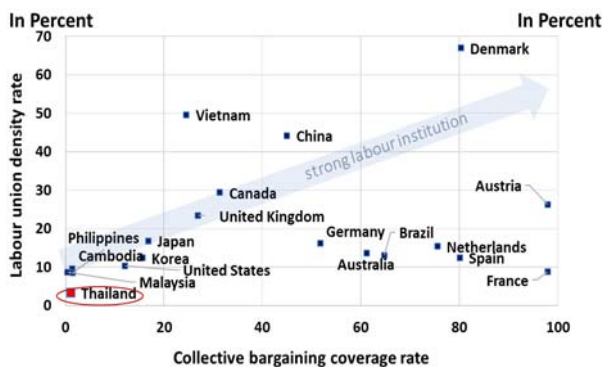
Third, wage earners only account for 44% of total employment, which is relatively low compared to other countries.[4] Thai employment is mainly comprised of three groups: wage earners, farm workers (which account for 31%) and non-farm self-employed workers, as well as employers (which account for 25%). Wage earners are non-farm employees who either earn daily or monthly wages.

Lastly, Thai workers have low bargaining power relative to many countries, as reflected by the low collective bargaining coverage rate[5] and labour union density rate (Graph 2.B). In addition, work contracts rarely include explicit wage indexation (eg cost of living adjustment (COLA) in European countries). Labour bargaining power and explicit wage indexation have been important factors driving wage growth in other countries. The absence of these features may partly account for the fact that cumulative wage growth (during the period 2000–21) in Thailand has been lower than cumulative productivity growth, unlike in most OECD countries in which workers' wages increased faster than productivity (Graph 2.B).
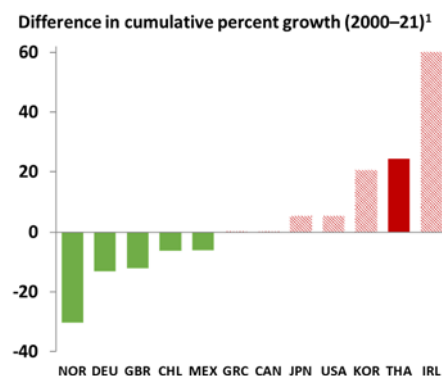

Thai labourers have low bargaining power   Graph 2

A. Labour union density and collective bargaining coverage rate	B. Productivity wage gap

[1] NOR = Norway, DEU = Germany, GRR = United Kingdom, CHL = Chile, MEX = Mexico, GRC = Greece, CAN = Canada, JPN = Japan, USA = United States, KOR = South Korea, Thai = Thailand, IRL = Ireland

Sources: CEIC; ILO; World bank and BOT calculations.

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[3]   Total legal migrant workers account for approximately 8% of Thailand's total workforce.

[4]   Share of wage earners to total employment in the United States, Germany and the United Kingdom are 92%, 90% and 85%, respectively (based on the US Bureau of Labor statistics, the UK Office for National Statistics and DEstatis).

[5]   Collective bargaining coverage rate represents the share of employees covered by one or more collective agreements, in percent (based on ILOSTAT data).

Monitoring labour market developments since Covid-19

During the Covid-19 outbreak, the Thai labour market was severely impacted in a number of dimensions (eg working hours, availability of jobs and labour income losses). However, traditional indicators, such as the unemployment rate, did not fully reflect the underlying picture in terms of labour market slack. Additional indicators were hence utilised to gauge labour market conditions, such as the number of under-employed workers[6] and labour income loss projection.[7]

Some slack during the pandemic   Graph 3

A. Number of under-employed workers[1]   B. Number of unemployed workers[1]   C. Projection income losses for non-farm workers compared with 2019
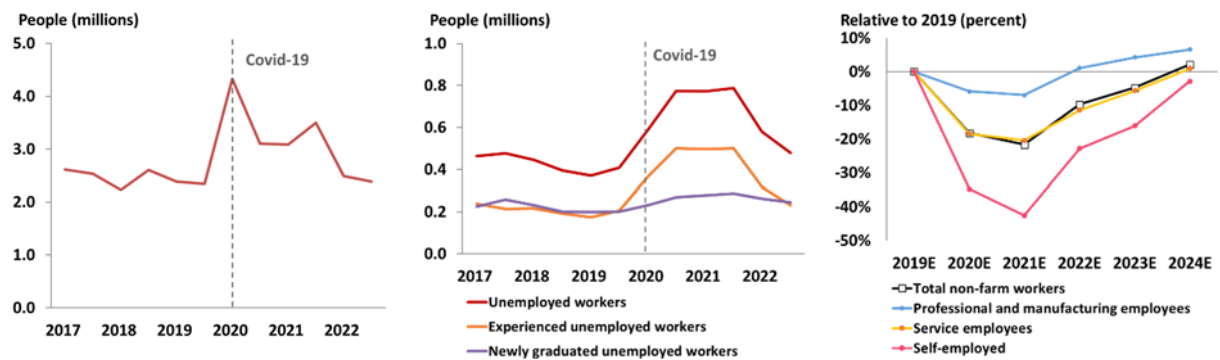
[1] Data are illustrated on a semi-annual basis and seasonally adjusted.

Source: NSO and BOT calculations.

The number of under-employed workers reached a historical high in the second quarter of 2020 (Graph 3.A). Some businesses, particularly in the services sector and among self-employed workers, were forced to temporarily shut down due to containment measures, while many workers' working hours were also reduced. At the peak, the number of the under-employed was more than five million workers with the number of unemployed around 0.8 million workers. The latter resulted in an almost doubling of the unemployment rate to 2.0% with about one third of unemployed workers being new graduates (Graph 3.B).

Consequently, aggregate labour income was estimated to have declined very substantially in 2020 (Graph 3.C). In addition, the income losses were uneven across different sectors and occupations. Self-employed workers, and workers in tourism-related sectors were heavily affected by a sharp decline in foreign tourists and stringent containment measures.

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[6] "Under-employed workers" is traditionally defined as workers who work less than 35 hours per week and would prefer to work more; however, BOT has defined "under-employed workers" as employed workers who work less than 24 and 20 hours per week for non-farm workers and farm workers, respectively. This definition arose from evidence of businesses' adaptations such as temporary shutdowns and working on alternative days, which significantly impacts workers' working hours.
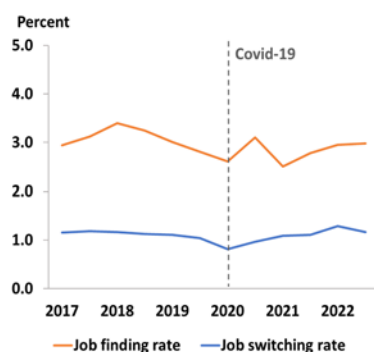
[7] BOT proposed labour income loss projections to track changes in aggregate labour income of each occupation, especially self-employed workers whose income is not reported in the official data.

In late 2021, the Thai labour market started to recover following the relaxation of containment measures. Unemployed workers have either been able to return to their previous jobs or find new ones (Graph 4). At the same time, wage inflation has been an area of concern in light of labour shortages in some labour-intensive sectors. These shortages stemmed from the fact that many workers resettled in their hometowns during the pandemic lockdown and have since switched to farming or to being non-farm self-employed workers. Relocation of workers back to key economic areas has thus been slow. Furthermore, migrant workers who returned to home countries, mainly in Myanmar, were unable to come back due to border restrictions and political upheaval. As a result, employers bid up wages to attract workers in some areas and industries. In the second quarter of 2022, hourly wage growth rose to 3.8% year on year. Subsequently, the easing of border controls and restrictions facilitated inflows of around 0.8 million migrant workers, helping to ease wage pressure in the third quarter of 2022 (Graph 4.C).
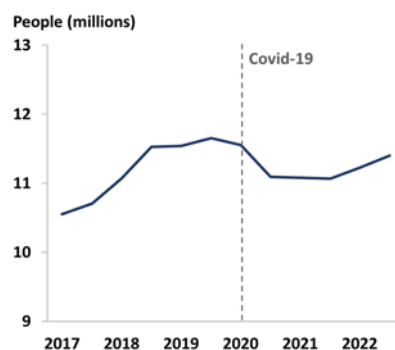
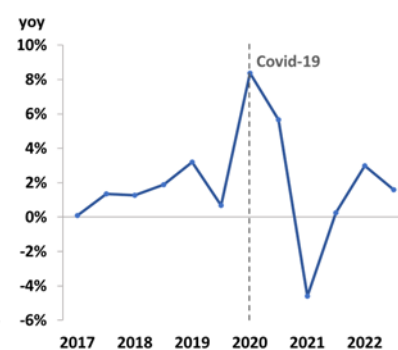The recovery of employment in the formal sector from the pandemic
Graph 4

A. Job finding and job switching rates[1]   B. Insured persons under the social security system[2]   C. Hourly wage growth[3]

[1] Job finding rate is the ratio of the flow from another activity into employment to the total number of insured people under the social security system. Job switching rate is the ratio of employed workers changing jobs to total number of insured people under the social security system and data are seasonally adjusted.   [2] Insured people under the social security system refers to employees in private companies and data are seasonally adjusted.   [3] All data are on a semi-annual basis.

Source: Social Security Office (SSO); NSO; BOT calculations.

In other countries, such as the US, a tightening of the labour market has been associated with a shrinking supply of labour (Pickert and Saraiva (2022). This has not been the case in Thailand. Even though the number of employees in the formal sector has almost returned to pre-pandemic levels, the unemployment rate is higher than it was before the pandemic.

Going forward, we expect Thai labour market conditions to continuously improve along with the recovery in tourism and the broader economy. This is reflected by our forecast of the unemployment rate and labour income returning to their pre-pandemic levels in the fourth quarter of 2023 and in 2024, respectively.

Drivers of wage growth in Thailand

Overall, Thailand's average wage growth has been driven by several factors, namely labour market slack, inflation, the educational background of employees and, to some extent, the minimum wage (Graph 5). It should be noted that wages for various groups of employees, categorised by income level and economic sector, respond differently to those factors.

Contribution to Thai workers' wage growth[2]   Graph 5
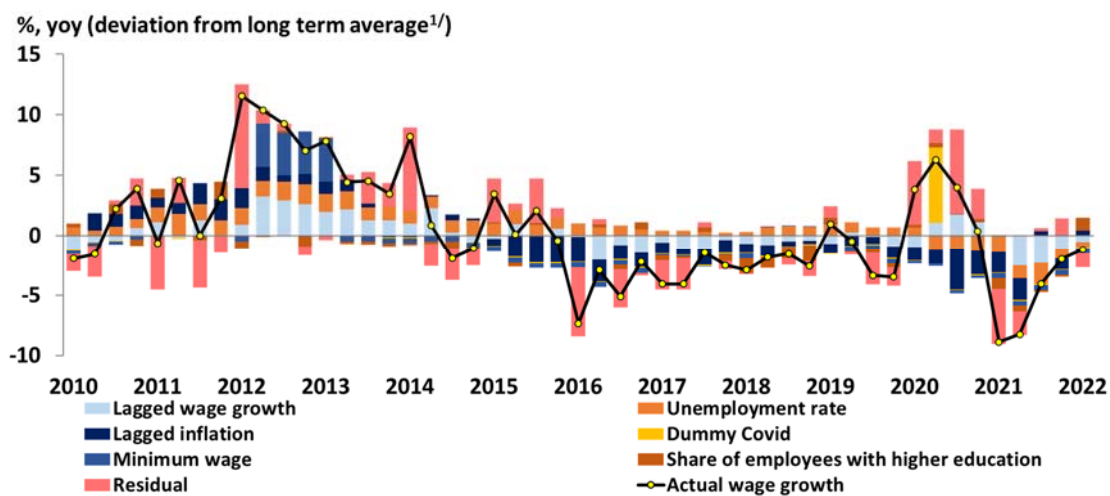
[1] Average in Q1 2001–Q1 2022.   [2] Dependent variable is year-on-year of wage per hour of employees. Sample is of quarterly frequency in Q1 2001–Q1 2022, results from two-stage least squared (2SLS) controlling for lagged wage growth, lagged inflation, unemployment rate, minimum wage growth, share of employees with higher education and dummy at the peak of Covid-19 (Q2 2020), using two quarters lagged Dubai oil price growth as an instrumental variable (IV).

Sources: ILO; NSO; OECD; International Federation of Robotics; Ministry of Commerce; Ministry of Labour; Office of the National Economic and Social Development Council; BOT calculations.

Cyclical factors have played an important role in determining wage growth over the past two decades. For labour market slack, a 1% increase in the unemployment rate is associated with a 1.8–2.1% decline in nominal wage growth, which is higher than other countries (Hong et al (2018); Cormier et al (2019); Kiss and Van Herck (2019)). This probably reflects the fact that variation in the unemployment rate in Thailand is generally quite low.[8] Thereby, a full 1% change in the unemployment rate indicates a radical movement in labour market conditions. The low and stable unemployment rate reflects the high mobility of Thai workers in finding new jobs rather than being unemployed.

At the same time, a 1% increase in inflation is associated with an increase in wage growth of 0.5–0.8%. This pass-through of inflation to wages in Thailand mainly reflects reaction to past inflation (adaptive expectations) rather than expected future inflation. However, this is likely to be non-linear depending on the level of inflation. When

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[8]   The absolute value of quarter-by-quarter changes in the unemployment rate in the past two decades are distributed towards zero. Median and mean are just 0.1%, the maximum increase is only 0.9%, that occurred during the peak of Covid-19.
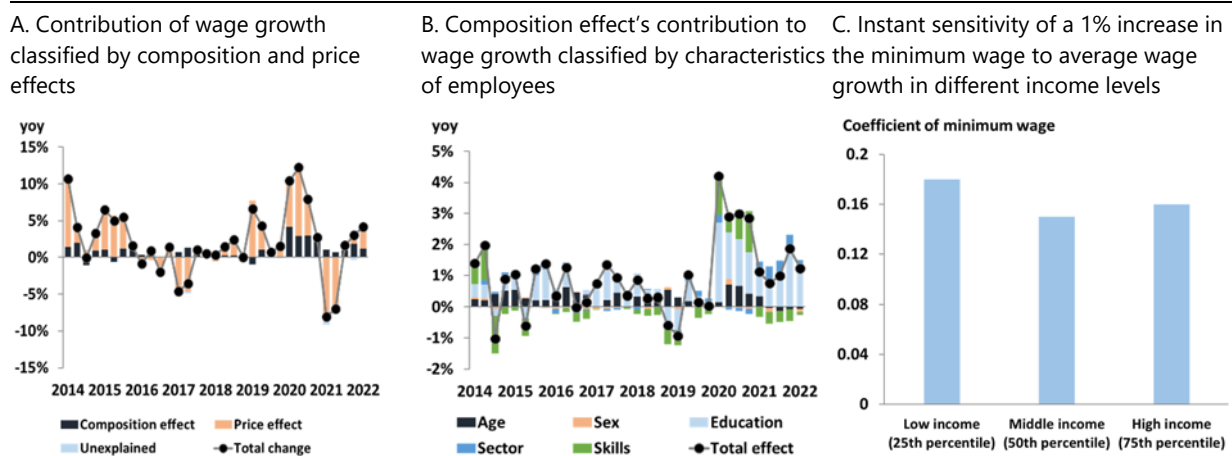
inflation is low, the transmission should be small as inflation might be neglected by stakeholders. On the contrary, employees will weight inflation more when it remains high out of concern for sustaining purchasing power and their standard of living (Boissay (2022)).

Moreover, employees' composition in terms of age, gender, education, skills and economic sectors account for 23% of total wage growth on average in the past decade (Graph 6.A). In terms of employee characteristics, education level has been the main contributor (Graph 6.B), as wage growth corresponds to an increasing share of highly educated employees. A 1% increase in the share of employees who graduated elementary school or higher increases wage growth by 1.1–1.3%.

The minimum wage setting also affects average wage growth. A 1% increase in the minimum wage is associated with a 0.1% immediate and 0.46% cumulative increase in average wage growth within one year (see Box A). This was not the case in 2012 when the minimum wage was raised by a historically large amount resulting in large adjustment in average wage growth. But after that, minimum wage adjustments were subdued. Thus, in the past decade, the minimum wage has only trivially contributed to wage growth (Graph 5).

Oaxaca-Blinder decomposition[1] results and minimum wage pass-through to wage growth in different income levels

Graph 6

A. Contribution of wage growth classified by composition and price effects

B. Composition effect's contribution to wage growth classified by characteristics of employees

C. Instant sensitivity of a 1% increase in the minimum wage to average wage growth in different income levels

[1] Methodology as demonstrated in Jann (2008).

Sources: NSO; BOT calculations.

In contrast to other countries, labour productivity is not a statistically significant determinant of wage growth (Hong et al (2018); Cormier et al (2019); Nickel et al (2019)). This could be partly explained by employees' low bargaining power, but also likely reflects measurement problems regarding labour productivity.

At a more disaggregated level, evidence of heterogeneity in drivers of wage growth can be found. For example, the wages of high-income employees respond to inflation to a greater extent than those of the low-income group; while low-income employees' reaction to minimum wage increases is slightly greater than those of other groups of worker (Graph 6.C). This might be due to the fact that low-income

employees have less bargaining power. Therefore, the minimum wage adjustment process is particularly important for low-income employees.

At the sectoral level, pass-through from inflation to wage growth is higher in the manufacturing and service sectors than in other sectors. This is consistent with our results that the wages of the high-income group are more sensitive to inflation as both sectors have higher average wages than other sectors. While increases in the minimum wage affect the wages of construction and manufacturing workers to a greater extent than others because the construction sector has the largest proportion of workers earning the minimum wage, and the manufacturing sector has formal employment mostly and enforcement, and verification of minimum wages are stricter in the formal than in the informal sector. Furthermore, an increase in migrant workers by 0.1 million people was associated with a reduction in wage growth of 1% in the construction sector.

Box A

The role of the government in the Thai labour market

The Thai government has played a role in determining the minimum wage as well as in mitigating adverse impacts of economic shocks.

By law, the tripartite national wage committee consists of representatives from the government, employers and employees. The committee's decision on minimum wage adjustment considers current minimum wage, inflation, labour productivity growth and some qualitative economic factors. In the past, the minimum wage adjustment used to be influenced by political factors such as the implementation of a 300 baht daily minimum wage policy, resulting in a 40% increase in the daily minimum wage in 2012. If we exclude the 300 baht policy period, an increase in the minimum wage had a limited impact on overall wages. Based on our estimation from historical data, we find that a 1% increase in the minimum wage would result in 0.46% cumulative increase in the average wage of non-farm employees within one year.

During the Covid-19 outbreak, the government had a crucial role in mitigating the impact of economic shocks on the labour market such as providing monthly transfers to workers, temporarily reducing social security contributions for both employers and employees, subsidising wages to support employment in businesses and creating jobs in the public sector during the pandemic. In addition, wages in the public sector could act as a benchmark for the private sector.

Risks of a wage-price spiral in Thailand

In Thailand, a wage-price spiral is not a major concern, compared with advanced economy countries. Although, inflation has recently been at its peak since the 2000s, wage growth has not picked up much, hovering around the long-term average. This is mainly due to labour market conditions and the flexible structure of the Thai labour market, as discussed previously.

The Thai labour market overall still has some slack because the unemployment rate has not yet reached the pre-pandemic level. This is in contrast with the United States, the United Kingdom, Germany, Canada and South Korea, where unemployment rates have already reached or surpassed pre-pandemic levels.

Both Thai and migrant workers who returned to their home countries or regions during the Covid-19 pandemic are gradually returning to key economic areas. As more supply has been catching up with increasing demand, in tandem with a recovery of economic activity levels, wage pressures have been curbed to some extent. In addition, the relative ease with which workers are able to relocate across sectors and regions has also helped to ease wage pressures to some degree.

Furthermore, wage earners in the Thai labour market account for only 44% of total employment and there is a low level of unionisation. Therefore, workers' bargaining power is generally not very high, and the scope for workers to demand higher wages is limited.

Moreover, pass-through from wage growth looping back to inflation is not expected to be significant. There are two factors supporting this. First, the role of wages in pressuring the overall cost of production is relatively contained. Labour costs vary from 3% in some manufacturing sectors to 34% in some service sectors, but in general, it accounts for 15%, which is limited and not expected to be the main reason for price adjustments, Second, firms' ability to markup prices is currently limited, as the economic recovery is still ongoing.

In summary, both cyclical and structural factors have contributed to a low likelihood of a wage-price spiral in Thailand. However, aggregate demand recovery and the dynamics of both Thai and migrant workers returning to key economic areas must be monitored closely. The overarching priority is to ensure that incipient price pressures emanating from the labour market do not feed into the general price-setting behaviour of firms and undermine the overall anchoring of inflation expectations.

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