



**ECONOMIST
IMPACT**

Closing the gap:

**Pathways to a post-pandemic
recovery in labour markets**

Supported by



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Foreword from the Adecco Group

Nearly two-and-a-half years on from the first outbreak of covid-19, global businesses are still operating in uncertain times. One of the greatest challenges relates to talent scarcity: are there enough people, with the right skills, to get your organisation's work done? The answer is not simple. To chart a path forward, Economist Impact, supported by the Adecco Group, presents employment forecasts that offer a new way of understanding the labour market outlook at a global and regional level. Covid-19 has impacted labour markets across global regions differently, and so different recovery paths should be expected. At a global level our analysis expects the labour market to recover fully from the impact of covid-19 by next year. However, when we dive deeper, our unique scenario analysis highlights the myriad factors that could delay this recovery, with regions such as South America and the Middle East and Africa potentially not recovering until 2025 and beyond.

What should organisations do to operate successfully in uncertain times? **First, stay focused on resilient, flexible business models.** The shockwaves impacting talent scarcity discussed in this report go beyond employment levels and job vacancies and are complex and varied: inflation, as well as inflation expectations and central bank policy responses; the Ukraine crisis creating geopolitical instability, displacing workers and driving inflation; covid-19's continued impact on supply chains, price inflation, as well as further breakouts of covid-19 itself; and rapidly shifting worker expectations. Organisations should not let this list overwhelm them—by maintaining a focus on resilient, flexible business models championed during the first two years of the covid-19 crisis and adapting them to cope with ongoing uncertainty it is entirely possible to forge a strong and successful path forward.

Second, **understand the workforce at a skills level and embrace the entire talent pool.** Invest in understanding skills data to better position, develop and upskill all workers. Envelop contingent workers seamlessly into workforce planning and talent management. Support workers re-joining the workforce, for example by non-discriminately offering "returnships" after parental leave or long-term sickness absence. Finally, consider automation as an option but treat workers with respect and care when designing and implementing human-machine working practices.



To manage a complex workforce in uncertain times, organisations should use scenario analysis as part of their strategic workforce planning to stay cognisant of regional labour market differences and ongoing developments. Taking a skill-based approach, having clarity on which skills are essential to the business, in which regions, at which times allows greater efficiency and accuracy when sourcing, positioning and developing talent. It is also prudent to plan carefully when and where reliable and consistent access to people and skills is needed and where flexibility can be used advantageously to tackle uncertainty.

Third, **pay attention to new workforce expectations.** The Adecco Group surveyed 14,000 workers to understand their priorities, and our results demonstrate that maintaining a good work-life balance is just as important as salary. Career development and up-/ reskilling opportunities, feeling trusted to get the job done, having leaders who exercise empathy and a company with great purpose are also key components for an engaged and loyal workforce. Once again, organisations should not feel overwhelmed by these demands but instead realise the vast array of opportunities to improve working life and, in return, contribute to a healthy and productive global workforce.

The Adecco Group is pleased to support Economist Impact's research, which aims to provide organisations with more clarity on the economic forces impacting employment and wage pressures. This is unique research for a unique moment in the labour market's history, helping organisations to make the future work for everyone.

Coram Williams, CFO and Chief Economist, the Adecco Group

About this research

Closing the gap: Pathways to a post-pandemic recovery in labour markets is an Economist Impact report, supported by the Adecco Group. The report explores current employment trends in global and regional markets and the forces that shaping the trajectory of a recovery, with a focus on the established relationship between economic growth and employment levels. The analysis maps out optimistic and tempered scenarios for a labour market recovery to pinpoint when employment levels are expected to converge with pre-covid trends, as well as the impact on wage-price spirals.

For the purpose of this analysis Economist Impact adopted a combination of two approaches to employment forecasting. First, to estimate the potential paths of employment in each region, we relied on econometric equations based on Okun's law that explore the fundamental relationship between economic growth and employment (see box below for more information on Okun's law). By applying these models to each economy in our analysis we were able to create scenarios for employment based on tempered and optimistic assumptions about economic growth in the five regions we studied. Second, to determine the counterfactual level of employment that would have occurred had there been no pandemic, we used a combination of historical data and pre-covid employment forecasts to create assumptions for employment growth in the absence of covid-19. With this framework in place, it was possible to examine the different paths for employment growth in each region and assess the time it might take to close the true employment gaps that remain post-covid.

OKUN'S LAW

Most people studying the macroeconomic state of an economy will intuitively relate its economic growth to its employment level. Arthur Okun, a professor at Yale University, formalised this connection by establishing a statistical relationship between economic growth and employment creation. Empirical estimates based on the relationship predict that a one percentage point increase in employment is associated with a 2-3 percentage point growth in GDP.¹

While Okun's law is not strictly a "law", the empirical relationship is robust across the common range of unemployment. If Okun's law is applied indiscriminately without paying due attention to common economic assumptions and constraints it may produce absurd outcomes, for example, an unemployment level below 0%.

¹ Lee, S., Schmidt-Klau, D., Weiss, J., & Chacaltana Janampa, J. (2020). Does economic growth deliver jobs? Revisiting Okun's Law (No. 995169192402676). International Labour Organisation.

When applied with rigour and within reasonable ranges, Okun's law has held up well since it was first postulated in 1962.² In the event of major global shocks, such as the global financial crisis, these structural breaks may weaken the relationship and lose some statistical significance, reflecting variations in quality of employment, informality and employment structures during these times, but the law itself has stayed valid.³ The law is sufficiently reliable that policymakers, economists and central bankers use it frequently—including during the Great Recession (2008) and the covid-19 economic fallout (2020)—to estimate the economic expansion necessary to induce job creation and limit the overall effect of economic decline on jobs.⁴ Conversely, ample literature⁵ also exists where economists use Okun's law in the other direction—to make employment projections using GDP forecasts. This is precisely the approach that we have adopted: using Okun's law, we have created tempered and optimistic employment projections for 75 countries based on forecasts of GDP until 2025.

Methodology

Step 1: Collect data. Employment data for 75 global economies were collected for the period from 2000 to the latest available data (in most cases until 2020). These 75 economies together account for nearly 95% of the world's GDP. The employment data were collected from the IMF and complemented with data from the World Bank wherever IMF data were missing.

GDP data, including forecasts, were collected for the same 75 economies for the period 2000-2025 from The Economist Intelligence Unit (EIU) in April 2022.

The economies were then classified into five regions (North America, South America, Europe, Middle East and Africa, Asia-Pacific), and the data for both GDP and employment were aggregated to obtain regional totals.

Step 2: Forecast employment level in each region. This was a three-step process:

Step 2a: Estimate the relationship between GDP and employment level. Okun's law establishes an empirical relationship between a country's economic growth and its employment levels as follows:

$$d\log(us_emp) = c + \beta_o \times d\log(us_gdp) \quad (a)$$

We used this relationship between the econometric variables to "predict" employment levels for an economy whose GDP is known for a given year. Using the GDP and employment data from 2000 to 2020 we calculated the β_o that relates the employment level with the GDP for each of the 75 economies.

Step 2b: Create optimistic and tempered scenarios. We calculated the standard deviation (SD) of GDP from 2000 to 2020 and created an optimistic scenario by adding the SD to the EIU GDP forecast for 2022 to 2025 (+1SD) and a tempered scenario by subtracting the SD from the EIU GDP forecast for the same period (-1SD). We chose a range of one standard deviation in either direction to cover a reasonable range of GDP outcomes based on a country's GDP performance from 2000 to 2020.

2 See, for instance, Daly, M., Fernald, J., Jordà, O. & Nechio, F. (2014), Interpreting Deviations from Okun's Law, Federal Reserve Bank of San Francisco (FRBSF), Economic Letter; Edward, S. & Knotek, I. I. (2007), How Useful is Okun's Law?, Economic Review, Federal Reserve Bank of Kansas City; Wen, Y. & Chen, M. (2012), Okun's Law: a meaningful guide for monetary policy?, Economic Synopses, 2012 (2012-06-08).

3 Canarella, G. & Miller, S. M. (2017), Did Okun's Law die after the Great Recession?, Business Economics, 52(4), 216-226.

4 Lee et al., 2020.

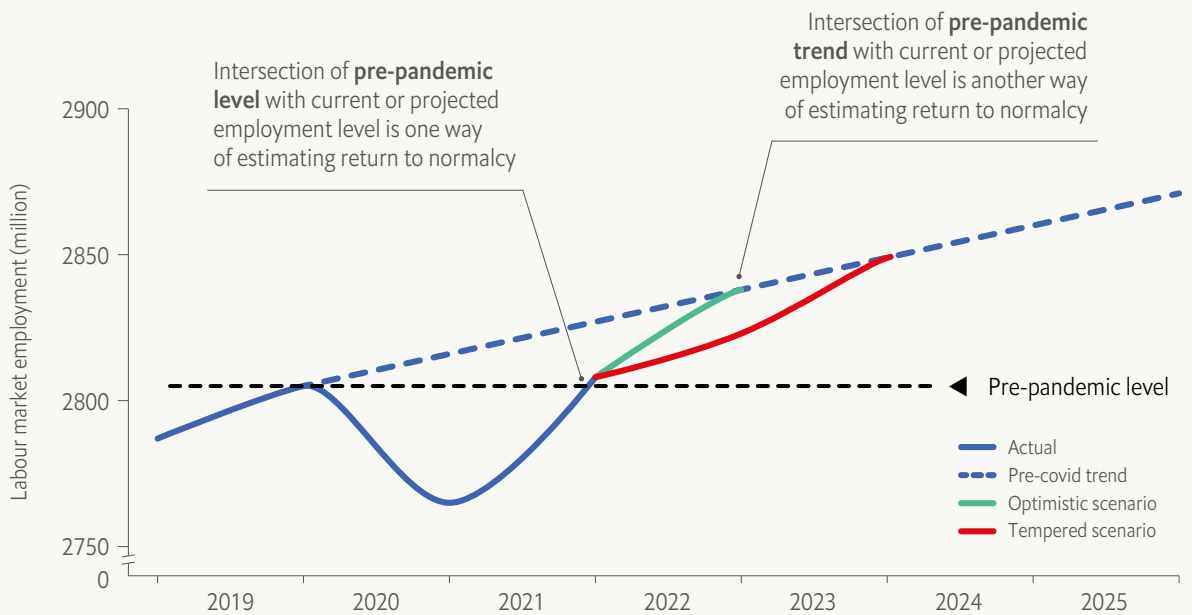
5 See, for instance, Dubina, K. S. (2017), Full employment: an assumption within BLS projections, November.

Step 2c: Forecast employment levels for scenarios. Using equation (a) and GDP scenarios from the previous step, we calculated the corresponding predicted employment level for each year in the period 2021-25.

Step 3: Estimate pre-covid labour trends. We took the average of the compound annual growth rate (CAGR) of the employment level from 2015 to 2019 and the International Labour Organisation’s estimated labour growth rate for each region (published in January 2020, just before the pandemic) to arrive at the consolidated labour growth rate for the five defined regions.

Step 4: Assess the closure of the labour gap. We compared the post-covid optimistic and tempered forecasts from Step 2 with the pre-covid labour trend from Step 3 to identify the year in which the two trend lines intersect or converge. This intersection or convergence estimates the year of full recovery i.e. the number of people employed reaching the levels that would have been achieved had there been no pandemic.

Illustrative explanation of methodology



Executive summary

The global economy experienced a deep recession in 2020, and as a result more than 40m jobs were lost as businesses shut down.⁶ Against this backdrop Economist Impact set out to understand how long it would take for employment to recover fully and to examine the different paths ahead for the five regions of the global economy: North America, South America, Europe, Middle East and Africa, and Asia-Pacific.

Underpinning a recovery in labour markets will be the strength of the economic recovery in each region, which is far from certain. The war in Ukraine is the latest in a series of major shocks facing the global economy, which has yet to emerge completely from the covid-19 pandemic and ongoing supply chain disruptions. While the economic impact of the war is likely to have the most significant impact in Europe, the indirect effects on trade, supply chains, investment and consumer spending will be felt around the world. In light of the heightened uncertainty related to global economic conditions, to properly investigate a labour market recovery we have used scenario forecasts rather than single forecasts of employment, as they capture the underlying uncertainty in the system. This produces a range of outcomes for a labour market recovery, depending on the scenario and the region.

Key findings of this research:

- **Global labour markets have yet to recover fully.** Although the number of people employed saw a recovery and returned to pre-pandemic levels in 2021, this represents only a partial recovery in employment. A full recovery would have seen the number of people employed reaching the levels that would have been achieved had there been no pandemic.⁷ According to this study, global employment would have stood at 2.83bn in 2021 without the pandemic, i.e. 0.7% higher than the actual number of people employed.
- **Although Economist Impact's optimistic scenario expects global employment to recover fully by 2022, the tempered (or more pessimistic) scenario of a recovery in 2023 is more likely in the current climate.** The ongoing war in Ukraine is just one risk factor that could further damage global growth, with interest rates and inflation (especially of food and energy prices) also creating challenges.
- **Regionally, employment levels in North America and Asia-Pacific will record the fastest recovery.** In North America, employment could recover fully in 2022

6 According to the International Labour Organisation, the loss in jobs in 2020 was 114m. The difference in figures with this study is probably due to country coverage and methodology. https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_766949/lang--en/index.htm

7 A recovery in this study refers to the number of people employed. It does not refer to the types of jobs or mix of jobs that were present before the onset of the pandemic.



under the optimistic scenario and in 2023 in the tempered scenario. In Asia-Pacific, on the other hand, employment levels are expected to recover fully in 2022 under both scenarios. This result is driven by the finding that Asian labour markets are less sensitive to economic growth than those in North America, implying that changes in economic growth have a smaller impact on employment. With uncertainty over economic growth now a feature of the global economy, the relative lack of sensitivity to growth will be a benefit for Asia-Pacific in this recovery period.

- **Europe will see the greatest degree of uncertainty in its labour market recovery owing to the war in Ukraine.** Europe's economy is most adversely affected by the war as a result of soaring energy prices, commodity and food inflation and disruptions to supply chains. Before the war, employment in the region was experiencing a strong recovery. This has since shifted, and the employment recovery from covid-19 could be even worse than we are forecasting in our tempered scenario. A full recovery may not take place until the middle of the decade, which is a long way from the pre-war estimates that would have seen a full recovery in employment in 2022 under both scenarios.

- **South American employment may not recover fully until the second half of this decade.** The war in Ukraine will add to underlying inflationary pressures in the region, resulting in a challenging environment for economic growth. The greatest spillover effect from the Ukraine war would stem from increased food and energy prices. With the balance of risks currently facing the region, the employment recovery is likely to be slow and uncertain.
- **In the Middle East and Africa, employment levels are expected to recover fully by 2023 under an optimistic scenario.** This scenario may be more likely in the region as it is less exposed to the adverse impacts from the war in Ukraine. The major downside risk for the region will be a slowdown in global economic growth and other region-specific risks, such as a food crisis in Sub-Saharan Africa. Should these risks materialise, they could derail a recovery in employment until the second half of the decade.
- **The risk of wage-price spirals is highest in North America and Asia-Pacific as a result of tightening labour markets, but this is unlikely to materialise.** Although trends such as the Great Resignation and older people permanently leaving the labour market are putting upward pressure on wages, these are temporary adjustments. Together with monetary tightening by central banks such as the Federal Reserve (Fed, the US central bank), the outcome is likely to be a softening of economic demand, which will help to alleviate inflationary pressures.

Companies navigating this degree of uncertainty in regional labour markets must undertake a great deal of planning, with strategies in place for a few of the most likely outcomes. It will require a collaborative effort across the strategy, human-resource and finance functions to map out the impact not just on team structures and operations but also on finances if higher wages for retention erode profitability. Firms that emerge successful will be those with the agility to respond quickly and creatively to the changing labour market conditions.

Section 1: the state of global and regional employment

In 2020 the global economy experienced its deepest recession since the end of the second world war.⁸ With covid-19 wreaking havoc in countries around the world, it is not surprising that global labour markets also saw a calamitous fall in the same year. Compared with the levels of employment in 2019, the global labour markets saw the loss of more than 40m people in employment in the first year of the pandemic. That equates to 1.4% of all jobs across the world that have been lost to the global pandemic. Demonstrating the severity of the pandemic, global jobs had been forecast to contract by only 0.1% in the first quarter of 2009 before returning to growth amid the recession caused by the global financial crisis.⁹

While the fall in employment in 2020 was felt all over the world, North and South America experienced the sharpest falls in employment on a proportional basis.

Fortunately for job seekers, 2021 saw some of these jobs return as growth resumed in major markets. Fuelled by economic stimulus packages and vaccine rollouts, growth recovered in advanced economies. The North American economy, for example, saw growth rebound by 5.6%, according to The EIU, which in turn drove employment growth in the region. Western Europe, meanwhile, experienced a rebound in economic growth of 5.9%. While China experienced no recession in 2020,

TABLE: Employment by region ('000)

	2019	2020	2021
World	2,805,295	2,765,093	2,838,080
North America	231,208	216,770	227,521
South America	142,390	133,583	141,005
Asia-Pacific	1,809,939	1,801,452	1,817,979
Europe	325,272	318,858	324,061
Middle East & Africa	296,486	294,431	297,853

Sources: International Monetary Fund; World Bank; Economist Impact.

⁸ <https://www.economist.com/finance-and-economics/2022/05/15/global-growth-is-slowing-but-not-stopping-yet>.

⁹ <https://graphics.eiu.com/upload/eb/IJR-January-2015.pdf>

the Asia-Pacific region as a whole returned to growth in 2021 with an expansion of 5.8%. Such rates of economic growth served to create jobs and bring workers back into employment. However, despite the global labour market inching above pre-pandemic levels in 2021, the recovery in jobs remained uneven and incomplete.

A return to pre-pandemic levels of employment represents only a partial recovery in the global labour market. A full recovery would see the number of people in employment reach the sort of level it would have achieved had the pandemic not occurred.¹⁰ This hypothetical number would be larger than the 2019 figure of 2.8bn employed because, in the absence of the pandemic, the global labour market would have continued to grow. According to this analysis, global employment would have stood at 2.83bn in 2021 without the pandemic, which would have been 0.7% higher than the actual number of people employed.

Given the state of the global labour market in 2021, Economist Impact set out to understand how long it would take for labour markets to recover fully and to examine the different paths ahead for the main regions in the global economy. The recovery in labour markets will be critical not only for the number of jobs available but also for the pressure on wages in each market. The recovery is unlikely to be easy as the global economy faces another period of heightened uncertainty following

Russia's invasion of Ukraine in February. While the economic impact of the war is likely to be the most significant in Europe, the indirect effects on trade, supply chains, investment and consumer spending will be felt around the world. Since the war is only the latest in a series of major shocks that the global economy has faced, uncertainty is now an enduring feature of global markets. The World Uncertainty Index has measured this phenomenon for the past three decades.¹¹ Compounded by the uncertainty created by Brexit and US-China trade tensions, the index reached a new high in 2020 as a result of the global pandemic. As this shock started to recede, the index fell in 2021. However, the war in Ukraine has reversed that recent trend and the index is once again on an upward trend.

In light of this heightened uncertainty related to global economic conditions, scenario forecasts were preferred over a singular forecast of employment as they capture the underlying uncertainty in the system. With this in mind, Economist Impact conducted a scenario analysis of employment at the regional and global levels. In the following section we analyse an optimistic and tempered scenario for each region in relation to the main drivers of economic growth and the risks to the outlook. In the final section we examine what these trends could mean for wage and price inflation in regions with strengthening labour markets, while in other regions we focus on the global risk factors that could lead to delays in the employment recovery.

¹⁰ A recovery in this study refers to the number of people employed. It does not refer to the types of jobs or mix of jobs that were present before the onset of the pandemic.

¹¹ <https://blogs.imf.org/2022/04/15/global-economic-uncertainty-surg-ing-amid-war-may-slow-growth/>

Section 2: global and regional scenarios

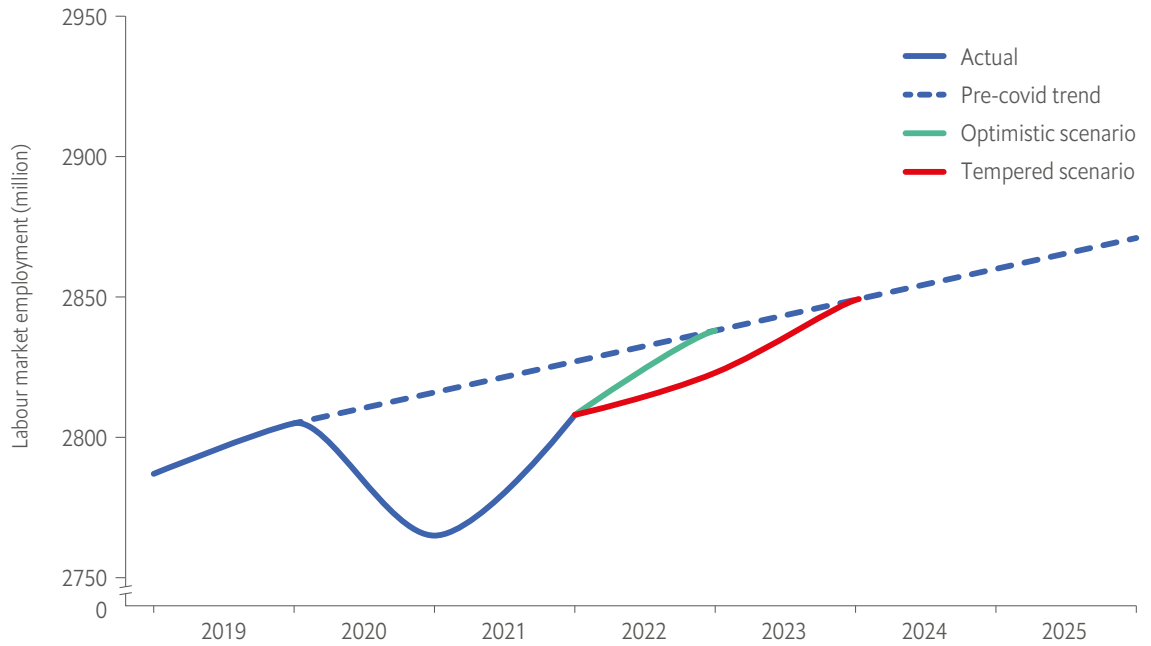
In the current climate the future path of economic growth is highly uncertain, with significant implications for employment. This uncertainty is captured by the degree to which our optimistic and tempered scenarios differ. The risks to the global outlook are many and varied. Most recently, the war in Ukraine has provided a significant shock to an already vulnerable economy. The EIU has downgraded its global growth forecasts for 2022 from 3.9% to 3.3% as a result of the conflict.

But the war is not the only risk faced by the global economy. The impact of covid-19 could still hurt global growth as further outbreaks of the virus—such as those seen recently in China—lead to further stresses on supply chains and add to inflationary pressures. At the same time tightening monetary policies in major economies could lead to a softening in global growth. For example, the Fed has begun to raise its interest rates with an increase of 25 basis points in its benchmark rate in March and a further 50 basis points in May. The EIU expects the Fed to raise its rates a number of times in the next 12-24 months, reaching 2.9% in 2023. Rate hikes of this nature are designed to curtail, but not stop, consumer and business activity. However, there is always the risk that these rate increases slow down growth more than anticipated and that the US economy dips into recession. Given that the US economy contracted in the first quarter of 2022, the risk of a US recession has increased.

In this context, global labour markets will be intimately linked to the ongoing impacts of the war in Ukraine, inflationary pressures, interest rates and supply-chain disruptions. With economic growth a key driver of employment outcomes, it will be critical to understand the outlook for growth and the degree of uncertainty for each region. The drivers of economic growth are addressed below, accompanied by the main sources of risk that could derail these economies and alter the timing of the recovery in employment.



FIGURE 1: Global employment scenario forecasts



Source: Economist Impact.

- The global employment gap is expected to close in 2022 in the optimistic scenario or in 2023 in the tempered scenario.
- Asia-Pacific and North America are likely to be the strongest labour markets in the coming 2-3 years, while South America and the Middle East and Africa regions face the longest path to recovery.

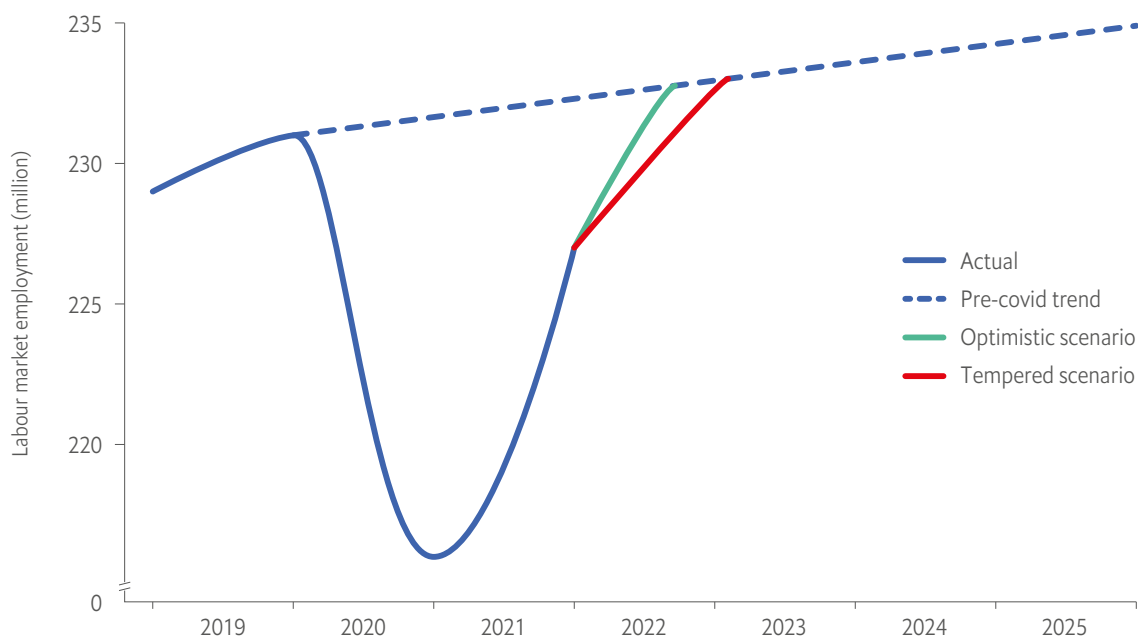
North America—A strengthening labour market but recession risks have increased

The US is central to the outlook for the North American region. The US economy rebounded strongly following the shock of the pandemic, and the labour market strengthened during this recovery period. In March unemployment fell to 3.6% and the economy added 431,000 jobs. Government spending was a major driver of this

growth. The administration of the president, Joe Biden, embarked on multiple rounds of fiscal spending in response to the pandemic, and with a major boost of US\$1.9trn of pandemic spending passed by the US Congress in March 2021 the total pandemic response reached 25% of US GDP.¹² With such strong support consumer spending was able to recover, business confidence returned and the labour market began to recover.

12 <https://www.economist.com/leaders/2022/04/23/why-the-federal-reserve-has-made-a-historicmistake-on-inflation>

FIGURE 2: North America employment scenario forecasts



Source: Economist Impact.

- In the optimistic scenario the employment gap is forecast to close in 2022, while in the tempered scenario the employment gap closes in 2023.
- The recent economic performance of the US suggests that, ultimately, the outcome for North America may be closer to the tempered scenario.

The scenario analysis presents a strong picture for North American labour markets, but there is a significant risk which clouds the outlook for the region. Underlying the scenario forecasts in this analysis is an important finding in the research, namely that the North American labour markets are highly sensitive to economic growth (our analysis aligns with other studies that show this to be the case more for advanced

than developing countries).¹³ This result suggests that the main determinant for economic growth in the region—Fed interest rate increases—will be critical for the development of labour markets in the region.

The Fed, along with other major central banks in the global economy, will need to take decisive action to rein in inflation.¹⁴ In doing so, it will aim to engineer a soft landing for the US economy,

13 Ball, L., Furceri, D., Leigh, D. & Loungani, P. (2016), Does One Law Fit All? Cross-Country Evidence on Okun's Law. Available at: <https://link.springer.com/article/10.1007/s11079-019-09549-3>; Huang, H.-C. & Yeh, C.-C. (2013), Okun's Law in panels of countries and states, *Applied Economics*, 45(2), 191-199.; Lee, S., Schmidt-Klau, D., Weiss, J. & Chacaltana Janampa, J. (2020), Does economic growth deliver jobs? Revisiting Okun's Law (No. 995169192402676), International Labour Organisation; Pizzo, A. (2019), Literature review of empirical studies on Okun's Law in Latin America and the Caribbean, Geneva: International Labour Organisation.

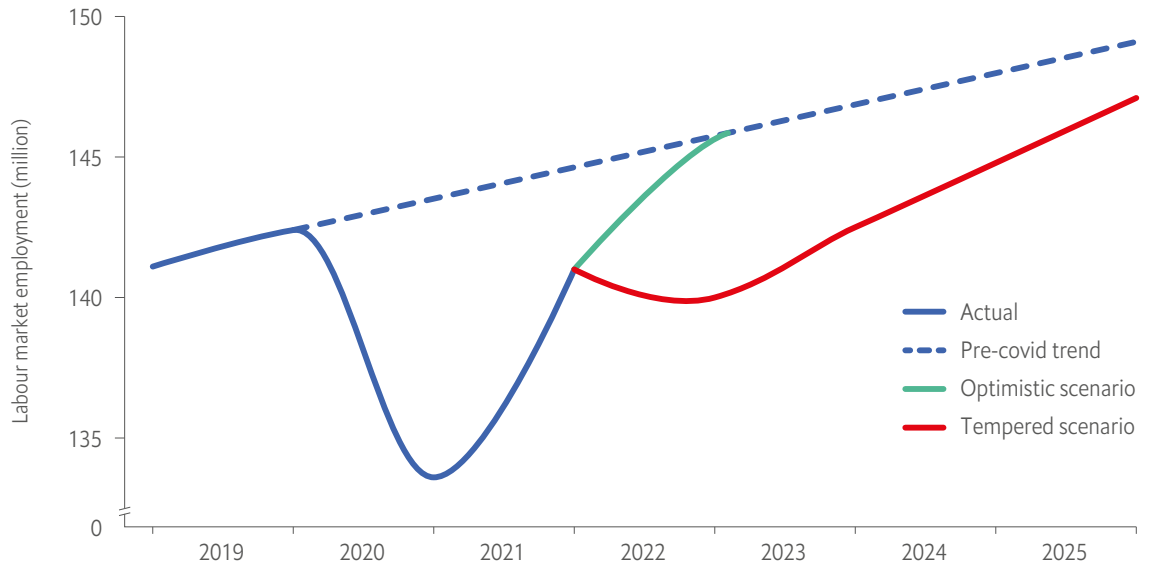
14 The Global Financial Stability Report, International Monetary Fund, 2022.

whereby growth slows but the economy does not contract. However, there is a risk that the Fed raises interest rates too quickly and the US economy enters into a recession. This would bring with it the possibility of stagflation, where inflation remains elevated and growth falters. In such a situation the labour market would see a reversal of its recent gains and the expected wage pressures would be significantly reduced. The US economy should be able to avoid this outcome as government spending will remain supportive of growth, but it is clear that the tempered scenario presented here is not the worst-case scenario facing the US and North American economies.

South America—A long and uncertain road to labour market recovery

The South American labour markets could be set for a difficult recovery from the pandemic. Depending on economic conditions, employment in the region could reach a full recovery in 2023 in an optimistic scenario with favourable growth rates. In our analysis employment levels in the region were found to have a moderate sensitivity to economic growth, but with growth likely to be lower than in other regions such as Asia-Pacific, for example, the outlook is for a weak and uncertain recovery in labour markets. This is shown in the tempered

FIGURE 3: South America employment scenario forecasts



Source: Economist Impact.

- In the optimistic scenario the employment gap with the pre-covid trend should close in 2023, while in the tempered scenario it is likely to close in the second half the decade.

scenario, where, with growth slower than anticipated, employment could decline in the short term before renewing its recovery. In such a scenario a full recovery would take place only after 2025, according to this analysis, pointing to the importance of economic growth for South American employment.

Before the war in Ukraine, South America had been embarking on a modest recovery after the onset of the global pandemic in 2020. The region had seen a rapid rollout of vaccines in 2021 and growth conditions were supportive of a strong recovery. While domestic fiscal policy was a positive factor, external conditions, such as remittances from the US and increased import demand from China, also played an important role.¹⁵ The external conditions have changed in 2022, with the war in Ukraine, in particular, creating a more difficult growth environment for the region. With the region already experiencing inflationary pressures, the impact of the war will add to these concerns via increases in commodity prices (some South



American commodity exporters will benefit from these price increases, which will partially offset the negative impact of inflation). These risks may also generate capital flight from the region, which would depreciate currencies and put even more pressure on inflation owing to increased import costs. Consequently, given the balance of factors facing the region, the labour market recovery may take place only after 2025 rather than in 2022 (as in the optimistic scenario).

Asia-Pacific—Strong growth and less variation point to strengthening labour markets

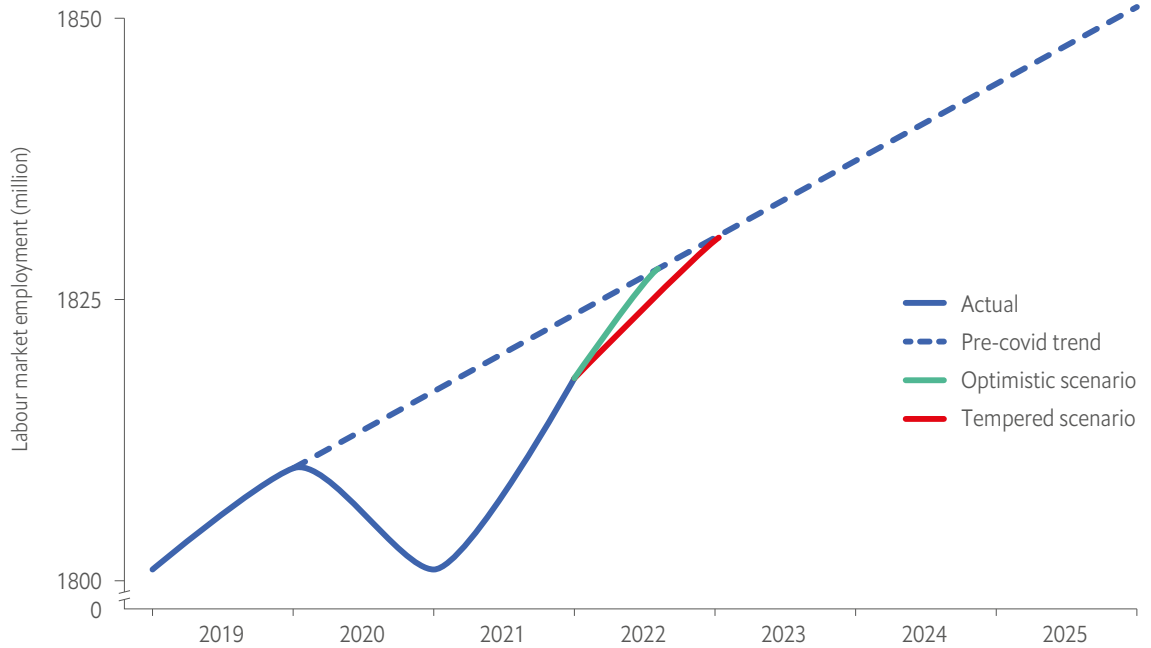
Asia was the world's fastest-growing region in the five years before the pandemic, and the same is expected to apply to the five years following the start of covid-19 pandemic. Within this favourable growth setting Asian labour markets will continue to strengthen in the coming years. Our analysis shows that in the optimistic scenario the recovery of the region may already be complete, while in the tempered scenario this would happen in 2022. This lack of variation reflects the results of our analysis, which found a relatively low sensitivity to economic growth among Asian labour markets (compared with the strong sensitivity of North American labour markets to growth, for example).¹⁶ Given the increasing levels of uncertainty that surround the global economy at this point, this should serve as a benefit for employment in Asia-Pacific.

This is not to suggest that all is rosy in Asian labour markets. China, for example, is facing structural challenges and high youth unemployment while at the same time still dealing with covid-related lockdowns. Informal labour markets are also a challenge in some emerging Asian economies. While the policy solutions to these challenges are beyond the scope of this study, our analysis does suggest that they could be addressed in a stronger employment market than the one that existed previously in 2020-21.

¹⁵ The Economist Intelligence Unit

¹⁶ The sensitivity of employment to economic growth refers to the coefficient in the Okun's law equation in the analysis conducted for this study. The higher the value of this coefficient, the more the country's employment changes with economic growth.

FIGURE 4: Asia-Pacific employment scenario forecasts



Source: Economist Impact.

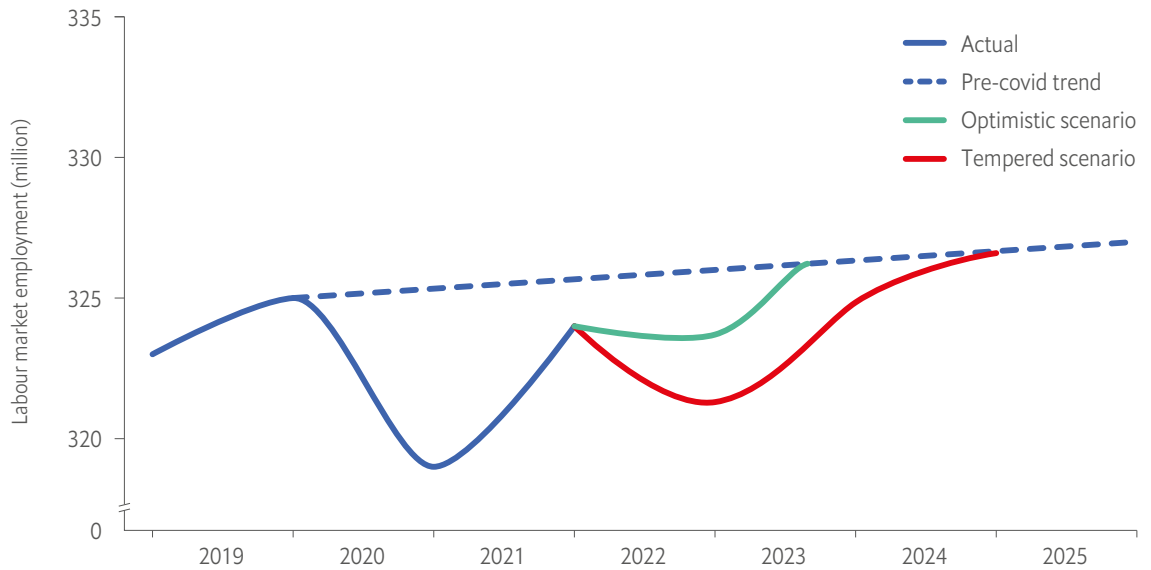
- In the tempered scenario the labour gap closes in 2022, while in the optimistic scenario it appears to have closed already.
- Relative to other regions, Asian labour markets display less sensitivity to GDP growth, resulting in a minor difference between the optimistic and the tempered growth scenarios.

Europe—Uncertain growth conditions are likely to weigh on labour market conditions

Following the rebound in 2021 Europe was expected to see slower growth in 2022, the same as every other region in the global economy. However, with the onset of the war in Ukraine growth rates are likely to be even lower than anticipated. While both Russia and Ukraine will experience deep recessions in 2022, the economic impacts of the war will be felt across the region. Almost every facet of economic activity will be affected. The energy and commodity price shock will increase costs for

businesses and households. The shock to supply chains will cause a slowdown in trade growth and lead to disruptions in many goods, including access to critical raw materials. The uncertainty over the development of the war will also cause investments to be delayed or cancelled entirely, thereby hurting not only short-term growth but also the long-run health of the European economy. Financial markets have remained relatively resilient, but the downgrades in growth and impacts on investment and consumer spending will weigh on financial returns over the coming months.

FIGURE 5: Europe employment scenario forecasts



Source: Economist Impact.

- Based on current forecasts, Europe may close the pre-covid employment gap in 2023 in the optimistic scenario or in 2024 in the tempered scenario

Before Russia’s invasion of Ukraine Europe was on track for a strengthening employment market, similar to that of North America and Asia-Pacific. Given the current geopolitical situation and weakness in economic growth, regional employment will experience a decline in 2022. Because of the continued economic fallout in Europe, we expect that the labour gap may not close until 2023 in the optimistic scenario, or even 2024 in the tempered scenario.

The analysis we conducted suggests that Europe’s labour markets are less sensitive to economic growth than those in North America, for example. This may be because European

labour markets are relatively more regulated, which limits changes in response to shifts in economic conditions. This can be an advantage when uncertainty over economic growth is high, as variations in GDP have less of an impact on employment than in North American markets. However, given the major challenges that are now facing European economies, the risks are clearly tilted to the downside. Consequently, the tempered scenario for labour markets in Europe looks more likely than the alternative. The situation could be further exacerbated if Russia decided to stop gas supplies to all European Union countries, impacting industrial production in major economies in the region.¹⁷

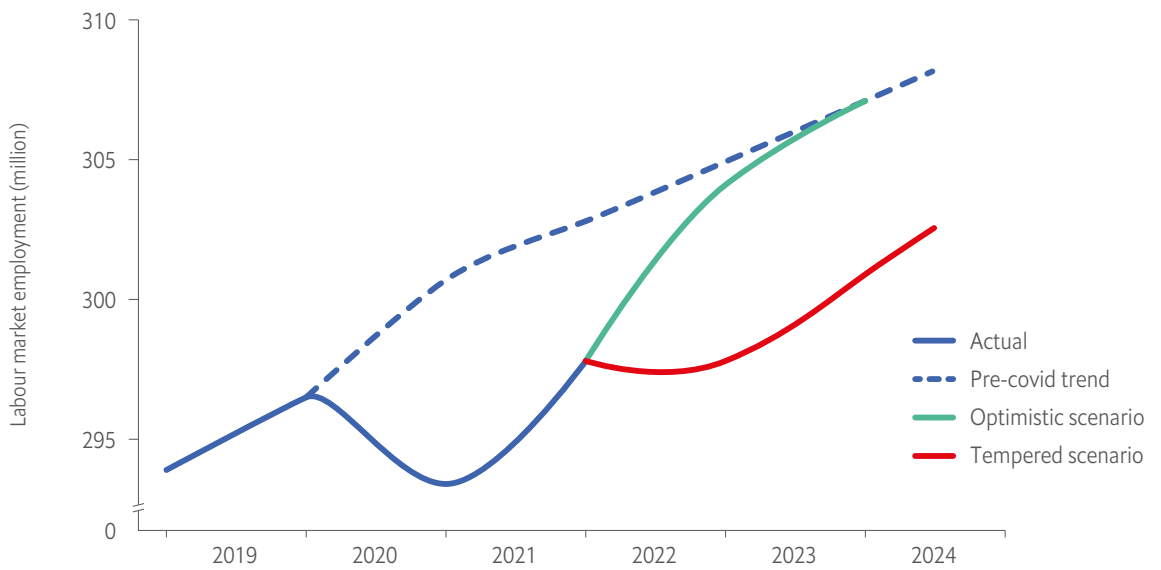
¹⁷ Russia already cut off gas to two EU countries, Poland and Bulgaria, on April 27th. <https://www.economist.com/finance-and-economics/russia-cuts-off-gas-to-two-european-countries/21808988>

Middle East and Africa—Exposure to other risks beyond the war may weaken the labour market recovery

The Middle East and Africa region saw economic growth return in 2021. According to The EIU, the Middle East and North Africa (MENA) region experienced economic growth of 3.7%, while the Sub-Saharan region expanded by 3.9%. Employment also bounced back in 2021, with the region adding 3.4m jobs after a fall of over 2m in 2020. That trend in employment growth looks likely to continue as the region is

less exposed to the risks currently seen in the global economy. The region has minor trade and investment links with Russia, while the elevated commodity prices will benefit the energy and mining producers in the region. For those countries in the region that are net importers of energy, such as South Africa, higher prices will put additional pressure on these economies due to higher import bills. On balance, the economic growth outlook is relatively favourable in the region—The EIU expects growth of 6.3% in MENA and 3.3% in Sub-Saharan Africa.

FIGURE 6: Middle East and Africa employment scenario forecasts



Source: Economist Impact.¹⁸

- Employment levels in the optimistic scenario are on track to surpass pre-covid trends in 2023.
- In the more tempered scenario, MEA's growth and employment trends will be dragged down by a slower recovery in Sub-Saharan Africa.

¹⁸ Forecasts for MEA were only extended to 2024 as GDP forecasts were not available for some countries beyond that time.



A favourable growth outlook bodes well for the recovery of employment in the region. However, the scenario analysis suggests that the region's employment remains vulnerable to weak economic growth. Were growth to disappoint in the region, the analysis suggests that a full recovery from the pandemic could be delayed until the second half of the decade. A key source of risk in the region is inflation. With global

inflationary pressures building due to the war in Ukraine, the risk of social instability has risen for low-income countries with high unemployment. According to the World Bank, food expenditure accounts for as much as half of total household expenditure in low-income countries.¹⁹ While efforts are being made to avoid a global food crisis, the risk of social unrest in the Middle East and Africa region cannot be ruled out.

¹⁹ <https://blogs.worldbank.org/voices/new-global-food-crisis-building>

Section 3: a global picture of diverging regional employment risks

Economist Impact's scenario analysis has revealed diverging regional labour markets. With the analysis predicting a strong employment recovery for the North America and Asia-Pacific regions, the predominant risk for these two regions is the potential of upward pressure on wages combined with high inflation levels, potentially causing dangerous wage-price spirals. Meanwhile, Europe's recovery has been hampered by the negative effects of the war in Ukraine on its economy, making the outlook uncertain and subsequently eliminating the likelihood of a tight labour market. Labour markets in the Middle East and Africa region and South America were already facing a weak employment recovery, still suffering from the long-term effects of the pandemic and facing risks such as food shortages. The war in Ukraine has indirectly increased the likelihood of the tempered scenarios in the two regions, implying that a full recovery of employment levels could potentially only take place in the second half of the decade.

The war in Ukraine has eliminated Europe's chances of a quick recovery and paves the way for an uncertain outlook

Given that the war in Ukraine will have its greatest impact on Europe, the risks are clearly tilted to the downside. While employment was experiencing a strong recovery, the war in Ukraine changed that trajectory. In Europe, the effect of the war is currently felt most in soaring energy prices, inflation and disruptions to car manufacturing and food supply chains.

The over-reliance on Russian exports of natural gas and crude oil, which according to the International Energy Agency account for about 40% and 25%, respectively, of imports by the 27 EU member states, demonstrates the vulnerability of both consumers and producers.

European companies are particularly affected by the supply-chain disruptions as the Ukraine conflict leads to increased shortages of key components. This could potentially prolong existing bottlenecks caused by the economic impact of the pandemic in some sectors, which had been expected to last until next year even before the invasion. With uncertainty likely to remain for months to come, the region's employment recovery from covid-19 could be even worse than we forecast in our tempered scenario. A full recovery may not take place until the middle of the decade—this is a long way from the pre-war estimates that would have seen employment recover fully in 2022 under both scenarios.

South America and the Middle East and Africa region prepare for an even slower employment recovery

Compared with North America and Asia-Pacific, the employment recovery was already subdued in South America and the Middle East and Africa. The indirect effect of the Ukraine crisis on the two regions is now accelerating pre-existing challenges to the employment recovery, such as inflationary pressures in South America and the potential for a global food crisis, which would probably hit Sub-Saharan Africa the hardest.

South American employment may not recover fully until the second half of this decade. The war in Ukraine will add to underlying inflationary pressures in the region, resulting in a challenging environment for growth. The greatest spillover effect from the Ukraine war would stem from increased food and energy prices. High commodity prices could exacerbate already high levels of inflation in South America. Increased oil prices will negatively impact importers in Central America and the Caribbean, while commodity exporters of oil, copper and iron will benefit from increased prices. With the balance of risks currently facing the region, the employment recovery is likely to be long and uncertain.

The Middle East and Africa region is less exposed to the war in Ukraine, but the global growth picture—particularly whether the global economy can avoid a recession—will be critical for the region. While a full employment recovery could take place next year, the downside scenario is concerning. A global food crisis is a major risk that hangs over the region, which would be especially painful for countries in Sub-Saharan Africa. If these countries were to experience social instability and weak economic

growth, the employment recovery in the wider region could be derailed until the second half of this decade.

Wages and inflation: Wage pressures in North America and Asia-Pacific increase the risk of a dangerous wage-price spiral, but it's not a given

Economist Impact's scenario analysis suggests strong wage pressures in the North American and Asian regions. With relatively strong economic growth rates, these markets are likely to see more jobs created and accelerating wage growth. However, given the global inflationary environment that currently exists, there is a risk that wage growth and inflation move increasingly higher in tandem. A wage-price spiral in a major Asian or North American economy would create significant economic uncertainty, but there are factors that should work against this trend to avoid such an outcome. With growing evidence that inflation is increasingly determined by global factors,²⁰ a closer examination of the current trends in the global economy—supply chain issues, energy shocks arising from the war in Ukraine and regional trade agreements—suggests that a destabilising wage-price spiral is far from certain.

TABLE: Consumer price inflation and average wage growth in 2022

	Consumer price inflation (%)	Average wage growth (%)
World	7.4	n/a
Asia-Pacific	3.6	7.0
Western Europe	8.0	8.3
North America	6.4	5.9
South America	12.4	7.1
Middle East & Africa	16.7	n/a

Source: The Economist Intelligence Unit estimate.

20 <https://www.brookings.edu/wp-content/uploads/2020/10/Forbes-final-draft.pdf>



Supply chains have faced major disruptions over the past two years, which has contributed to inflation. Before the pandemic supply chains had been run on a model of efficiency, sometimes referred to as the “just in time” model. This system, pioneered by Japanese manufacturing firms, prioritised the minimisation of time and cost at each point of the supply chain. While this system worked incredibly well as firms expanded their supply chains across the world in the decades following the end of the Cold War, this approach began to come under pressure with the onset of the US-China trade war. The increase in trade barriers between the world’s two largest economies certainly raised challenges for multinational companies, but it was only a forewarning of what was to come with the arrival of covid-19.

The pandemic shocked supply chains in a large and varied way. It was not only a supply shock to the global system when factories shut down, but it was also a demand shock when major cities went into a series of lockdowns. This was a perfect storm for global supply chains. They had to deal with a lack of intermediate goods that delayed the final production of many goods, but they also had to deal with major swings in consumer demand. As many people moved to working from home during these lockdown periods, consumer spending shifted away from services to goods, thus putting extra demand on an already stretched supply chain. Whether a

shock to demand or a shock to supplies—either shock would have been a major challenge for supply chains; to have both occurring simultaneously across multiple industries and markets was rare.

The impact of supply-chain disruptions on inflation should dissipate over time. As the covid-19 crisis progressed, companies shifted their focus from efficiency to resilience. A recent analysis by Economist Impact which assessed the private sector’s approach to trade found that companies had engaged in various adaptations to their supply chains to meet this goal. Central to this shift in supply-chain management was the diversification of suppliers as a key risk-management strategy. The analysis found that companies reconfigured their supply chains faster than expected, taking approximately eight months to reconfigure their supply chains compared to the nine months expected in the early months of the pandemic. Amid these changes companies focused on improving the sourcing of raw materials and managing shipping lines, among other issues. All these efforts resulted in supply chains that are more adaptable and resilient to future disruptions. This does not mean that supply chains will experience no further disruptions in the future, however, but they will be in a better position to withstand future shocks than they were pre-covid. With more resilient supply chains, the impact of further disruptions on inflation should lessen over time.

The war in Ukraine has delivered another shock to global inflation. With supply chains already stressed, the war will increase energy and commodity prices due to the disruption of exports from Russia and Ukraine. As a result of the war The EIU has raised its forecasts of global inflation to 7.7% in 2022, up from 5.6% previously, which would be the highest rate of inflation since 2008. Barring another shock of this kind, the effects of the war on global inflation will slowly wane over time, as food, energy and commodity markets stabilise. It is likely, therefore, that global inflation eases over the next 2-3 years as the energy and commodity price shock of the war falls out of inflation measures.

Regional trade agreements in some markets should also work to reduce the likelihood of a wage-price spiral. Recent evidence suggests that increases in import competition are an important factor that diminishes the link between wage and price inflation.²¹ While the global economy is unlikely to see a global agreement on goods trade any time soon, the number of regional and bilateral trade agreements that are being implemented is growing. This is particularly the case in Asia-Pacific, where two major regional trade agreements are coming into effect: the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).²² Both agreements cover a large number of markets in the Asia-Pacific region and are designed to incentivise supply chains that focus on member countries. These markets are likely to experience a rise in import competition, which will help to lessen the link between wage growth and inflation.

Despite these trends—regional trade agreements, the diminishing price impact of the war in Ukraine and supply chain reconfigurations—there is still a risk in the short term as these adjustments will take time to play out.²³ With inflation likely to stay elevated for the next 6-12 months, there remains a period of time where a wage-price spiral could occur.

Inflation expectations are key, and they are flashing warning signs

Inflation expectations are the most important factor that will guard against a wage-price spiral. These data series capture either the consumer or the market expectations of inflation over various forecast periods and they are watched closely by central banks as they have a significant impact on how monetary policy will evolve in a given market. In the context

of this analysis, where inflation expectations remain within historical levels, the chances of a wage-price spiral are greatly reduced. While it is true that inflation expectations have risen in recent times, they are still within the range that should contain an escalation in inflation. In Australia, for example, two-year-ahead inflation expectations have reached a five-year high, but at 2.7% they are still within the range of long-run averages. Inflation is higher in some emerging markets in Asia, such as India. However, inflation expectations in India, while higher than in developed markets, have declined in recent months to 10.7% in January 2022, down from 12.6% in November. In markets such as the US and the euro area, five-year inflation expectations have been close to their average over the last decade.²⁴ Warning signs have emerged, however, since Russia's invasion of Ukraine. In its latest Global Financial Stability Report the IMF notes that five-year inflation expectations have risen sharply in the US and the euro area since the invasion. With the employment scenarios derived in this analysis identifying North America and Asia-Pacific as the regions likely to see the strongest employment trends (rather than Europe), it is the US economy that carries the highest risk of a wage-price spiral.

It's a Great Realignment rather than a Great Resignation. Resulting wage pressures during this period should ease over time, avoiding a destabilising wage-price spiral.

The so-called Great Resignation is another factor that could lead to wage pressures. The term refers to the high number of workers who left their jobs as the covid-19 crisis unfolded. This trend, which has been seen in many markets, has prompted a major debate in the US labour market. Referred to as "quits", the number of workers leaving their job has skyrocketed in

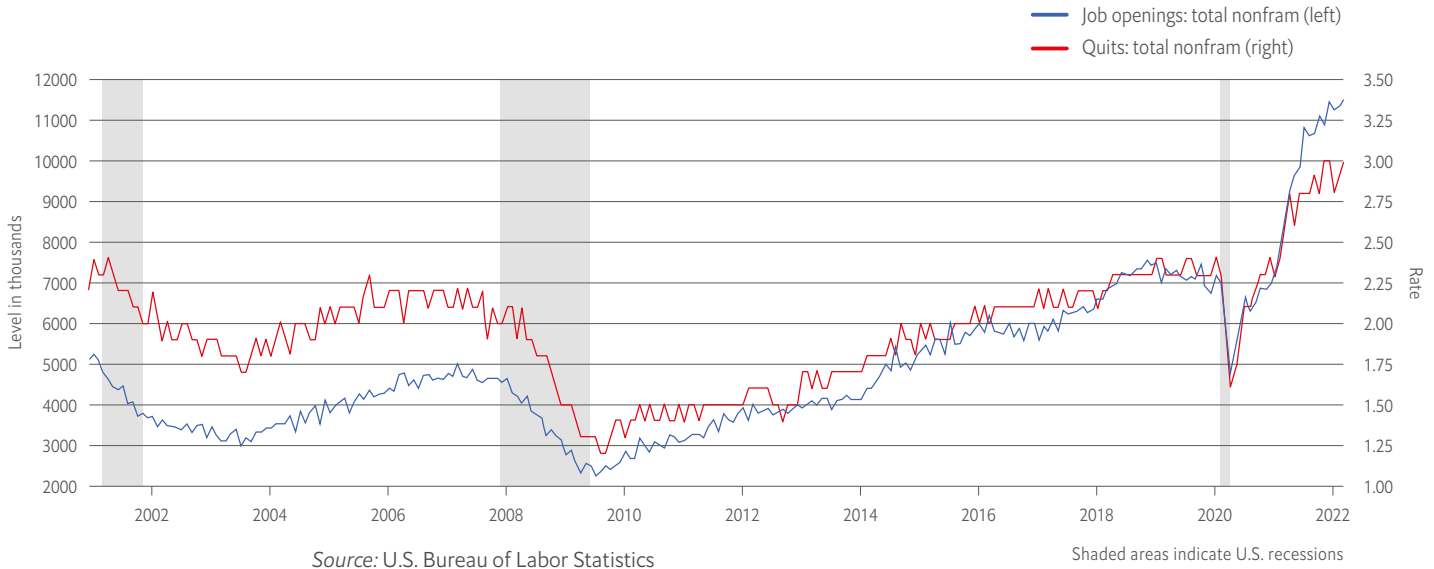
21 Heise, S., Karahan, F. & Sahin, A. (2021), The Missing Inflation Puzzle: The Role of the Wage-Price Pass-Through, NBER Working Paper No. 27663. A key finding of this paper was that those sectors that experience high levels of import competition exhibit lower wage-price pass-through.

22 India has also signed free-trade agreements with the United Arab Emirates and Australia in the past year, while looking to sign further agreements with countries such as the United Kingdom in 2022.

23 Wage indexation, where wages are automatically linked to changes in inflation, would make a wage-price spiral more likely in the current environment. This is not a concern in the US market, for example.

24 Bank of England, Monetary Policy Report, February 2022.

FIGURE 7: Job openings and “quits” in the US, 2000-2022



Source: U.S. Bureau of Labor Statistics

Shaded areas indicate U.S. recessions

recent months.²⁵ A new record for the number of quits was set in September 2021, when it reached 4.4m. In the midst of a strengthening US economy this has been taken as a sign of workers’ confidence to leave their job and find better employment elsewhere, including higher pay. While this will put upward pressure on wages, this trend should not lead to runaway wage growth and inflation, as these quits need to be viewed in the broader context of the recovery from the shock of covid-19.

The recession caused by the pandemic was unlike any recession that workers had so far experienced. It was not caused by something familiar, such as a financial crisis, a dot-com bubble or even rising oil prices. This uncertainty is likely to have led many workers to hold on to their jobs during the first stages of the pandemic. However, when the pandemic moved into a less acute phase in 2021, workers felt more confident to leave their jobs. In the same year the backlog of workers who had held on to their jobs in 2020 created a large wave of people quitting their jobs. This also needs to be placed in the context of a booming US recovery. As economic growth strengthened, the number of job vacancies in the US economy increased sharply (see chart). The evidence seems to suggest that the number of people leaving their job is maintaining its

relationship with the number of job vacancies. Both are reaching new highs thanks to the strength of the US labour market. While the current gap in these series suggests that wage pressures will be growing, the lack of a major misalignment reduces the risk that they will accelerate uncontrollably.

Companies must plan carefully as they navigate divergent labour market trends between regions

The unprecedented level of uncertainty in economic growth, employment trends and wages will demand a great deal of agility from corporations. Effective planning can help executives prepare for a range of outcomes. For multinationals, factoring in the nuances of the various markets in which they operate will be imperative, particularly given the divergence in labour market trends between regions. Importantly, it mandates the attention not just of HR teams but also of their counterparts in finance. In labour markets that are tightening, higher wages paid to retain employees may hit the bottom line.

As executives navigate labour market challenges, these are the key takeaways to bear in mind. Overall, the great realignment in labour

²⁵ Quits are job separations that are initiated by the employee. They do not refer to job separations caused by involuntary separations such as layoffs. They are a gauge of workers’ willingness to leave jobs.



markets will see sustained pressures on wage growth, but the impact should subside as new norms are established. Underpinning this will be the size of the talent pool available to companies. The pandemic saw an increase in the number of workers who left the labour market permanently, thus reducing the pool of available staff, particularly in the US and the UK, which has contributed to the current tightening of the labour market.²⁶ Changing worker preferences, such as the exploration of hybrid models,²⁷ could also reduce the supply of workers as considerations of work-life balance reduce the desired hours that a given individual wants to work. However, this should be viewed as a transition period in labour markets rather than a permanent state of disruption, albeit one that still has a way to go. Some of the workers who left the labour market could be enticed back by wage growth, while more flexible working practices may also encourage others to return. The risk is highest in the short term, as this disruption combines with inflation that could stay elevated for another 12 months before easing. As new norms in hybrid practices are established and interest-rate increases by central banks such as the Fed invariably soften economic demand, a destabilising wage-price spiral should be avoided—but only just.

26 In the UK, since the start of the pandemic, employment levels have fallen for older workers aged 65+ by 8% and for young people aged 16-24 by 3%. Foley, N., Francis-Devine, B. & Powell, A. (2020), Coronavirus: Impact on the labour market. House of Commons Library. And covid-19 may have prompted more than 2.4m baby boomers to take early retirement, according to the Federal Reserve Bank of St Louis. <https://www.economist.com/business/2022/02/05/how-americas-talent-wars-arereshaping-business>

27 <https://impact.economist.com/projects/nextpeceptions/>

List of countries included in the analysis by region

Asia-Pacific	Europe	Middle East and Africa	North America	South America
Australia	Austria	Algeria	Canada	Argentina
Bangladesh	Azerbaijan	Angola	Mexico	Brazil
China	Belgium	Côte d'Ivoire	United States	Chile
Hong Kong	Bulgaria	DR Congo		Colombia
India	Croatia	Egypt		Peru
Indonesia	Czech Republic	Ethiopia		Venezuela
Japan	Denmark	Ghana		
South Korea	Estonia	Iraq		
Malaysia	Finland	Israel		
Pakistan	France	Kenya		
Philippines	Germany	Kuwait		
Singapore	Greece	Libya		
Sri Lanka	Hungary	Morocco		
Taiwan	Iceland	Nigeria		
Thailand	Ireland	Oman		
Vietnam	Italy	Qatar		
	Kazakhstan	Saudi Arabia		
	Latvia	South Africa		
	Lithuania	Syria		
	North Macedonia	Tanzania		
	Norway	Turkey		
	Poland	UAE		
	Romania			
	Russia			
	Serbia			
	Slovakia			
	Slovenia			
	Spain			
	Sweden			
	Switzerland			
	Ukraine			
	United Kingdom			

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