



STRUCTURAL TRANSFORMATION AND LABOUR MARKETS IN ASIA AND THE PACIFIC

TOWARDS A MORE INCLUSIVE AND SUSTAINABLE FUTURE



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FOREWORD

The Asia-Pacific region stands at a critical juncture, grappling with multifaceted challenges that have disrupted established paths and timelines of structural transformation, however incomplete they may have been. The COVID-19 pandemic laid bare disparities and vulnerabilities within labour markets in the region that were already contending with pre-existing disruptions, including from climate crises, demographic change and accelerated technological automation.

This study zooms in on structural transformation and labour market performance across the Asia-Pacific region, with a view to identify the critical factors shaping the region's development trajectory in this post-pandemic era. Foremost, it underscores the importance of: addressing structural imbalances that characterize domestic labour markets, implementing more integrated policy approaches that tackle the interlinkages between macro-level levers to advance structural transformation, promoting more inclusive labour markets to build resilience to future shocks, and integrating 'green' considerations in these transformation processes. Responsibly managing automation and digitalization to prevent widening inequalities in labour markets is also an issue it addresses.

The study begins with the examination of the historical trajectory of structural transformation in Asia-Pacific economies, and implications for labour market development and poverty reduction. It then unpacks the disruptive impacts of the pandemic on labour markets in the region, emphasizing the vulnerabilities of specific segments such as women, youth, informal workers, and micro-, small- and medium-sized enterprises. It then analyses the interconnected challenges currently influencing labour market dynamics, including climate change, technological change and the ramifications of geopolitical instability on regional integration. The study concludes with a forward-leaning set of actionable recommendations on structural transformation pathways, for policymakers to consider, designed to propel Asia-Pacific countries towards a path of sustainable and inclusive development.

Kanni Wignaraja

Assistant Secretary-General, Assistant Administrator and Regional Director
Regional Bureau for Asia and the Pacific
United Nations Development Programme

INTRODUCTION

Countries in the Asia-Pacific (APAC) region are facing an increasing onslaught of complex and multi-dimensional challenges that are affecting existing processes of structural transformation and negatively impacting local labour markets, constraining the potential for economic growth, human development and poverty reduction. The global COVID-19 pandemic revealed imbalances and gaps in labour markets and social welfare systems that have widened inequalities and imposed heavy costs on vulnerable segments of the population. The pandemic intersected with a range of existing macro-level issues, including climate change, the increasingly more prominent role of technological automatization in labour, trade protection in advanced economies and the undermining of multilateralism in trade policy. Russia's invasion of Ukraine in early 2022 destabilized international markets for food and fuel, resulting in a range of damaging, macro-level spill-over effects.

Against this backdrop, this study analyses structural transformation and labour market performance in the APAC region, including the key factors affecting progress in the region. The study provides a concise set of recommendations to address the most pressing challenges that constraint labour markets of APAC countries and that impede structural transformation in this post-pandemic scenario.

To achieve these objectives, the study has been structured as follows:

- **Section 1** describes the structural transformation of APAC economies over recent decades and the implications for labour market development, economic growth and poverty reduction. The section classifies APAC countries in terms of their structural transformation performance, analysing specific factors that have enabled and constrained the process. It includes seven case studies of country experiences to illustrate factors that have influenced the performance of each of these countries.
- **Section 2** analyses the effects of the COVID-19 pandemic on labour markets in the APAC region based on recent data, with special attention to the impact of the pandemic on women, youth, informal labour and micro-, small- and medium-sized enterprises (MSMEs).
- **Section 3** analyses macro-level issues that are currently affecting labour market conditions in the region, including climate change, technological automation and the socio-economic repercussions of the Russia-Ukraine war.
- **Section 4** presents concrete recommendations for policymakers to help set APAC countries on a path of inclusive and growth-enhancing structural transformation.

Below are important messages that constitute the core of this study's insights and conclusions.

1. **Several APAC countries still lag in their path to structural transformation.** Structural imbalances partially explain why some APAC countries have been particularly affected by the multi-dimensional impacts of the COVID-19 pandemic and why they are lagging behind compared to their regional neighbours.
2. **APAC countries are subject to a series of interconnected and mutually reinforcing macro-level challenges that require a holistic and integrated policy response to drive structural transformation.** These challenges include the rising threat of climate change, under-funded and partial social protection systems, growing digitalization and automation processes that risk widening structural inequalities and sudden-onset systemic crises brought about by an increasingly more unstable geopolitical context (e.g., the Ukraine War).
3. **Promoting inclusivity in APAC labour markets is key to foster balanced structural transformation and strengthen the resilience of labour markets to future systemic shocks.** In the framework of the structural transformation process, it is critical for public decision makers to tackle the structural gaps and inequalities that marginalize and weaken sub-segments of APAC labour forces, including women, youth and informal workers. A range of possible interventions and policy measures need to be implemented to address these inequalities.

4. **It is crucial to mainstream ‘green’ considerations in the structural transformation process.** When properly designed and bundled, green policy interventions can deliver socio-economic benefits while mitigating environmental degradation. Nevertheless, from the perspective of APAC policymakers, implementing such policy packages in an effective manner is bound to involve, among many other things, tackling the current gaps in institutional capacity (at country level) that can be used to orient a green recovery process, harmonizing the green and digital transition processes, promoting a more climate-friendly investment ecosystem at national levels and linking labour market and employment goals to climate change commitments.
5. **While the twin processes of automation and digitalization represent an invaluable opportunity to advance socio-economic growth for APAC economies, a strong policy hand will be needed to ensure that these rapidly accelerating trends do not marginalize and disrupt the livelihoods of millions of already vulnerable workers and MSMEs, widening the stark structural inequalities already present in APAC labour markets.** Countries need to undertake large-scale initiatives to tackle the enormous skills gaps registered in information and communications technology (ICT)-related areas, which characterize the majority of the APAC workforce. Countries will also need to work towards universal access to digital infrastructure, including affordable and better quality high-speed broadband service, support interventions to advance the digitalization process of the region’s MSMEs and enable harmonization of the digital transition with the green transition processes.

What is structural transformation?

The term ‘structural transformation’ refers to a process of transition by which a growing economy shifts its core axis from low productivity and labour-intensive sectors to higher productivity and skills-intensive sectors. This process is characterized by the gradual movement of the workforce from labour-intensive sectors to skill-intensive ones, with a reallocation of economic activity and labour from agriculture to industry and services. As pointed out by Beylis et al. (2020): *“Structural transformation remains of interest to analysts because of its intimate ties to trends in productivity, regional income convergence, labour force participation, urbanization, business cycles, wage inequality and many other facets of development—ties which often open avenues for policy interventions contending that the existing allocation of activity across sectors proves inefficient.”*

From a policymaker’s perspective, promoting growth-enhancing structural transformation is critical to achieve a more sustained and inclusive socio-economic development at national level. This process is a core driver of economic growth, as it leads to increasing productivity and output in high-productivity sectors, which can in turn bolster national GDP. It diversifies and deepens production, linking processes to global value chains in manufacturing and services, and making exports more competitive. It enables decent job creation and increases employment as more and better-paying jobs are created outside of the agricultural sector. It bolsters technological progress, encouraging greater investments in new technologies and associated human capacity that allow for greater and more sustainable gains in capital productivity. Finally, it can have a beneficial impact on a range of social indicators, increasing access to education, healthcare and other welfare services, while reducing poverty and income inequality.

It should be underlined that these represent the ideal outcomes of a balanced, classic process of structural transformation. As will be seen throughout this paper, many APAC countries are either experiencing an ‘incomplete’ and partial process of structural transformation or are still considerably lagging behind in this path. The determinants and causes will be amply discussed in this study.

1. SETTING THE STAGE: INSIGHTS ON STRUCTURAL TRANSFORMATION AND LABOUR MARKET PERFORMANCE IN ASIA AND THE PACIFIC



1.1 GROWTH DRIVERS AND DETERMINANTS OF STRUCTURAL TRANSFORMATION IN THE APAC REGION

To understand how the COVID-19 crisis and associated issues have affected structural transformation in APAC countries, it is first critical to analyse the past performance of countries prior to the pandemic, and, in particular, the key factors that explain the success and failure of structural transformation across different countries.

A study by Nayyar (2019a) provides a wide-ranging analysis of Asian countries' processes of structural transformation, expanding it from a purely economic viewpoint to a wider one that contextualizes structural transformation from the perspective of six different – but still interconnected – dimensions: macroeconomics of growth; structural change and economic transformation; openness and industrialization; markets, governments and politics; unequal outcomes for countries and people; and the correlation between APAC development and that of the world economy.

When analysing the **macroeconomics of growth**, China is considered the star performer in the region in terms of GDP growth, with 7 to 9 percent annual growth rates over a period spanning almost forty years. GDP per capita growth rates were also high in Indonesia, the Republic of Korea, Malaysia, Singapore and Thailand in the earlier stages of their development, but rates slowed down significantly after 1991. On the contrary, GDP per capita growth rates were initially lower in Bangladesh, India and Viet Nam, but they rose to much higher levels at a later stage (Nayyar, 2019a). In countries that registered significant growth, rapidly rising levels of investment and savings represented the main driving factors of growth from the supply side. Education was also a solid driver of growth in successful countries. From the demand side, growth in most countries was driven primarily by private consumption, expenditure and investment. **The supply and demand interaction is a virtuous circle of cumulative causation, by which rapid investment growth coincides in time with rapid export growth, resulting in accelerated GDP growth.**

Aside from the cases of the Republic of Korea, Singapore and (possibly) Malaysia, **the process of structural transformation in the APAC region is considered uneven and incomplete.** Transformation of the agricultural sector remains incomplete in China, and even more so in Southeast Asian countries, while South Asia still has considerable work to do from this standpoint. Moreover, considerably less progress has been achieved in terms of manufacturing for industrialization, particularly in South Asia, while industrial dynamism has lost momentum in Southeast Asia. The services sector has driven economic growth up to a point in several countries, but this may not be sustainable, as **structural transformation cannot progress and advance in a balanced manner if even one of the three core sectors remains a weak link in the chain.**

The **economic openness**¹ dimension has acted as a critical supporting factor in the process of structural transformation in the region, **but only when it has assumed the form of a strategic integration with the world economy.** However, openness by itself has not been sufficient, as it has been only beneficial towards achieving industrialization when combined with efficient industrial policy, as in the Republic of Korea and Singapore. The more recent success stories in China and Viet Nam have seen the use of industrial policy in a very different context. The industrial dynamism of Indonesia, Malaysia and Thailand lost momentum after the Asian Financial Crisis. India lagged behind the leading countries due to weaknesses in the implementation of its industrial policy. Indeed, it must be stressed that transition in Asia was about managing an evolving relationship between states and markets, in terms of achieving a right balance in their respective roles, which is something that also changed over time.

Rising per capita incomes and improvements in social indicators are related phenomena, with causation running in both directions: **social progress and economic development can be mutually reinforcing in a virtuous circle.** By 2016, China, the Republic of Korea, Malaysia and Singapore registered infant mortality rates in the single digits, while life expectancy was over 75 years of age and adult literacy rates were over 95%. Sri Lanka and Thailand came close to those numbers, despite their lower income levels. Meanwhile, Indonesia and the Philippines, at similar income levels, did not make as much progress, except in adult literacy rates. Viet Nam, which registered a distinctly lower income level, fared better. Bangladesh, India and Pakistan showed slower growth in all three

social indicators, with Pakistan having the worst results. Although several Asian countries started their remarkable development with a more equal distribution of incomes, **rapid economic growth in Asia became associated with greater income inequality**. Rapid growth led to a substantial reduction in absolute poverty that could have been much greater, were it not for the rising inequality. Consequently, the absolute numbers of poor remain elevated, while the number of vulnerable people has risen to over a billion (Nayyar, 2019a).

1.2 CLASSIFICATION AND FEATURES OF STRUCTURAL TRANSFORMATION ACROSS APAC COUNTRIES

To analyse the performance of individual APAC countries in terms of structural transformation, it is useful to establish a classification model that categorizes different groups of countries according to their performance. This is fundamental to identify and highlight common historical trends across these categories of countries that can explain their different pathways for structural transformation, as well as key policy decisions that either supported or constrained these processes.²

Van der Hoeven (2019a) analysed the performance of labour markets over the last three decades for a set of thirteen APAC countries. The exercise classified APAC countries in six different categories based on their performance in economic growth and labour market outcomes over the period 1986 to 2015. In this study, we updated the original exercise to encompass the period ranging from 1986 to 2019 (pre-Covid). First, the countries were classified according to their performance in terms of economic growth: *fast growers* (with an average per capita GDP growth rate of more than 4.5%); *medium growers* (with an average per capita growth rate of between 3% and 4.5%); and *slow growers* (with a per capita growth rate of less than 3%). Each of these three growth outcome groups were then further subdivided according to whether they registered: a) good; or b) weak labour market outcomes, i.e., a combined score on an extensive set of labour market and development-related indicators, which were:³ share of working poor; employment in agriculture; employment-to-population ratio; male and female labour force participation rates;⁴ share of wage and salaried workers by sex, poverty rate, income inequality, literacy rate and secondary school completion rates.⁵ The categorization of select APAC countries that results from this exercise can be seen in Table 1.

Table 1: Classification of select APAC countries by growth and labour market outcomes (1986–2019)

	Fast growth	Medium growth	Low growth
Good labour market outcomes	China Republic of Korea Viet Nam	Indonesia Malaysia Thailand	
Weak labour market outcomes	India	Bangladesh Lao PDR Sri Lanka	Nepal Pakistan Philippines

Source: Authors, adapted from van der Hoeven, 2019a.

According to this classification, the group of fast growers (China, Republic of Korea, India and Viet Nam) presents a mixed pattern in terms of labour market outcomes in the period under analysis. Those with good labour market outcomes (China, Republic of Korea and Viet Nam) show the below characteristics.

- A rapid decline in poverty rates. In China, down from 71.96% in 1990 to 0.14% in 2019 and in Viet Nam down from 45.02% in 1992 to 1.23% in 2018 (World Bank, 2023a).⁶
- Either a fast or at least an average decline in the share of workers employed in agriculture. In China from 60% to 25%, in the Republic of Korea from 16% to 5%; and in Viet Nam from 75% to 35% for the period 1991–2019 (World Bank, 2023b).

- A declining share of working poor. In China from 9.4% to 0.1% and in Viet Nam from 3.9% to 1.6% for the period 2011–2019.⁷ Working poverty is non-existent in the Republic of Korea (ILOSTAT, 2023)
- High and rising literacy rates. In China from 78% to 97% for the period 1990–2019 and in Viet Nam from 88% to 96% for the period 1989–2019; Female literacy rates also rose over the same periods, from 68% to 95% in China and from 83% to 95% in Viet Nam (World Bank, 2023b).
- A considerable employment-to-population ratio. 64% in China, 61% in the Republic of Korea and 74% in Viet Nam as of 2019 (World Bank, 2023b).
- A considerable increase in wage and salaried workers. From 30.6% to 54% in China, 15.2% to 45.1% in Viet Nam and 62.7% to 75.4% in the Republic of Korea over the period 1991–2019 (World Bank, 2023b).

In India, on the other hand, the economic and labour market profiles are closer to those of countries with a low growth rate despite its success in reducing poverty from 50.6% in 1987 to 10% in 2019 (World Bank, 2023b). Labour force participation declined from 56% in 1990 to 52% in 2019. Furthermore, about 9% of the employed population were considered working poor in 2019 (ILOSTAT, 2023). The literacy rate stood at 74% in 2018 with a lower female literacy rate at 66% (World Bank, 2023b). The employment-to-population ratio was 46% in 2019, with a marginal increase in wage and salaried workers, from 14.9% in 1991 to 24.5% in 2019 (World Bank, 2023b).

The labour market outcomes registered among the group of *medium growers* are rather diverse. In Bangladesh and Lao PDR, while poverty rates declined over this period, they declined to a lesser extent than in other countries, with a still considerable share of working poor registered among the population.⁸ In comparison, Indonesia, Malaysia, Sri Lanka and Thailand experienced a considerably more rapid pace of poverty reduction and a lower share of working poor (working poverty is non-existent in Malaysia). Only Malaysia registered an elevated share of wage and salaried workers in this group of countries (74.4% in 2019) (World Bank, 2023b). Literacy rates have grown in recent years in both Bangladesh and Lao PDR, although the former still registered a national literacy rate of 74.6% as of 2019 (World Bank, 2023b). The number of individuals who completed at least lower secondary school education varied substantially in this group of medium growers, with the lowest rates registered in Bangladesh (44.7% as of 2019) and the highest in Sri Lanka (81%) (UNESCO).

All countries in the group of *slow growers* register weak labour market outcomes. The labour force participation rate in Nepal has remained stagnant since 1990 at a low 42.6% in 2019 (ILOSTAT, 2023). Similarly, not much movement has occurred in the labour force participation rate in Pakistan, with only a slight increase from 50.3% in 1990 to 53.6% in 2019. The Philippines registered a slight decrease in labour force participation rate, from 63% in 1990 to 61.6% in 2019. The employment-to-population ratio has also largely remained unchanged over the period 1991–2019, with 2019 rates at 36% in Nepal, 49% in Pakistan and 58% in the Philippines. The share of workers employed in agriculture varies considerably in this group, with relatively lower figures registered in Pakistan and the Philippines (38.3% and 22.9% respectively) and a considerably higher one in Nepal (62.3%). Literacy rates and secondary school completion rates are also relatively low in this group, with the exception of the Philippines which has both high literacy and high secondary school completion rates.

Another interesting element in this classification is the differences among country categories related to **women's participation in the labour markets**. One of the most important aspects to underline from this standpoint can be seen in the group of fast-growing countries: **those characterized by good labour market outcomes all register a much higher female labour force participation rate than the countries with weak labour market outcomes**. As of 2019, for example, China and Viet Nam were registering a female labour force participation rate of 70.1% and 77.2% respectively, while India registered a 25.3% rate (ILOSTAT, 2023). Furthermore, among women workers, the difference in the percentage of wage and salaried workers is higher on average in the case of fast-growing countries with good labour market outcomes compared to countries with weak labour market outcomes. In general, countries with lower female labour force participation rates belong, regardless of their growth outcomes, to the group of countries with weak labour market outcomes (van der Hoeven, 2019a).

Analysis by the authors of the current study find that the **values registered by APAC countries on the Human Development Index⁹ (HDI) match well with the country-level classification based on the six different growth and labour market outcomes**, detailed above. By adopting a HDI threshold value of 0.65 to distinguish between good and weak HDI performance, it emerges that all countries registering good labour market outcomes and high or medium growth outcomes were presenting a HDI value higher than 0.65 as of 2019. All countries with a

HDI value below 0.65 belong to the group of countries with weak labour market outcomes (see Table 2). The only two countries registering weak labour market outcomes, but a relatively high HDI value are the Philippines and Sri Lanka, which despite registering such a high value at the beginning of the growth process under analysis have not managed to translate this advantage to fast growth and good labour market outcomes.

Table 2: HDI values (as of 2019) for countries classified according to growth and labour outcomes

	Fast growth	Medium growth	Low growth
Good labour market outcomes	China (0.76) Republic of Korea (0.91) Viet Nam (0.70)	Indonesia (0.71) Malaysia (0.81) Thailand (0.74)	
Weak labour market outcomes	India (0.64)	Bangladesh (0.59) Lao PDR (0.61) Sri Lanka (0.78)	Nepal (0.60) Pakistan (0.55) the Philippines (0.71)

Source: Authors based on UNDP (2020).

A common feature of fast-growing countries with good labour market outcomes (i.e., China, Republic of Korea and Viet Nam) is that these countries did not rely exclusively on the market to determine resource allocation. Furthermore, their macroeconomic policies were not in line with neoclassical macroeconomic prescriptions. Another common element to the group of countries which present good labour market outcomes (registering fast-growth and medium-growth) is **the nature of their drivers of growth**. All these countries made use of external markets to sustain demand-led growth. However, as in the case of their investment outcomes, external demand was not left to an invisible hand, as firms were encouraged to export – in the framework of clear export targets (Amsden 2007).

These virtuous growing countries have defied the lessons from the ‘Washington Consensus,’ which came to dominate policy advice from the Bretton Woods institutions in the 1980s (van der Hoeven and Taylor, 2000). For some countries characterized by high growth and good labour market outcomes, such as the Republic of Korea, government policies have been aimed at increasing agricultural productivity through land redistribution, investment, subsidies and the provision of ‘public goods’ for agriculture. By restricting the analysis to a range of common factors that have characterized countries with high/medium growth and a good labour market, the following elements emerge: **rapid export growth; high rates of public investment (especially in rural sectors); and superior education outcomes**. A key difference lies in the fact that, in the framework of the structural transformation process, APAC countries that registered employment growth in sectors for which there were rapid productivity advancements managed to achieve good results, whereas those countries that did not register employment growth in those same sectors showed a weak degree of advancement.

An important element that characterizes the group of fast-growth countries was their **initially low levels of household income inequality** (van der Hoeven 2020). Low household income inequality was in itself the result of a more equal factor distribution of income. The most salient examples of equal factor distribution were public programmes for land redistribution and early investment in education. Amsden (2011) argues that the institutions of fast-growth countries have managed to curtail, over the course of the development process, the influence of capital (i.e., ‘taming capital’). This was achieved not through social contracts or labour market agreements, as in specific cases of equitable high-growth economies in Europe in the aftermath of the Second World War, but through state interventions implemented by an enlightened and strong bureaucracy, which either directly (China) or indirectly (Republic of Korea) pushed firms to invest, expand and create employment, discouraging speculation and fostering the development of export industries. Nevertheless, the effect was similar; productivity gains were used to invest, expand employment and increase wages. Taylor (2010) labels such a virtuous growth regime as **mildly profit-led**, as there was room for wage growth and profits were reinvested in the economy. This, on the one hand, bolstered demand, but on the other hand it led – through productivity gains – to an expansion of supply (i.e., the so-called *Kaldor–Verdoorn mechanism*).

This virtuous growth pattern registered among the fast-growing Asian countries was the consequence of what Khan (2019) defines as **growth-enhancing governance** – sustained, employment-intensive growth, enabled at first

by a transformation process in agriculture (brought about by more egalitarian landholdings and by a consequent rise in industrial activities), with initially high employment elasticities stimulated by strong final demand outcomes (due either to exports or internal consumption). Khan contrasts this growth-enhancing governance with market-enhanced governance, as advocated by the Bretton Woods institutions in the Washington Consensus. Two important observations are relevant here. First, although the group of fast-growing countries with good labour market outcomes was registering low inequality levels at the start of their development process, in some of these countries, household inequality has since risen (for example in China, where the Gini index increased from 32.2 in 1990 to 38.2 in 2019) (World Bank, 2023b). Secondly, several countries (such as Nepal) that did not register fast-growth outcomes also showed low levels of inequality – or at least did in the past. Thus, **low-inequality outcomes are a necessary – but not sufficient – condition for positive economic growth and employment creation.**

While this paper does not explicitly tackle the issue of differences in the political economy of decision-making across countries owing to different governance regimes, it acknowledges that this is also an important factor behind countries' divergent trajectories.

1.3 COUNTRY CASE STUDIES OF STRUCTURAL TRANSFORMATION IN THE APAC REGION

This section presents brief case studies that analyse the structural transformation path followed by different APAC countries, based on the classification system introduced in the previous section which categorizes countries according to their performance in terms of economic growth and labour market outcomes. Table 3 provides a summary of how the countries analysed in this section are classified according to this model.

Table 3: Classification of case study countries according to the growth/labour market performance model

	Fast growth	Medium growth	Low growth
Good labour market outcomes	Viet Nam	Indonesia Malaysia Thailand	
Weak labour market outcomes	India	Bangladesh	The Philippines

Source: Authors.

1.3.1 FAST GROWTH AND GOOD LABOUR MARKET OUTCOMES: VIET NAM

Structural transformation in Viet Nam has played a vital role in enhancing the country's growth and reducing poverty, particularly in the last two decades. Between 2000 and 2020, the country's GDP grew at an average rate of 6.5% per annum, while the poverty rate¹¹ declined from 29.9% in 2002 to 0.6% in 2020. Meanwhile, the labour share in agriculture declined from 65% in 2000 to 33% in 2020, while it rose from 12% to 31% in the industry sector and from 22% to 36% in the services sector (World Bank, 2023b). The degree of changes over time in each sector's contribution to GDP paralleled (to a point) the trends registered in sector-specific labour shares.

As pointed out by McCaig and Pavcnik (2022), structural change played a far more important role in Viet Nam throughout the 2000s than the 1990s (see Figure 1). At the beginning of the 1990s, Viet Nam's agriculture sector still employed more than 70% of the workforce and contributed to more than 35% of the national GDP – among the highest shares registered in Asian countries in that decade. Improvements to within-sector labour productivity contributed significantly to Viet Nam's aggregate productivity growth throughout the 1990s, compensating for the slower pace of structural transformation, with workers in manufacturing producing four times the output of agricultural workers, while in small sub-sectors of services (e.g., construction and public utilities) differences in productivity were even greater.

Starting with the *Doi Moi* Reforms in 1986 and throughout the 1990s, Viet Nam underwent a shift from central planning to a market-oriented economy, encouraging the establishment of private businesses, loosening restrictions on internal and foreign trade and devolving control over agricultural land to households and businesses. These policies attracted foreign investment, reduced subsidies to state-owned enterprises (forcing them to compete for access to domestic markets), eliminated most price controls and created a network of state-owned and joint-stock commercial banks. The reforms sparked a rapid acceleration of economic growth, with an annual GDP growth rate of 6.5 percent on average from 1990 until the Asian Financial Crisis in 1997 (Anh, Minh Duc and Chieu, 2016).

Viet Nam's consistently **high female labour force participation rates** have been an important factor in the country's economic success. The female labour force participation rate has hovered around 70% since 1990 and the gender gap in labour participation stood at 8 percentage points in 2021. History, culture and tradition are important factors. Gender parity in school and university enrolments has also contributed to high participation rates. However, women face multiple and persistent inequalities in job markets. A gender division of labour excludes women from higher-paying jobs and women are paid less even when performing the same jobs as men. Women in the formal sector retire five years earlier than men, which is an obstacle to career advancement and reduces women's pension benefits. Women also perform a disproportionate share of unpaid family care responsibilities and domestic work (Banerji et al., 2018).

Starting from the 2000s, reallocation of labour from agriculture and traditional services to manufacturing and modern services began playing a more important role in aggregate productivity growth, as shown in Figure 1. The flow of workers out of the agricultural sector and into higher-productivity sectors (manufacturing and modern services) accelerated as export-oriented industrialization gathered pace.¹² The steady growth of manufacturing has been sustained by Viet Nam integration into East Asian supply chains, mainly final assembly of garments, footwear and electronics. The country's young workforce (half of the population is below 35 years of age), relatively low wages, improving infrastructure, political stability and geographical proximity to China, Japan and Korea are notable factors (Eckhardt, Mishra and Dinh, 2018). Jobs in manufacturing have grown at annual rates over 10%, reaching 15% in the garments sub-sector and 30% in office and computing machines (McCaig and Pavcnik, 2017). These trends make Viet Nam stand out among its regional peers. Both the average aggregate labour productivity growth that characterized Viet Nam in the 2000s (4.9%) as well as the contribution to this growth made by structural transformation (55%) (as opposed to within-sector productivity increases) exceeded the average values registered in Asian economies over that period (McCaig and Pavcnik, 2017).

Figure 1: Components of labour productivity growth in Viet Nam (1991-2008)



Source: McCaig and Pavcnik, 2017.

Manufacturing, finance and other modern services are concentrated in the Southeast region of the country, including Ho Chi Minh City, and the Red River Delta provinces surrounding Ha Noi and the port city of Hai Phong. In remote and mountainous regions, agriculture's share of GDP and the labour force remain high. These regions host the major seaports (Ho Chi Minh City, Vung Tau and Hai Phong) as well as the main industrial zones. Despite these differences in terms of structural change, poverty has declined rapidly in all regions. As shown in the last *Viet Nam's Multidimensional Poverty Report*, while upland regions, such as the North Mountain and Midland and Central Highlands, still registered the highest poverty rates in the country as of 2020 (7.6% and 9.2% respectively), these rates dropped by approximately 23 and 21 percentage points in only eight years (UNDP et al., 2022).

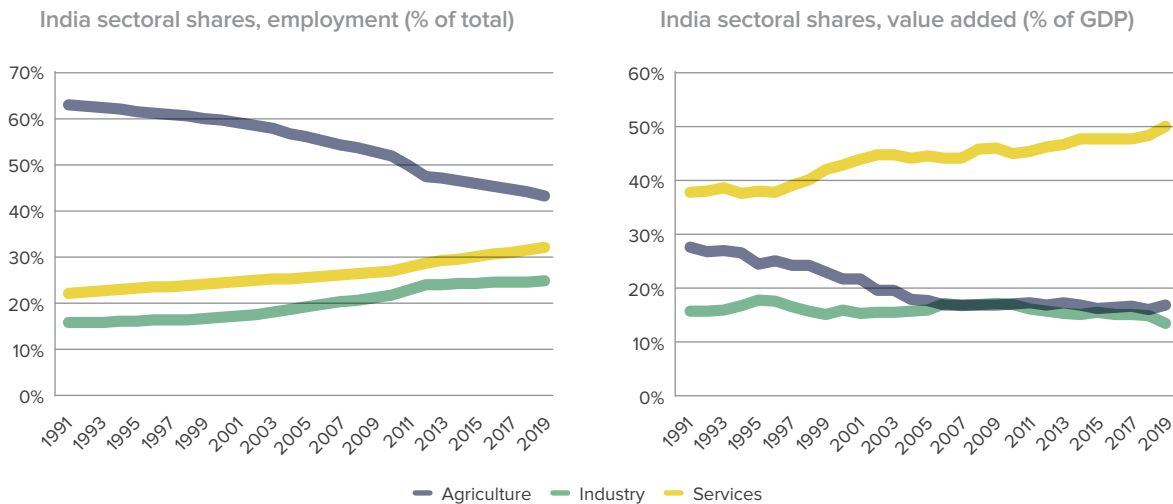
1.3.2 FAST GROWTH AND WEAK LABOUR MARKET OUTCOMES: INDIA

The growth India has experienced in the past three decades has been mainly led by the services sector – specifically digitally transformed services, such as information technology, communication, financial and business services – rather than industry.¹³ This represents an anomalous route compared to other low-income countries, where structural change has been associated with manufacture-led growth in early stages of development, as low-skilled workers move from agriculture to the manufacturing sector (Ghose, 2021). As such, India has developed two distinct sectors: a high-productivity service sector and a low-productivity agriculture sector. The highly productive service industries are not labour-intensive and India's vast labour force which primarily still engages in subsistence farming lacks the qualification for these high-paying high-skill service jobs. The three closely interconnected aspects of structural change in India are discussed below to explain this broad phenomenon.

- 1. The labour share of the industry sector has started plateauing in recent years and the sector's contribution to GDP has declined; employment in the manufacturing sub-sector and its GDP share has seen a decline.** This appears to imply a weak industrialization process. As can be seen in Figure 2, the labour share in the services sector has grown from 21.5% in 1991 to 32.3% in 2019. Although the labour share in industry¹⁴ grew from 15.1% in 1991 to 24.4% in 2012, growth has been plateauing since 2012. As can be evinced from data by ILOSTAT (2023), employment in manufacturing has declined from 12.9% in 2012 to 11.5% in 2021. In parallel, the GDP share of the services sector has grown from 37.8% in 1991 to 50.1% in 2019, while industry's contribution has decreased from 15.7% to 13.5% in the same period. The manufacturing value added as a share of GDP has seen a decline from 15.8% in 2012 to 14.5% in 2021. Various factors can explain the lack of growth of the Indian manufacturing sector: poor infrastructure; restrictive labour regulations; and land constraints. As such, unlike other APAC countries, such as China and Viet Nam, India has never benefitted from a boom in labour-intensive manufacturing dedicated to export.
- 2. Outgoing workers from the agricultural sector have largely sidestepped manufacture.** The labour share of agriculture in India has fallen by 22 percentage points between 1991 and 2019, but the sector still employs 44% of Indian workers (World Bank, 2023b). Meanwhile, agriculture's share of GDP has declined in this period, from 27.7% to 16.7%. This implies that while agriculture's output share has decreased noticeably, its labour share has declined only modestly, which is a clear indication that agriculture's relative productivity has fallen. Nevertheless, in India the manufacturing sector has barely managed to absorb any of the workers moving out of agriculture, while services and construction have represented the two main destinations.
- 3. The pace of structural change has been relatively slow.** When compared to other rising Asian economies, characterized by a more 'classical' manufacture-led pathway to growth (in which manufacture absorbed a sizeable number of outgoing agricultural workers), the pace of structural transformation in India has been considerably slower, as the services sector, unlike manufacturing, is considerably more skills-intensive than labour-intensive and thus unable to absorb the majority of the Indian workforce.¹⁵ Thus, structural transformation in India has indeed resulted in considerable economic growth, but not in a commensurate rate of labour reallocation, as the services sector is incapable of adequately absorbing a mass of low-skilled workers seeking to move out of agriculture and manufacturing plays a very limited role due to infrastructural and regulatory under-development. Without a large, structured manufacturing sector, the vast majority of India's workforce lacks the opportunity to be trained and upskilled to be able to find employment within higher value-added segments. Pre-pandemic data from the Periodic Labour Force Survey 2018-2019 shows that a mere 2.2% of the Indian workforce was in regular salaried employment arrangements which offered both security of tenure and access to social security benefits (such as a pension, gratuity, health care and maternity benefits) (Kapoor, 2022).

India's distinct path for growth has important implications for the **improvement of labour conditions**, as well as overall development. Not only does structural transformation involve the reallocation of workers from agriculture to non-agricultural sectors characterized by a higher labour productivity, but it also serves as a primary mechanism for the improvement of employment conditions. This is true both in the non-agricultural sector (as workers move to better, higher-income jobs) and the agriculture sector (as surplus labour in the sector is reduced, both productivity and quality of employment increases). In India, though, the country's services-led pathway to economic growth has had a much weaker effect on employment conditions, due to the services sector's inability to accommodate the outflow of agricultural workers (Ghose, 2021).

Figure 2: Evolution of different sectors' share of employment and contribution to GDP in India



Source: World Bank, 2022b.

In terms of India's potential for future inclusive and sustainable growth, as pointed out by McMillan et al. (2016), the scope for further productivity increases within the services sector is relatively limited beyond a certain point, and, hence, this limits its possible future contribution to economic growth. For the country to transition to a manufacture-led pathway to growth it will be critical to tackle some of the key constraints that have historically limited worker movement to the manufacturing sector. Examples of such constraints include the current restrictive labour laws, as well as the very low levels of credit provided by development banks in the country.¹⁶ The Indian government recently issued a new Foreign Trade Policy 2023 to increase the country's export of goods and services to US\$2 trillion by 2030, up from \$760 billion currently, or a 14.8% annual compounded growth rate. The government has also pledged to develop labour-intensive sectors to create jobs, with a focus on textiles, plastics, footwear, auto parts and agri-food processing. However, the starting point is low and efforts must be made to accelerate this transition. The young workforce (including young women) must be adequately prepared and upskilled to face the tech-enabled future of work, which will involve artificial intelligence (AI) interfaces, machine learning and increasing levels of automation. Better political commitment to understand automation technologies and their implications for the Indian economy is crucial. Instead of framing policies and incentives to create employment opportunities in areas that are going to be the first to lose jobs with the advent of automation and AI, it would be better to boost employment in the areas that are least vulnerable to automation (Desouza and Somvanshi, 2019).

Low female labour force participation rates and the continued engagement of women in low-paying, poor-quality jobs remain key impediments to structural transformation in India. A study by the McKinsey Global Institute estimated that raising the female labour force participation rate in India by 10 percentage points from 2015 to 2025 could boost GDP by \$0.7 trillion or 16 percent of the business-as-usual level (McKinsey Global Institute, 2015). Despite this significant economic opportunity, female labour force participation lags that of male participation. Between 1991 and 2019, India experienced a decline in its female labour force participation rate, from 27.8% in 1991 to 24% in 2019 (World Bank, 2023b). The labour force participation rate for men stood at

74.6% in 2019. A great majority of employed women (90%) worked in informal employment in 2019, which is often characterized by low wages, poor working conditions, lack of access to social protection and low productivity (ILOSTAT, 2023). Much of the mainstream explanations have centred on women dropping out of paid work due to supply side factors, such as adverse social norms, the burden of domestic and childcare responsibilities and a 'household income effect.'¹⁷ Additionally, some have argued that measurement problems arise due to the inability of household surveys to adequately capture women's economic activity. Deshpande and Singh (2021) have argued that demand side factors, in particular the availability of steady gainful employment for women has also led women to drop out of the labour force.

Boosting the participation of women in the labour force and creating an enabling work environment will require multi-faceted and concerted action in the following areas: 1) closing gender gaps in secondary and tertiary education; 2) promoting skills training for women in promising sectors; 3) addressing barriers to entry in the labour market; 4) extending the reach of digital and financial services to advance women's entrepreneurship; (5) strengthening legal provisions for women and ensuring the enforcement of laws; (6) addressing the burden of routine domestic work, childcare and elder care through provisions for affordable and accessible care services; and (7) changing deep-rooted societal attitudes about the role of women in work and in society.

1.3.3 MEDIUM GROWTH AND GOOD LABOUR MARKET OUTCOMES: MALAYSIA, INDONESIA AND THAILAND

Malaysia

Malaysia's growth in recent decades differs from that of most of its peers in Southeast Asia, in that **within-sector labour productivity growth** has played a considerably more important role for the country's economic development than structural change between sectors. According to Abdur Rahman and Schmillen (2020), between 1987 and 2017, the country's aggregate output per worker (i.e., labour productivity) more than doubled in real terms, from RM 41,370 to RM 91,074 million. Labour productivity growth was faster in the 1987-1997 period (an average annual increase of 4.8%) and relatively more constrained between 1997 and 2018 (2.3%). When focusing the analysis on individual sectors, labour productivity growth was particularly strong in business and trade services (which grew by an annual average of 8.8% between 1987 and 1997) and in manufacturing (an average annual growth of 6.1% in the same period).

Within-sector productivity growth was the chief factor responsible for the considerable labour productivity growth registered in the 1987-2017 period (Abdur Rahman and Schmillen, 2020), as can be seen in Table 4, while labour reallocation between sectors scarcely contributed to growth in output per capita. In fact, in the period 2007-2018 the contribution of structural transformation to labour productivity was negative, which implies that labour on average shifted to less productive sectors. This can be explained by the fact that starting from 1997 productivity growth in the manufacturing sector began to gradually decelerate, thus workers moving into this sector contributed increasingly less to labour productivity growth. Productivity growth continued in the high-end electronics sector (which represented a crucial component of Malaysia's exports), but with relatively few jobs created in association with this trend. In addition, the 2007-2018 period saw an outflow of workers from the business services sub-sector, which registered the highest level of output per worker for the period.

Table 4: Decomposition of labour productivity, Malaysia

Period	Annual growth in output per worker (%)	Share of contribution to labour productivity growth from (%)	
		Within-sector	Between-sector
1987-1997	4.8	92	8
1997-2007	2.4	99	1
2007-2018	2.1	113	-13
1987-2018	2.8	96	4

Source: Adapted from Abdur Rahman and Schmillen (2020).

This data should not lead to the erroneous conclusion that a process of structural transformation has not actually taken place in Malaysia, only that its contribution to output growth has been minor compared to within-sector productivity growth. In fact, the country has steadily shifted in the past decades from being an agriculture-based economy to one focused mainly on services. Between 1987 and 2020 the employment share of the agricultural sector decreased from 30.9% to 10%, while the contribution of agriculture to the GDP decreased from 20% to 8%.¹⁸ Meanwhile, the service sector's share of employment rose from 44% to 64%, while the sector's share of the GDP increased from 42.4% to 54.4%. The manufacturing sector was far more static in comparison, as its share of the GDP increased by only 2 percentage points in that time (up to 22% in 2020), while its employment share decreased from 31% to 27% (World Bank, 2022b; Naiya, 2013). As pointed out in a paper by Asyraf et al. (2019), Malaysia began to show signs of **premature deindustrialization** from the year 2000 onwards, as it registered a twin decline in both employment and output share of manufacturing, reflecting lower levels of competitiveness in this sector.¹⁹

Several reasons (described below) can be attributed to the relative weakness of the manufacturing sector's growth in Malaysia, as originally pointed out by Abdur Rahman and Schmillen (2020):

- A government policy approach protected Malaysia's industry with import substitution measures and privatization programmes in the mid-80s, which led to the domestic manufacturing sector being affected by, according to Abdur Rahman and Schmillen (2020), "ongoing structural weaknesses related to low aggregate technology levels, minimal technology spillovers and weak supply chains, with a dependence on imported components and a lack of a local capital goods industry." In a resource-led economy such as Malaysia, these policies were unable to generate substantial growth in manufacturing output and employment, leading to a gradual policy reorientation towards export-led industrialization, following the successful examples of (at the time) newly industrializing countries, such as Singapore and South Korea.
- The manufacturing sector's dependency on foreign direct investment (FDI) inflows to bolster its growth, especially in the electrical and electronics sub-sector. Starting from 1992, increasing competition from other low- and middle-income countries, such as China, India and Thailand, resulted in FDI flows being diverted away from Malaysia.
- An inflow of portfolio investments in Malaysia in both the 1990s and early 2000s, partly influenced by political interests, which focused on various sub-sectors of services (e.g., wholesale and retail trade, finance, insurance, business services, construction, real estate) rather than manufacturing.

A few key trends currently represent considerable barriers to a more equitable process of structural transformation in Malaysia, as well as to economic growth. These trends are described below.

- **High levels of income inequality.** In 2019, the Gini coefficient of Malaysia was 0.41,²⁰ the highest in the APAC region together with the Philippines. The income distribution gap between the richest and the poorest 10% of the population is also the highest in the region, albeit this has narrowed over the past decade (OECD, 2022).
- **Wage stagnancy.** Compensation to salaried employees has stagnated for years at around 35% of the national GDP, considerably behind rival APAC economies, such as Singapore. One of the core reasons behind this is the ready supply of cheap foreign labour (see below), as well as a scarcity of a skilled labour force and associated high-skilled jobs, as the educational system is not overtly efficient in producing young graduates with the skills demanded by the job market. This also represents a core barrier to increasing automation, as firms are reluctant to invest in new technologies when there is a lack of skilled personnel to operate them (OECD, 2022).
- **A high dependency on foreign labour.** Malaysia hosted more than two million regular migrant workers in 2019 and at least as many undocumented workers. This cheap supply of foreign labour has been essential in meeting workforce demands from key industries, such as electronics and palm oil production, but it is now acting as a barrier to wage growth, automation and other technological advances that would be crucial to boost productivity (Nikkei Asia, 2021).

Going forward, the core policy challenge for Malaysia will be halting, or at least mitigating, the inevitable decline in within-sector productivity growth, as the country's advancement towards high-income status will make it increasingly harder to sustain high rates of economic growth. The government can intervene on several different

policy areas to achieve this. It can: invest in high-quality infrastructure; foster the reallocation of production factors within sectors; address distortions in output markets; and foster workers' capacities to overcome specific skills gaps. According to Abdur Rahman and Schmillen (2020): "It will also be important to positively affect the employment rate by further increasing labour force participation, especially among women and better use the productive potential of older persons in the face of a rapidly accelerating aging process."

Indonesia

Indonesia has experienced a similar trend to that of some other developing economies in Southeast Asia: rapid economic growth and a growth-enhancing structural transformation process have on the one hand, had a considerable poverty reduction effect on the country, but they have also resulted in **an actual increase of income inequality**. According to Kyunghoon et al. (2022), Indonesia underwent a process of industrialization and growth-enhancing structural transformation starting from the mid-1970s, as the manufacturing sector started to grow at an increasingly faster pace, turning into a core driver of the country's economic development, while agriculture and mining began to decline in both their contribution to the GDP and their share of employment. Between 1975 and 1995 the manufacturing sector's contribution to GDP rose from 11.6% to 27.9%, while the employment share of the sector also rose from 7.9% to 13.4% in the same period. The government played a very active role in accompanying this process, by adopting import substitution and protectionist policies, as well as carrying out considerable investments in manufacturing infrastructure, financed by the revenues from oil exports. Nevertheless, this prominent governmental role in the industrialization process started to become unsustainable as international oil prices began to decline in the mid-1980s, a scenario that was compounded by the growth of Indonesia's national debt due to a global rise in real interest rates and the appreciation of the yen.

Following the 1997-1998 Asian Financial Crisis, the industrialization process in Indonesia stalled, a similar experience to that of other developing Southeast Asian economies, such as Malaysia and Thailand. The structural transformation process began to lose momentum, as specific services sub-sectors characterized by low productivity (mainly trade and personal services) began to absorb a vast number of workers leaving agriculture, while the manufacturing sector remained mostly stagnant and stopped playing a central role in Indonesia's economic growth. By 2020, the manufacturing sector's contribution to the GDP was 20% (a 3-percentage point decrease compared to 2000), while its share of employment had only risen by 3 percentage points in 20 years, to 23%. Meanwhile, the agricultural sector's share of employment had decreased by 16 percentage points, from 44% in 2000 to 29% in 2020. The driving sector in this period was services: its share of contribution to the GDP had risen to 44.4% in 2020 (an 11-percentage point increase from 2000) and its labour share was 49% (a 12-percentage point increase), with the trade and personal services sub-sectors driving this growth. (Kyunghoon et al., 2022; World Bank, 2022b). This shift to a less dynamic, services-driven process of structural transformation in the aftermath of the Asian Financial Crisis was associated with slower economic and productivity growth, as well as a rise in income inequality, from a Gini coefficient of 0.29 in 2000 (as the financial crisis impacted high-income household and narrowed the income gap) to 0.38 in 2022 (World Bank, 2023b).

Regarding more recent challenges, Indonesia has still not managed to create a 'middle-class' workforce, i.e., good-quality jobs that allow the average Indonesian family to afford a middle-class lifestyle. Productivity growth in Indonesia has been insufficient to unlock the potential of the 47 percent of Indonesians stuck in aspiring middle-class status, partly due to a structural transformation that has failed to transition enough workers from low productivity to high-productivity sectors, firms and jobs. Most of today's workforce is not equipped to hold a middle-class job due to skills shortages or exclusion. Other economies in the region — China, the Philippines, Thailand and Vietnam — have seen faster middle-class jobs growth. The difficulty in creating middle-class jobs is particularly worrying given that the tailwind of favourable demographics will abate over the coming decade, as Indonesia will begin to age rapidly. These structural challenges have been exacerbated by the COVID-19 pandemic, which has hit jobs in Indonesia hard, particularly in the country's largely informal labour market, and interrupted the transition of workers from low-quality to higher-quality, middle-class jobs (Wihardja and Cunningham, 2021).

As proposed by Dartanto et al. (2017), the rise in income inequality registered in the past two decades is closely associated to the specific features of Indonesia's structural transformation process: as the economy moved to a services-driven model before the industry sector²¹ had matured (i.e., stalled industrialization), the large outflow of poorly educated, unskilled workers migrating from rural to urban areas were unable to find jobs in high-

productivity, skills-intensive services sub-sectors (e.g., finance, telecommunications) and were thus unable to benefit from a growing economy. Although the Indonesian government has not managed to reduce income inequality among the population in the first two decades of the 2000s,²² it has nevertheless managed to achieve noteworthy results with poverty reduction. The share of the population living below the \$2.15 extreme poverty line declined from 62.8% in 1990 to 2.5% in 2022, while the share of those living below the \$3.65 poverty line declined from 88.1% to 20.2% in the same period (World Bank, 2023b). Although the country looks to be poised to eradicate extreme poverty by 2030, reducing the share of people living below the \$3.65 poverty line is going to be more challenging if inequality remains high.

In this sense, as argued by Kyunghoon et al. (2022), the future of both inclusive growth and poverty reduction in Indonesia will be chiefly dependent on the **government's ability to promote a more dynamic, growth-enhancing structural transformation process that creates a large number of jobs in high-productivity sectors**. This in turn enables the government to expand the budget of current social welfare programmes and increase their ability to cover the poorest segments of the population. In this context, Kahkonen (2021) proposes the three-pronged policy strategy below to boost high-end job creation.

1. Foster labour productivity growth across the board through the implementation of competition, and competitiveness-enhancing policies, that support new firm creation and technological innovation. These policies should focus on, according to Kahkonen (2021), "lowering the high cost of trade, increasing access to highly skilled international talents that are currently in need in Indonesia and attracting export-oriented, efficiency-seeking foreign direct investment with links to global value chains."
2. Focus investment promotion efforts on facilitating the transition of workers to better-paying, higher-value-added sectors and jobs, in both manufacturing and services sectors, encouraging the growth of a middle-class workforce.
3. Improve the education and vocational training system, as a critical need exists to capacitate young workers with the skills required to take on new jobs in higher value-added areas, as well as upskill the current adult labour force.

Thailand

Thailand's considerable economic growth since the 1960s has not been accompanied by a similar strong performance from the viewpoint of structural transformation. From the perspective of economic growth, Thailand's rapid rise has been sustained by a notable increase in the share of the manufacturing sector's output as a percentage of GDP (from 13% in 1960 to 27% in 2021), which was mirrored by a contraction of agriculture's contribution to the economy (from 36.4% to 8.5%). Meanwhile, the services sector's output share of the GDP has hovered for decades in the 50-55% range (World Bank, 2022b).

From the perspective of structural transformation, two main points can be underlined. First and foremost, the flow of Thai workers outside of the agricultural sector has been relatively slow compared to the country's rapid pace of economic growth. As pointed out by Warr and Suphannachart (2022), a common feature of middle-income developing economies is that the labour share of the agricultural sector exceeds considerably the sector's share of contribution to the national GDP. This gap remains present throughout much of the economic development process and only disappears once the country has attained income levels that are considerably elevated (such as those registered today in the U.S.A. or in Western European economies). The case of Thailand shows that this discrepancy between agricultural labour share and GDP contribution can actually *widen*; as the national economy grew at a rapid pace (and agriculture's contribution to the GDP declined), workers exited the sector at a considerably slower rate. In Thailand, the share of employment in agriculture was 81.3% in 1960 (ADB, 2023), 2.2 times larger than the agricultural output share (i.e., agricultural value-added/GDP) of 36.4% (World Bank, 2023b). In 2000, the share of employment in agriculture (51.7%) had risen to be six times higher than the output share (8.5%) (World Bank, 2023b). As of 2021 this ratio was 3.6, with a considerable decline of workers in the agricultural sector (31.6% of the total) and a slight increase in output share (8.7%) (World Bank, 2022b).

The second point to underline is that the outflow of workers from agriculture over time was mirrored by an inflow of workers mainly towards the services sector rather than manufacturing, despite the latter's growing importance for the economy. Between 1960 and 2021, the employment share of the services sector rose from 13.5% to 45.9%,

while agriculture's share declined from 81.3% to 31.6% (UNU-WIDER, 2020; World Bank, 2023b). As stated by Warr and Suphannachart (2022): "Over the half-century ending in 2017, abstracting from growth of the total population, for every 100 workers leaving agriculture, 25 went to employment in manufacturing, 65 to services and the remaining 10 to the non-manufacturing industry." In short, Thailand presents, on one side, a constrained pace of structural transformation and, on the other, an evident mismatch between the changes over time in the different sectors' contribution to the GDP and the changes in sector-specific labour shares.

What are the implications of these trends from the perspective of equitable growth and poverty reduction? As the economy of a country grows and a process of structural transformation unfolds, absolute poverty declines at the national level, although agricultural incomes still lag behind national average incomes. As a result, rural areas begin registering higher-than-average poverty levels, as poorer people (mainly engaged in agriculture) concentrate increasingly more in these areas. This explains why the constrained pace of structural transformation has resulted in a sharp rural-urban divide in household-level incomes and higher economic inequality, especially between more and less urbanized regions. This scenario is particularly evident in the (heavily rural) north and northeast regions of the country, where the shift from agriculture to manufacturing was particularly constrained and where poor rural households are mostly concentrated (Sen, 2016).²³ As pointed out by Warr and Suphannachart (2022): "The fruits of economic growth, especially industrial growth, have accrued overwhelmingly to residents of the central and southern regions, especially the capital, Bangkok, and its surrounds, including massive numbers of new residents, recently migrating from other regions. The important point is the persistence of a high level of regional inequality, not changes in it. If there is a 'developer's dilemma' in Thailand, it is seemingly not that growth and structural transformation accentuate the gap between rich and poor households. It is that economic development has not diminished the longstanding and politically toxic disparities between rich and poor regions."

One important reason can partially explain the constrained pace of structural transformation in Thailand. As illustrated by Sen (2016), the main factor has been the absence of effective and widespread land reform, which could have tackled the critical issues of large-scale tenancy farming and lack of equitable access to land already present in the 1970s. Although a law was indeed approved in 1975 by which the government would purchase land from large-scale tenants and divide it among landless, rural dwellers, its implementation did not lead to the expected results. As a result, considerable rates of both land tenancy and landlessness²⁴ have persisted for a long time in the country, with the latter being an issue especially in Thailand's northern and northeast regions. Land reforms can be key to fostering agricultural productivity, as well as freeing up labour to move to manufacturing and services in urban areas. Moreover, as stated by Sen (2016): "An egalitarian distribution of land that leads to greater incomes for the poorer sections of the rural population can create a larger home market for manufacturing goods, facilitating the expansion of the manufacturing sector." In the absence of that, the pace of structural transformation in Thailand has been relatively more constrained than that of many of its regional peers. This contributed to a strong urban/rural divide, as vast sections of Thailand's rural population have not been able to benefit much from the rapid economic growth.

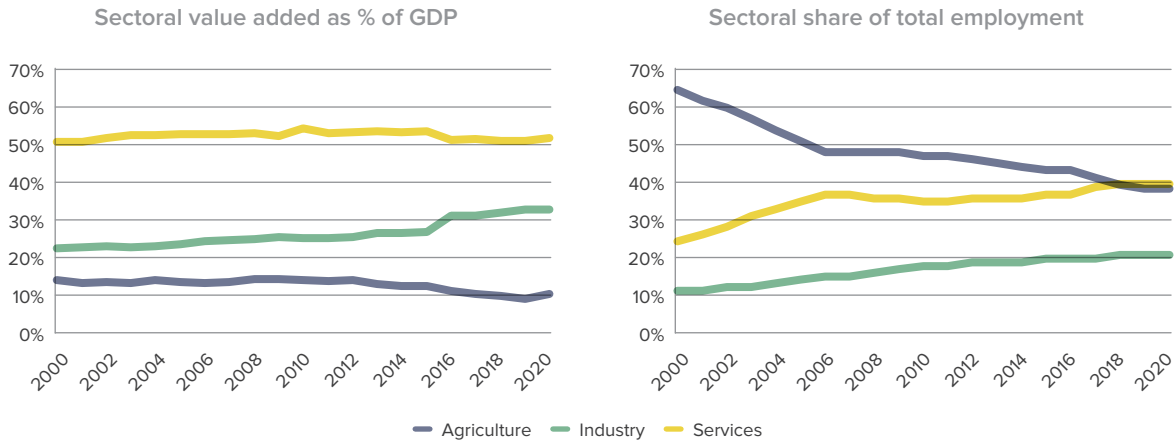
1.3.4 MEDIUM GROWTH AND WEAK LABOUR MARKET OUTCOMES: BANGLADESH

While Bangladesh has managed to achieve notable results in some specific aspects of structural transformation, it still lags considerably behind many of its APAC peers. The agricultural sector's share of the country's GDP has significantly declined since the 1970s (from 52.5% in 1979 to 12% in 2020), whereas the contribution to the economy of both services and industry has risen considerably in that timeframe. That being said, the growth in services has far outpaced that of industry, with the rise of specific sub-sectors, such as banking, insurance, micro-credit, transportation and telecommunications, accounting for this superior performance (Raihan and Khan, 2022). Starting from the 2000s, the industry sector has begun to narrow the gap with services (see Figure 3), driven by the phenomenal growth of the garments industry – the key export for the country. Nevertheless, the services sector still represents the primary driver of the economy, accounting for 51.5% of the GDP in 2020.

In terms of employment, the agricultural share of total labour was still quite high as of 2020 (38%), despite declining by 27 percentage points compared to 2000. The relative low contribution of agriculture to GDP, in comparison to a high share of total employment, is one of the factors that has impeded the country's path of structural transformation – at least when compared to some of its APAC peers. While both services (40% as of

2020) and industry (21%) have played a role in absorbing this outflow of workers, the former has had the lion's share in this regard, with a 16-percentage point increase from 2000 (World Bank, 2022b). Both the services and industry sectors in Bangladesh are heavily informal, characterized by low-pay and low-productivity jobs.

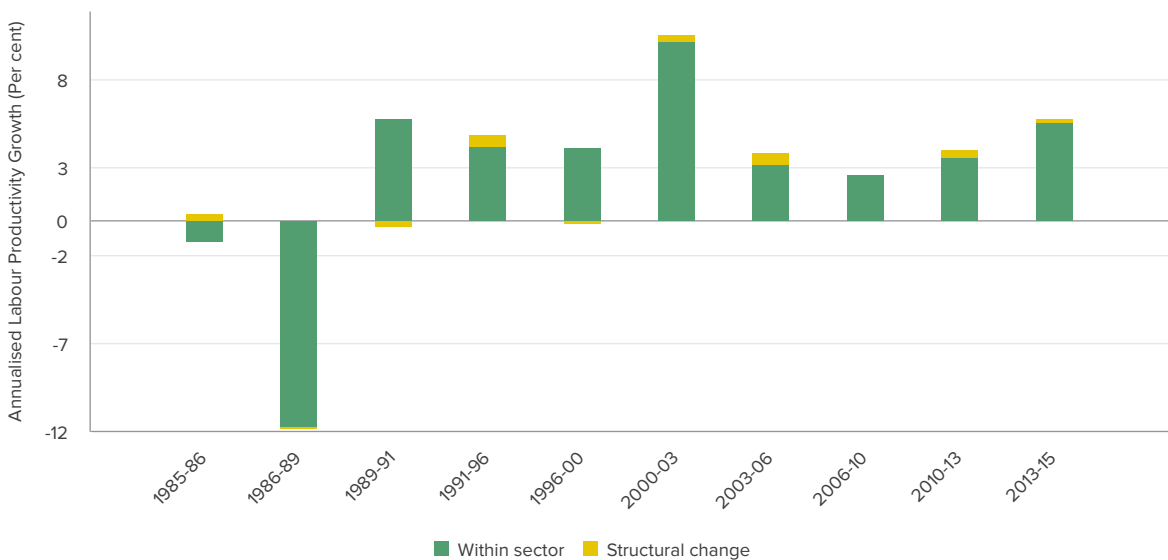
Figure 3: Changes in sectoral value added as % of GDP and sectoral share of total employment – Bangladesh (2000-2020)



Source: World Bank, 2022b.

Despite these changes in GDP and employment shares, economic growth in Bangladesh has largely been the result of sizeable increases to within-sector labour productivity registered in the past three decades (see Figure 4). As pointed out by Moazzem and Arno (2018), structural change accounts for only 0.2% of the average annualized growth of labour productivity registered over the past thirty years, a clear indication that the real potential for growth-enhancing structural transformation in the country is waiting to be unlocked.

Figure 4: Growth of “within-” and “between-” sector productivity, 1985 to 2015



Source: Moazzem and Arno, 2018.

A full analysis of the various constraints responsible for the slow pace of structural transformation in Bangladesh goes beyond the scope of this brief case study. Nevertheless, three core factors are important to highlight, affecting primarily the industry sector. The first factor is the **lack of industry diversification**; the country's export basket is heavily concentrated in the ready-made garments industry, which exposes Bangladesh to risks of price and earnings volatility and fluctuations in foreign demand, increasing its vulnerability to external shocks. Bangladesh ranks last in terms of export diversification in a list of select APAC countries, that includes India, Indonesia, Pakistan and Vietnam (Moazzem and Arno, 2018).

A second factor to consider is the **very low level of foreign direct investment** channelled to the country. Foreign direct investment is an essential contributing factor to diversification, growth and technological advancement²⁵ in the industry sector and – as the experience of Viet Nam has shown – an important driver for growth-enhancing structural transformation. Although FDI inflows (as a share of GDP) had increased to 1.5% in the 2000-2015 period, they were down to 0.4% in 2020. A weak infrastructure and a high cost of doing business have been underscored by Raihan and Kahn (2022) as two core factors that help explain these low levels of FDI. Consequently, Bangladesh ranked 177 out of 190 countries in the World Bank's 2018 Doing Business Index. It should be noted, however, that Bangladesh has more recently been making significant investments in infrastructure, including the development of the Dhaka Metro Rail (Economist Intelligence Unit, 2020).

A third factor is the **lack of skilled manpower**, especially for entry-level positions, with a national educational system struggling to equip young workers with the specific skills demanded by various sub-sectors of industry. According to data from the Bangladesh Chamber of Industries, of the average 2.1 million people that join the Bangladeshi labour market every year, 53% are only 'moderately' skilled from a technical viewpoint, while 40.8% are completely unskilled. From the supply side, 36% of employers are registering a shortage of skilled workers. By 2030, the population in the 18-35 age bracket will be 60 million, which makes it imperative to upgrade existing educational and vocational training opportunities to ensure that this growing segment of workers will be able to capture high-value jobs both in domestic and foreign markets (TBS, 2021).

To conclude, Bangladesh has a strong need for a forward-looking industrial development policy that can accelerate industry growth and competitiveness, increase sectoral diversification, create more high-productivity and high-skill employment, attract greater flows of foreign direct investment, decrease informality in the job market and shift (and accelerate) the current trajectory of structural transformation in the country. Furthermore, it is imperative to improve the capacity of the educational system to train workers capable of fulfilling the needs of a growing industry sector, as well as mitigate the current gap in available skills training opportunities between rural and urban areas. These types of policies would be critical to tap into the vast potential for of 'between-sector' labour productivity, which in turn would become a core enabling factor for the achievement of Bangladesh's goal of becoming an upper middle-income country by 2031.

1.3.5 LOW GROWTH AND WEAK LABOUR MARKET OUTCOMES: PHILIPPINES

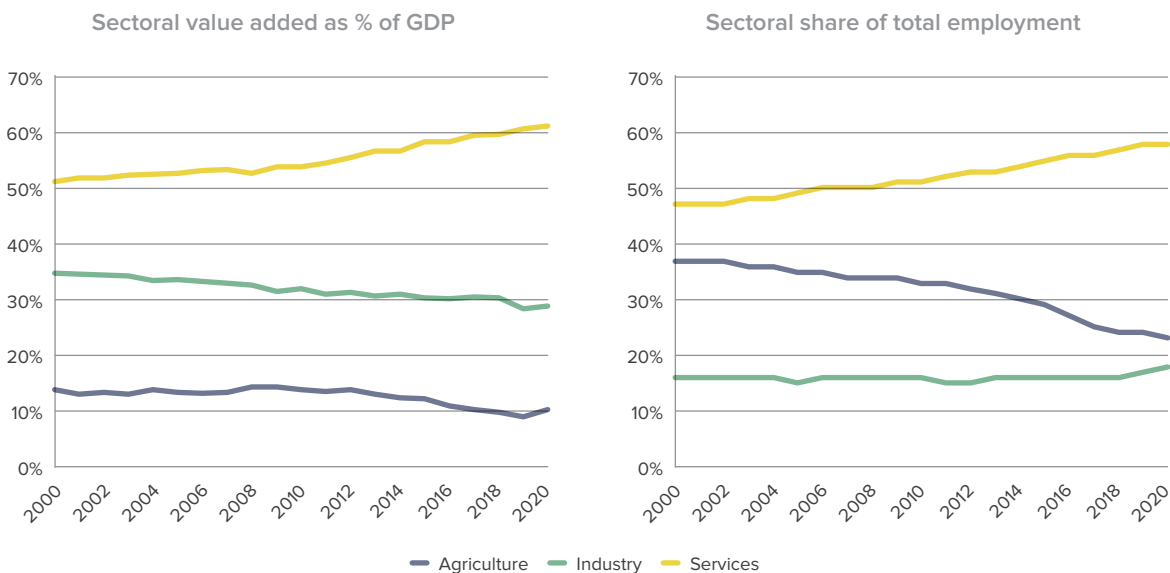
The structural transformation process in the Philippines has been notably slower compared to that of many of its peers in the APAC region. The country has largely missed on the industrialization boom that favoured other APAC countries between the late 1960s to the end of the 1990s, as the industry sector in the Philippines largely stagnated over that timeframe. While initial success was achieved in terms of expanding the electronics sub-sector, this growth was not followed by a further diversification or deepening in other areas of industry. As a result, workers moving out of agriculture either went on to low-productivity, low-skill sub-sectors of services (largely incapable of absorbing them all) or emigrated overseas (Lanzona, 2022).

Different factors have been suggested to have contributed to the failure of the industrialization effort: decades of protectionism; insufficient export promotion; a strong governmental hand in the markets; a weak business and investment climate; the high cost of energy; a weak basic infrastructure network (e.g., transport and electricity); and political instability. Furthermore, it must be noted that the (relatively scarce) growth that the industry sector has managed to achieve in the Philippines has been geographically skewed, being primarily concentrated in the three highly urbanized regions (Metro Manila, Calabarzon and Central Luzon) that surround the capital, where access to physical investments, schooling and other public good and services were readily available.

These three regions are responsible for approximately 70% of total manufacturing gross value added, as well as 70% of total employment in manufacturing (Lanzona, 2022). As stated by Lanzona (2022): “The failure of the country’s industrialization programme stems from the absence of a common conception of the role and nature of technological investments in the context of structural transformation [...]. Even as investments and necessary public goods and services for industrialization have been provided, [...] the rural areas have not achieved the desired level of industrialization because of limited technological inputs.”

The 2000s did not register a notable change in this pattern. In fact, as can be seen from Figure 5, between 2000 and 2020, the contribution of the services sector to GDP rose by 10 percentage points (from 51% to 61%). On the other hand, industry’s share of GDP declined by 7 percentage points in that same time frame (from 35 to 28%), while that of agriculture decreased from 14% to 10%. These trends have also been in line with the changes in sector-specific shares of total employment, as the services sector share rose from 47% to 58%, the industry sector share stagnated at around 16% and the employment share for agriculture declined from 37% to 23% (World Bank, 2022b).

Figure 5: Changes in sectoral value added as % of GDP and sectoral share of total employment in the Philippines (2000-2020)



Source: World Bank, 2022b.

The stagnant pace of industrialization, coupled with the booming growth of services, are chief contributing factors to three of the core issues that have chronically affected the Philippines economy: high labour underutilization; slow poverty reduction; and stagnant investment. These are described below.

- Chronic levels of labour underutilization in the national job market can be explained by the fact that a growing services sector has been an ineffective absorber of job supply – a role that in many APAC countries has traditionally been played by a booming industry. The unemployment rate was 6% in 2022 (approximately 3.7 million people), while the underemployment rate was 14.5% (Tirona, 2022). This is one of the core arguments (see Usui, 2011) behind the idea that the Philippines cannot ‘leapfrog’ over industrialization and keep basing its future growth on the services sector. As pointed out by Usui (2011): “Quality labour continues to seek job opportunities abroad or takes over relatively low-wage and low-skill jobs. A serious mismatch between labour supply and demand is observed, which includes educated maids, educated taxi drivers and top university graduates who work for contact centres. The deployment of overseas workers and high underemployment mask the extent of domestic unemployment.”

- High levels of underemployment and the scarcity of high-productivity and high-paying jobs have been contributing factors to the slow pace of poverty reduction in the country. The share of people living under the national poverty line decreased from 33% in 2000 to 17% in 2018, which – while not a bad performance in absolute terms – represents a notably slower pace than among other APAC peers, such as Indonesia and Malaysia (World Bank, 2020b).
- The lack of industrialization and highly restrictive policy barriers²⁶ are two core factors that help explain low levels of foreign direct investment in the country (aside from the foreign capital flowing into the three main urban regions mentioned above). Foreign direct investment equalled 1% of GDP in 2000 and 1.9% in 2020, with two brief peaks of 3% in 1998 and 2017. Despite relatively stagnant levels of investment, the country has kept growing throughout the 1990s and 2000s, mainly thanks to high levels of consumer expenditure (75% of GDP in 2020) and high remittance inflows (9.6% of GDP in 2020) (World Bank, 2020b).

It is worth underlining that, within the context of a series of national priority investment plans implemented in the last decade, the government has given particular attention to attracting foreign investment in what is arguably the most successful sub-sector of services at the national level, i.e., Business Process Outsourcing (BPO), which includes voice services (call centres), software development, transcription services, animation, data mining and a host of other remote services. According to data from the IT and Business Process Association of the Philippines (IBPAP), the BPO sector employed 1.57 million Filipinos as of 2022, with \$32.5 billion in yearly revenue. An 8.3% growth in the sector's workforce and a 10.5% growth in revenue is expected in 2023 (Financial Times, 2023). While the BPO sector is forecast to grow, technologies such as artificial intelligence, Big Data and cloud computing are expected to disrupt this sector. Clerical support jobs which account for a significant share of BPO employment in the country could be threatened by automation. On the other hand, the pace of job growth in mid- to high-skill occupations in the sector is expected to increase (ADB, 2018). However, the sector is facing challenges in hiring qualified workers (Financial Times, 2023). To maintain its leadership in the global BPO market and prevent jobs from moving to other outsourcing destinations, the Philippines must strengthen its education system to meet the needs of the BPO sector and ensure that the workforce is equipped with the relevant skills.

1.4 THE LINK BETWEEN LABOUR MARKET DEVELOPMENT AND POVERTY REDUCTION

The analysis of the linkages between structural transformation and employment creation becomes all the more important when viewed from the standpoint of the poverty reduction efforts that governments in APAC countries have enacted in the last decades. Employment growth (and a strong structural transformation process) is a key enabler for poverty reduction at national level, while the relatively scarcer results achieved in the fight against poverty among certain APAC countries can be explained from the viewpoint of poor employment outcomes and weak structural transformation.

For Pasha and Palanivel (2003), employment represents one of the core channels through which the link between economic growth and poverty reduction is established. Given that income levels are a core determinant of poverty – and that productive employment is the core source of income – promoting employment must be viewed as a critical element of any poverty reduction strategy. Based on data available from 14 Asian countries,²⁷ the authors tested, over a period spanning from the 1960s to the 1990s, whether employment growth had any effect on the rate of change in poverty incidence, regardless of the effect of economic growth on poverty. This was carried out by classifying countries according to four categories, on the basis of national rates of per capita income growth and employment growth (with both variables being classified as either 'fast' or 'slow'). The authors observed that in the 1970-2000 period there was a considerable variation in the rate of employment growth among the countries under analysis, influenced by the sectoral composition of economic growth, the choice of technologies adopted and the degree of effective functioning of the labour market. Furthermore, in the context of a process of increasing trade liberalization and a gradual opening of the economy, the degree of net impact on employment opportunities was dependent on the extent by which employment was gained or lost when moving resources from the non-tradable to the tradable sectors (such as manufacture and tradable services). The results clearly illustrate **the importance of employment growth in tradable sectors** toward affecting the rate of change in the incidence of poverty, after having controlled for the effects of economic growth on poverty.

As noted by Pasha and Palavinel (2003), while the average rate of change in the incidence of poverty was close to 5.5 percent per decade in the seven cases in which both rapid economic and employment growth were observed, the average rate of change in the incidence of poverty was 4.2 percent per decade in the six cases in which fast growth was accompanied by relatively slow employment growth. Furthermore, in contexts in which the pace of economic growth is slow, the significance of employment growth in contributing to poverty reduction appears to be even more prominent. In seven cases, despite growth in per capita income of less than 3.5 percent, over 2.5 percent per annum in employment growth has been achieved.

Pasha and Palanivel's analysis confirmed that **employment growth is a critical element for pro-poor growth and poverty reduction in Asia**. Over the 1980-2000 period, the growth elasticity of poverty is estimated at -0.9, which implies that the Asian region has been successful in achieving high rates of economic growth but has had limited gains in poverty reduction due to an absence of pro-poor growth. Key macroeconomic determinants of the degree of pro-poor growth were found to be the rates of agricultural growth and employment generation. The authors argued that to promote poverty reduction, APAC countries should become more flexible in their policy approaches, in terms of the **implementation of more growth-oriented policies as opposed to shorter-term stabilization policies**. They also made a case for countries to implement a more expansionary counter-cyclical fiscal policy, driven by greater levels of public investment and bolstered by appropriate monetary and exchange rate policies.

1.5 THE LINK BETWEEN ECONOMIC GROWTH AND EMPLOYMENT GROWTH

Another critical linkage to analyse to properly set the stage for the rest of the study is the one that historically connects economic growth and employment growth in the APAC region. The growing concern over creating productive employment in the APAC region has generated considerable interest over the study of employment elasticity²⁸ as a tool for analysing long-term and structurally driven employment creation.

It must be noted, first, that employment elasticity calculations can be notoriously unreliable due to the cyclical nature of output, as firms tend to hoard labour during a downturn (which means that more workers are retained than what is required to generate the demanded level of output). Hence, employment elasticities are not very helpful as short-term estimates (e.g., year on year) for policy analyses (USAID, 2013). In a study by Kapsos (2006), which analyses employment elasticities for all regions (including APAC) during the 1991-2003 period, the author emphasizes that a relatively complete understanding of labour market trends will require analysing employment elasticities together with additional labour market and macroeconomic indicators, such as GDP and labour productivity growth, unemployment rates, labour force participation and poverty rates, among others. Kapsos' study analyses employment elasticities in APAC not only for the general employed population, but also for different demographic groups and for the three broad economic sectors – agriculture, industry and services. The results of this analysis, summarized in Table 5, show that in the APAC region (and particularly in East Asia) rapid gains in labour productivity – that have both contributed to improving living standards and promoted significant growth in employment – have generated considerable economic growth.

Kapsos' findings on the determinants of employment elasticities in the context of other labour market factors are significant for those policy debates focused on the opportunity of fostering employment and productivity to achieve greater economic growth and poverty reduction. Importantly, Kapsos finds "no evidence across economies of a causal link between measures of the extent of employment protection in an economy and its job intensity of growth."

Table 5: Employment elasticities and GDP growth in the APAC region (1991-2003)

Region	Total			Female			Male			GDP growth		
	1991-95	1995-99	1999-03	1991-95	1995-99	1999-03	1991-95	1995-99	1999-03	1991-95	1995-99	1999-03
East Asia	0.14	0.14	0.18	0.16	0.17	0.18	0.13	0.12	0.18	11.6	7.40	7.70
South-East Asia and Pacific	0.39	0.20	0.42	0.38	0.20	0.49	0.39	0.20	0.37	7.40	1.60	4.80
South Asia	0.40	0.49	0.36	0.49	0.61	0.30	0.37	0.44	0.38	6.00	5.80	5.10

Source: Kapsos, 2006.

Kapsos (2006) notes that the APAC region has registered the most dynamic growth and development of all regions of the world in the period spanning from 1991 to 2003. The study shows that an average annual GDP growth was registered over the three periods detailed in Table 5, between 7.4% and 11.5% in East Asia and between 5.1% and 6% in South Asia. Yet, the region also struggled over the course of the Asian Financial Crisis (halfway through the 1995-1999 period), due to its negative impacts on Southeast Asian countries. This can be witnessed in Southeast Asia's sharp decline in output growth over the 1995-1999 period. Furthermore, in East Asia total employment elasticities have remained significantly low when compared with figures at global level. The region's fast growth, though, has been sufficiently strong to generate employment and allow for rapid increases in living standards through productivity growth (while registering low levels of employment elasticity).

Southeast Asia registered a large degree of volatility in both its economic and employment performance. From 1991-1995, the region's output increased by more than 7.4%, while a broad employment elasticity of 0.39 was enough to translate into a reduction in total unemployment. During the Asian Financial Crisis, the region's employment elasticity decreased, and the decline in output was answered by a greater relative decline in employment growth compared to productivity growth. The period 1999-2003 saw a considerable increase in employment elasticity in the region, together with a more subdued growth in output, which translated into reduced growth in labour incomes. In each of these periods, scarce differences between men and women were registered in employment elasticity. Finally, the considerable growth of South Asia from 1991 to 2003 led to an improvement in living standards and decreasing poverty rates. Nevertheless, the subregion remains one of the poorest in the world. As pointed out by Kapsos (2006), given that employment elasticity trends in South Asia and Southeast Asia have been similar, these regions required a higher relative employment elasticity for a given rate of GDP growth to maintain stable unemployment.

Kapsos found that growth in East and Southeast Asia has been driven by the industrial sector, which rose at an average annual rate of 12.8% in East Asia and 5.4% in Southeast Asia. This was followed by growth in the services sector, which rose by 8.8% annually in East Asia and 4.6% in Southeast Asia. The growth of the services sector in South Asia stood at 6.9%, slightly higher than the 5.9% average annual growth rate registered by the industrial sector. South Asia has therefore registered the slowest rate of structural economic transformation in the region, in terms of the shift from agriculture to the industry and services sectors. As pointed out by Kapsos (2006), the fast growth registered in East Asia across the three core economic sectors had translated into considerable employment generation and rapid productivity gains between 1991 and 2003. On the other hand, South Asia presented a different scenario, given that growth in the agricultural sector had mainly been driven by employment growth, while approximately two-thirds of output growth registered in industry and services was attributed to increases in labour productivity.

A more recent study on employment elasticities by Morén and Wändal (2019), which includes a full coverage of the APAC region for 2000-2017 (see Table 6), presents similar conclusions; the region registered rapid growth in GDP in the past twenty years, ranging between 4.50% and 8.60% among the various subregions. The highest GDP growth across all time periods was recorded for East Asia, while the Pacific region registered a modest growth of 3.06%. The lowest total employment elasticities in this period are generally recorded among fast-growing East and South Asian countries.²⁹ The elasticities when considering men and women separately remain, on average, rather homogenous. Employment elasticity in the Pacific is higher than any Asian subregion, which can mainly

be explained by scarce economic growth. Conversely, in East Asia and South Asia employment elasticities are low – mainly due to rapid economic growth. Those countries that show an elevated population growth and scarce economic growth also register higher levels of employment elasticity, which can be explained by the fact that in many developing countries employment growth is connected to labour force growth – and poor people cannot afford to remain unemployed.

Table 6: Employment elasticities and GDP growth in the APAC region (2000-2017)

	Employment Elasticities All			GDP Growth			Employment Elasticities Female			Employment Elasticities Male		
	2000-17	2000-08	2009-17	2000-17	2000-08	2009-17	2000-17	2000-08	2009-17	2000-17	2000-08	2009-17
Eastern Asia												
China	0.04	0.06	0.03	9.28	11.76	8.11	0.02	0.06	0.02	0.06	0.07	0.04
Mongolia	0.26	0.29	0.18	6.92	7.68	7.01	0.26	0.32	0.17	0.26	0.26	0.19
South Korea	0.28	0.26	0.43	4.13	5.76	3.13	0.32	0.31	0.53	0.25	0.23	0.36
South Asia												
Bangladesh	0.34	0.40	0.33	5.95	6.31	6.29	0.59	0.53	0.62	0.25	0.35	0.22
Buthan	0.42	0.62	0.30	7.48	9.51	6.50	0.37	0.64	0.12	0.46	0.60	0.42
India	0.16	0.26	0.18	7.06	7.56	7.40	-0.04	0.18	0.06	0.23	0.29	0.21
Maldives	0.94	0.90	0.61	5.55	7.14	4.76	0.71	0.74	0.30	1.04	0.97	0.73
Nepal	0.49	0.45	0.61	4.20	4.51	4.39	0.60	0.51	0.72	0.38	0.39	0.50
Pakistan	0.66	0.57	0.60	4.32	5.26	3.97	1.22	1.15	0.76	0.54	0.45	0.56
Sri Lanka	0.11	0.21	0.05	5.37	5.81	5.58	0.16	0.29	0.14	0.09	0.17	0.01
South East Asia												
Brunei	1.39	1.05	-0.31	0.84	1.98	-0.08	1.56	1.12	-0.64	1.28	1.00	-0.07
Cambodia	0.36	0.38	0.20	7.80	10.56	6.21	0.32	0.33	0.12	0.4	0.43	0.28
Indonesia	0.37	0.23	0.33	5.28	5.80	5.40	0.45	0.21	0.39	0.32	0.26	0.29
Laos	0.34	0.39	0.29	7.22	7.63	7.66	0.33	0.40	0.27	0.35	0.39	0.30
Malaysia	0.61	0.47	0.65	5.11	6.17	4.73	0.69	0.41	0.88	0.56	0.50	0.52
Myanmar	0.05	0.05	0.07	10.14	14.18	7.68	0.02	0.02	0.01	0.08	0.07	0.11
Philippines	0.46	0.48	0.32	5.3	5.43	5.77	0.49	0.51	0.32	0.45	0.46	0.33
Singapore	0.59	0.57	0.57	5.32	6.67	4.70	0.72	0.67	0.70	0.49	0.48	0.46
Thailand	0.19	0.27	-0.06	4.04	5.48	3.20	0.18	0.29	-0.10	0.19	0.27	-0.03
Timor Leste	0.02	0.01	-0.24	8.01	19.75	-1.53	-0.01	0.02	-0.26	0.04	0.03	-0.23
Vietnam	0.31	0.30	0.25	6.41	7.63	6.05	0.30	0.30	0.25	0.31	0.31	0.25
Pacific												
Fiji	0.58	0.90	-0.05	2.03	1.57	2.67	0.83	0.95	-0.29	0.46	0.87	0.07
Papua New Guinea	-0.01	-0.25	0.32	4.05	2.69	5.71	0	-0.27	0.34	-0.02	-0.23	0.29
Samoa	0.15	0.08	0.12	2.97	5.10	1.40	0.22	0.19	0.12	0.11	0.02	0.12
Solomon Islands	0.54	0.51	0.48	2.64	1.64	3.82	0.55	0.54	0.47	0.53	0.49	0.50
Tonga	0.68	0.69	0.38	1.67	1.48	2.03	0.81	1.01	0.36	0.61	0.49	0.40
Vanuatu	0.90	0.71	1.45	2.83	3.87	2.21	0.94	0.73	1.49	0.87	0.70	1.43

Source: Adapted from Morén and Wändal (2019).



2. IMPACTS OF THE COVID-19 PANDEMIC ON LABOUR MARKETS IN THE APAC REGION



Following the broad overview of the pre-pandemic labour market scenario in APAC, this Section marks the start of a more in-depth analysis of the various effects of the COVID-19 crisis on regional and national labour markets, with a particular focus on how the pandemic influenced trends related to informal work, gender inequalities in labour, micro, medium and small entrepreneurship and associated policy responses on the part of public decision makers.

2.1 OVERVIEW OF LABOUR MARKETS IMPACTS

As discussed in the previous Section, various countries in the APAC region have gone through a process of rapid structural transformation in recent decades, although this process has often been incomplete. In a number of APAC countries, the structural transformation process has resulted in a high number of workers moving from agriculture to the services sector, rather than towards industry. This process has been accompanied by **rising inequality along various dimensions**, including an expanding rural–urban gap and a growing skills premium between high-skilled and low-skilled occupations (ILO, 2020b). Even before the COVID-19 crisis, working poverty and informality rates in labour markets were elevated in the APAC region, which registered a 16.1% rate of working poverty (equivalent to almost 300 million workers) and an employment informality rate of almost 70% (ILO, 2019). These trends manifested despite a range of positive factors being present, on average, at regional level, such as rapid economic growth, elevated labour force participation and employment rates and a relatively limited degree of labour under-utilization.

This scenario can partially explain the fragility of many APAC countries when dealing with the initial impact of the COVID-19 pandemic. Addison et al. (2020) observed that “many countries did not use the growth years to tackle social inequality and there is insufficient social protection across the developing world. This is a bad starting point in a pandemic when economic and social support needs to expand quickly.” Countries were faced with the conundrum of having to contain the virus in an effective manner while also having to preserve and maintain the livelihoods of their national populations – in a context of limited ability and willingness on the part of people to comply with social distancing measures. Given this scenario, a certain degree of social and economic damage was inevitable. The main goal was to mitigate as much as possible the brunt of the crisis on the living standards of local populations, while, at the same time, setting countries on a path of inclusive recovery (i.e., a recovery path that does not leave behind the poorest and most marginalized).

COVID-19’s impact on labour markets in the APAC region varied significantly among its subregions, especially when taking into consideration the effects of the different waves of the pandemic (see Table 5). East Asia was the first subregion to be affected in 2020, but it then generally managed to control the spread of the disease. South Asia and Southeast Asia were both significantly affected by the Delta wave of the virus, particularly from the second half of 2021. At regional level, it must be noted that Asia has managed to affirm its dominant position in global trade despite the disruptions caused by the pandemic to global supply chains, together with the decline in the demand for goods produced by the manufacturing sector. In fact, the region registered a growing share of global trade for both 2020 and 2021 (UNCTAD, 2021).

Labour market impacts varied across subregions depending on the rigidity of the containment measures enacted, the timeliness and quality of the associated policy responses and the different mixes of outputs, exports and employment that characterized each subregion. As can be seen from Table 7, total working time in 2020 declined by the equivalent of more than 130 million Full-Time Equivalent (FTE) jobs across the whole APAC region. Net employment losses were roughly 58 million in 2020, while 39 million of FTE workers ended up exiting the labour force. Estimates suggest that the pandemic drove over 2 million workers to fall below the extreme poverty line in the Asia and Pacific region in 2020 and another 1.6 million to fall below the moderate poverty line, reversing some of the progress made in poverty reduction over recent decades (ILO, 2022a). However, the working poverty figures underestimate the poverty impact of the crisis, since they do not account for low-income earners who became jobless due to the pandemic.

Table 7: Estimates and projections of working hours, employment, unemployment and labour force in the APAC region (2019–2023)

Region/ subregion	Ratio of total weekly hours worked to population aged 15-64 (percentages)					Total weekly working hours in full-time equivalent jobs (FTE = 48 hours/week) (millions)				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Asia and the Pacific	29.2	26.8	28.0	28.6	28.8	1771	1638	1723	1774	1797
East Asia	33.8	32.5	33.9	34.0	33.9	825	790	821	823	821
South-East Asia	29.7	27.3	27.5	28.6	29.3	277	257	262	275	284
Pacific Islands	25.2	24.3	24.7	24.8	25.1	14	14	14	14	14
South Asia	24.8	21.5	23.0	24.0	24.3	655	577	626	662	678
	Employment-to-population ratio (percentages)					Employment (millions)				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Asia and the Pacific	57.7	55.3	55.8	56.1	56.1	1901	1843	1878	1909	1930
East Asia	65.5	64.4	64.3	64.2	64.1	906	895	898	901	902
South-East Asia	65.7	63.9	63.9	64.1	64.6	324	320	324	329	336
Pacific Islands	60.2	58.8	59.8	59.5	59.4	19	19	20	20	20
South Asia	47.0	43.3	44.5	45.4	45.5	651	609	636	660	672
	Unemployment rate (percentages)					Unemployment (millions)				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Asia and the Pacific	4.3	5.4	4.8	4.6	4.5	85.8	104.7	95.2	92.6	91.0
East Asia	4.3	4.8	4.6	4.5	4.3	40.6	44.7	43.1	42.0	41.0
South-East Asia	2.5	3.0	3.1	3.1	2.8	8.2	9.9	10.5	10.4	9.7
Pacific Islands	4.7	5.6	4.7	4.6	4.5	0.9	1.1	1.0	0.9	0.9
South Asia	5.2	7.4	6.0	5.6	5.5	36.0	48.9	40.7	39.3	39.4
	Labour force rate (percentages)					Labour force (millions)				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Asia and the Pacific	60.3	58.5	58.6	58.8	58.8	1987	1948	1973	2002	2021
East Asia	68.4	67.6	67.4	67.2	67.0	947	940	942	943	943
South-East Asia	67.4	65.9	66.0	66.1	66.4	333	330	334	340	345
Pacific Islands	63.1	62.3	62.7	62.3	62.2	20	20	21	21	21
South Asia	49.6	46.7	47.3	48.1	48.2	687	658	677	699	712

Source: ILO, 2022a.

The impact of the COVID-19 pandemic on labour markets by subregion is discussed below.

East Asia: This subregion exhibited the highest levels of resilience in its labour markets at the start of the pandemic, while also experiencing the most rapid rebound in 2021. China, however, began to dial down on public investment and fiscal support in 2020, which had until then bolstered its growth and resulted in a series of ripple effects across the region (UNCTAD, 2021). As noted by the International Labour Organization (ILO) (2022a), in East Asia the pandemic had a disproportionate impact on female workers in comparison to other subregions, with 62% of the net decline in employment registered among women. Young workers were also disproportionately impacted, accounting for roughly half of net job losses despite representing only 9% of the workforce.

South Asia: At the height of the pandemic in 2020, South Asia accounted for roughly 6% of the losses in working hours across the APAC region, together with 73% of net job losses. The Employment Participation Rate (EPR) in South Asia decreased by 3.8 percentage points following the start of the pandemic. The subregion also accounted for 56% of the new working poor in Asia in 2020. The recovery process for South Asia in 2021 was also limited, as employment and labour force participation rates remained considerably below their pre-pandemic levels.

Southeast Asia: This subregion suffered a major setback in its recovery in 2021; it was the only subregion in Asia in which the unemployment rate is estimated to have increased in the second year of the pandemic. According to the latest data from the Asian Development Bank (ADB) (2022a), the pandemic erased 9.3 million jobs in the subregion, pushing an additional 4.3 million people into extreme poverty (compared to the baseline). Furthermore, an earlier report from ADB (2021), showed that young workers in the subregion had been disproportionately affected by pandemic-induced job losses. While young workers only represent 10-15% of the workforce in Indonesia, the Philippines, Thailand and Viet Nam, they accounted for a far higher relative share (between 22% and 44%) of total job losses at the height of the pandemic in 2020.

The Pacific Islands: This subregion registered a 1.4% decrease in its Employment Participation Rate in 2020 and most of the net decrease in employment took the form of people transitioning to unemployment rather than exiting the labour force altogether. Young workers were disproportionately impacted by the crisis (they accounted for roughly two-thirds of net job losses in 2020) due to the fact that they were considerably over-represented in those sectors that were most affected by the pandemic (ILO, 2022b).

An analysis of the impact of the pandemic on tourism is also critical, given that this sector is an important generator of employment in the region. Data by Statista (2022) shows that the APAC region was the most impacted region in the world in terms of pandemic-induced losses of tourism-related jobs; 25.48 million less jobs were registered in the region in 2021 compared to pre-pandemic levels. The almost complete shutdown of the tourism industry in the region in the first year of the pandemic resulted not only in a massive loss of working hours and a rise in unemployment, but also translated into an increase in informal employment. As noted by ILO (2021a), informality in the tourism sector in the APAC region increased both in absolute terms and relative to formative employment. In Viet Nam, for example, the share of informal jobs in tourism-related sectors increased from 63% at the beginning of 2020 to 67% by mid-2021.

Covid-19 impact on tourism in the APAC region's Small Island Developing States

When discussing the impact of the COVID-19 pandemic on tourism in the APAC region, the 20 Small Island Developing States (SIDS) in the Pacific subregion deserve a more in-depth analysis, given the critical importance tourism plays in their economies and their structural transformation pathways. Three of these countries (Kiribati, Solomon Islands and Tuvalu) are classified as least developed.

The pandemic was particularly devastating for tourism in the Pacific. In 2019, tourism was generating a yearly revenue of \$6.29 billion and was responsible for almost 70,000 jobs, accounting for 20% of the regional GDP. In 2020, international tourist arrivals in the region declined 74%, which, in the case of some SIDS such as Fiji and Samoa, translated into double-digit recession (Gay, 2021; PPSDI, 2021). The Pacific region's GDP contracted by 5.4 percentage points between 2019 and 2021. Particularly fragile countries, such as Samoa, Solomon Islands and Vanuatu, are projected to register a lower GDP per capita by 2027 than they did pre-pandemic (Howes and Liu, 2022). The pandemic served as a wake-up call for policymakers, underlining the fragility and the inherent weaknesses of the service-dominant, tourism-dependent economic model that many countries (such as Fiji, Palau and Vanuatu) had built through intensive public investment.

The silver lining in this scenario is that the pandemic gave policymakers in Pacific SIDS the chance to 'build back better,' i.e., re-adjust their structural transformation pathway to shift towards a core economic model that is more sustainable, resilient and better suited to weather the most pressing challenges these nations are bound to face in the next decades – first and foremost the rising effects of climate change. A recent ESCAP (2022) publication estimates that the total cost for Pacific SIDS to adapt to climate-related and biological hazards will grow to an annual \$487 million under the worst-case climate scenario of RCP 8.6, while various ADB projections (2023) point to Pacific SIDS losing between 3 and 8 points of GDP by 2050 due to various concurrent effects of climate change. Although the potential of the Pacific SIDS to develop a viable manufacturing sector remains limited due to constraints of distance and economies of scale, ample scope exists, for example, to carry out productivity enhancements within the services sector. As pointed out by ESCAP (2019), for example, there is scope to reinvent tourism in the Pacific as a "high-value, high-end focused and environmentally sustainable endeavour, similar to that in the landlocked and mountainous Bhutan." This is especially true when considering that many Pacific SIDS (e.g., Kiribati, Solomon Islands, Tuvalu,) are still far from developing their tourism industry – and still have ample freedom in deciding how to shape their growth. Even those SIDS with tourism industries already locked in a resource-intensive model can leverage the aftereffects of the pandemic to redirect their approach. As underlined by the Pacific Private Sector Development Initiative, "recovery strategies [...] suggest that destinations can use the global tourism pause to rebuild the tourism sector in ways that make it more sustainable, more valuable and better able to bring about improved outcomes for local communities and the environment" (PPSDI, 2021).

Aside from sustainable tourism, another dimension that holds considerable potential to advance the structural transformation path of Pacific SIDS and generate long-term socio-economic growth is that of the blue economy, i.e., fostering through policies and programmes the sustainability and resilience of ocean and coastal resources, with a view to achieving economic growth, improved livelihoods and job creation. The enormous potential of sustainable fishing and aquaculture in the region can be explained by the fact that the relatively small landmass of most Pacific SIDS is offset by the enormous ocean areas under their jurisdiction. In fact, the combined exclusive economic zones (EEZs) of 12 Pacific SIDS are equal to 16.8 million km², or 31 times their total landmass (ESCAP, 2019). In this framework, according to OECD (2021a), "supporting new and emerging ocean-economy opportunities in ways that foster significant linkages and multiplier effects across multiple economic and social areas will be key to achieving a fast and resilient recovery in SIDS." This is particularly relevant for SIDS in Polynesia and Micronesia, such as the Marshall Islands and Nauru, whose small size and geographical isolation are a limitation to the development of other sectors.

2.2 IMPACT ON INFORMAL LABOUR AND MICRO-ENTERPRISES

The APAC region houses 1.3 billion informal workers, accounting for almost two-thirds of the world's total, which is one of the reasons why job markets in this region have been impacted so heavily by the pandemic. On one hand, the pandemic brought to light the considerable fragility and vulnerability of APAC job markets, where very high levels of job informality are compounded by stark gaps in social welfare systems, which implies, among other things, that a large swath of the working population was unable to access social insurance and social assistance programmes during the pandemic due to the informal nature of their work. On the other hand, it must be noted that the pandemic also provided an opportunity for some APAC countries to address these gaps and expand coverage to worker categories that suffered from extremely high levels of vulnerability, such as informal workers, evidently, but also intersecting categories, such as temporary and migrant workers.

It is possible to assess the disproportionate impact of the pandemic on informal workers by analysing job loss rates across sectors in which informality is preponderant.³⁰ As pointed out by ADB (2021), those sectors characterized by high informality rates (such as wholesale and retail trade, construction, transport and storage) were responsible for 75% of the 8.7 million job losses registered in Q2 2020 in the Philippines, 51% of the 1.1 million job losses registered in Thailand and 65% of the 2.4 million job losses registered in Viet Nam. The restrictions and containment measures implemented to contain the pandemic initially prevented labour re-allocation from taking place, especially in Q2 2020 when such measures were the most stringent. In times of crisis, predominantly low-skilled sectors, such as agriculture, play an important role in absorbing displaced labour and creating new employment, although this trend remained stagnant until economies began to reopen again in Q4 2020 (ADB, 2021).

Women in Informal Employment: WIEGO (2022) found, in a survey of 11 cities (among which four are in Asia), that different groups of informal workers experienced different pathways of impact and recovery in the context of the COVID-19 crisis. The losses in earnings and livelihoods registered across the 11 cities surveyed were quite uneven among different categories of informal workers. By mid-2021, approximately 40% of domestic workers, street vendors and waste pickers were still earning less than three-quarters of their pre-pandemic earnings; subcontracted home-based workers were faced with the near complete loss of their livelihoods and income. This scenario translated into very high levels of food insecurity and a rapidly increasing reliance on emergency coping strategies that are unsustainable in the long-term.

A specific note should be made of migrant workers (those employed in APAC countries and those originating from the region), who constituted a particularly vulnerable worker category during the pandemic due to their high levels of employment informality, weak job security, scarce savings and limited social safety nets, among other factors. As pointed out by ADB (2021), the various measures implemented to curb the spread of COVID-19, such as border closures, lockdowns and visa issuance restrictions, slowed down to a trickle the flows across all main migration corridors in the APAC region and strongly constrained migrant work opportunities, damaging in particular a number of APAC economies that strongly depend on remittance inflows (e.g., Indonesia, Lao PDR, the Philippines).

Southeast Asia was particularly affected in this sense, given that there were more than 10.6 million migrant workers in the region when the pandemic hit (particularly in Malaysia and Thailand) and about two-thirds of them were part of intraregional flows (i.e., they had migrated from other countries in the subregion). Furthermore, uncertainty arose over whether migrants could access health and welfare systems in the host countries. A rapid survey carried out by ILO (2020d) in Q2 2020, for example, showed that 97% of migrant workers in the Association of Southeast Asian Nations (ASEAN) had been unable to avail of any social security support. While some countries did indeed implement specific policies meant to promote the welfare of migrant workers – such as the Thai government, which allowed 650,000 illegal immigrant workers to legally stay and work in the country – most of the social protection measures in the APAC region introduced to mitigate the impact of the pandemic on national populations did not apply to migrant workers (ADB, 2021).

Another important aspect of the crisis that merits a more in-depth analysis is the impact that the pandemic has inflicted on micro, small- and medium-sized enterprises (MSMEs) in the APAC region, many of which operate in the informal sector. This segment of enterprise is a critical pillar in the region for both economic growth and job creation. In Viet Nam, for example, MSMEs were responsible for around 80% of total employment in Q2 2020. On the other hand, they also accounted for 77% of job losses caused by the pandemic in that same period, due to their prominent presence in sectors that were particularly affected by the crisis, which included wholesale and retail trade, accommodation, transportation and storage and agriculture (ADB, 2021). A large-scale survey by Sonobe, et al. (2021) found that MSMEs across developing Asian countries faced considerable reductions in both employment and sales revenues in the initial months of the COVID-19 outbreak. Although these employment reductions affected temporary employees to a greater degree, significant and widespread disruptions also affected permanent and regular employees. While the scenario varied considerably from one country to another, the survey found that, on average, between one-fourth and one-half of all MSMEs went into a temporary close-down during the initial months of the outbreak, while one-third to two-thirds of all MSMEs faced temporary cash shortages.

ILO (2020a) highlights that the COVID-19 crisis has threatened the continued existence of thousands of micro and small-sized enterprises in the region, as their capacity to remain in business has been critically affected by lockdown measures and other restrictions implemented to contain the spread of the virus, with considerable drops in revenue and consumer demand – and associated cash flow constraints. Many of these enterprises struggled to make adjustments to their workforce to remain operational during the pandemic, resorting to a variety of measures, such as working hour reductions, pay reductions, asking staff to take unpaid leave and even permanent layoffs. These dynamics highlight the fact that micro and small-sized enterprises represent the first business segment to be impacted by the economic consequences of the crisis and are also the last to recuperate when business conditions improve.

2.3 IMPACT ON GENDER EQUALITY IN LABOUR MARKETS

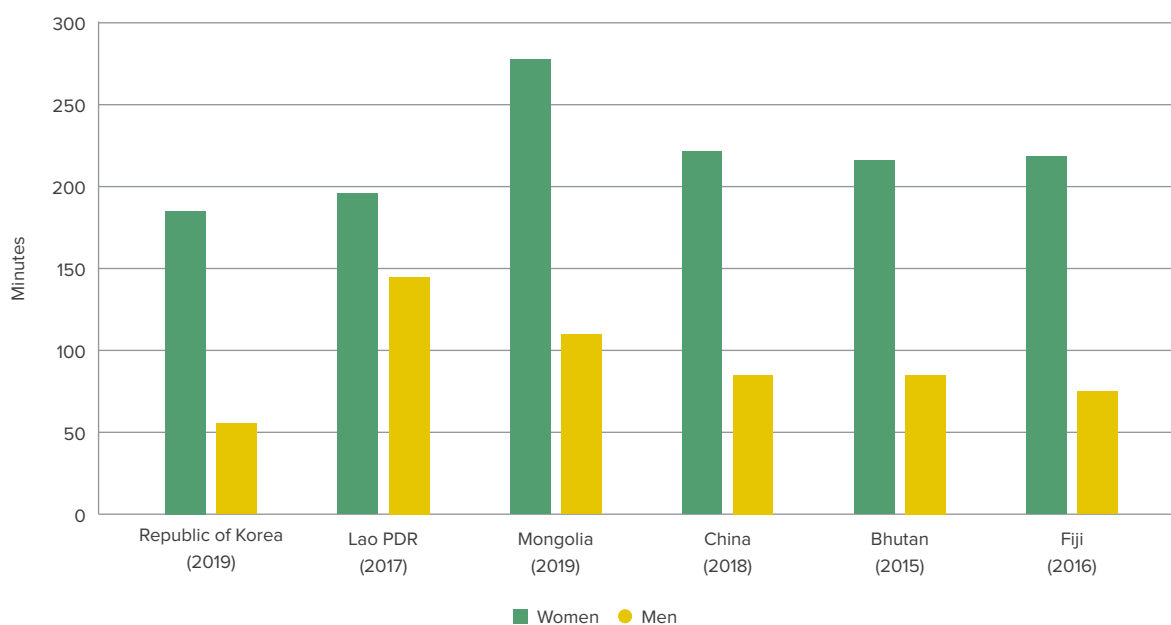
Among the various repercussions of the COVID-19 pandemic on the APAC region, one of the direst has been the rise in inequality across various dimensions. While it is challenging to provide projections on this trend for the entire region, due to the scarcity of official estimates on income and consumption inequality at country level, a few countries produced national household surveys that can help to gain a sense of the rise in inequality. As pointed out by the World Bank (2022), the Gini coefficient in Indonesia grew from 37% in March 2019 to 37.3% in March 2021, mainly driven by rising urban inequality.³¹ In China, the income Gini also increased slightly, by 0.65 percent, between 2019 and 2020 (UNDP, 2022a). Preliminary simulations show that Gini coefficients were expected to increase in Lao PDR, Mongolia, Papua New Guinea and the Philippines (World Bank, 2022c).

Among the various expressions of this crisis-induced increase of inequality in the region, the widening gender gap in employment has proven to be a particularly stark issue. In the APAC region, the COVID-19 crisis led to a 3.8% decline in women's employment in 2020, compared to 2.9% among men. As of 2021, while the female employment rate in the region remained lower than pre-crisis levels, the rise in men's employment had already offset the job losses caused by the pandemic among male workers (ILO, 2021b). The disproportionate impact of the crisis on women – particularly employment loss – has been particularly evident at the level of specific countries and sectors. In Thailand, for example, women's jobs accounted for 60% of all job losses in Q2 of 2020, as well as 90% of job losses in the manufacturing sector (ADB, 2022).

One important cause that can (partially) explain this decline in women's employment rates is the scarcity of care services and infrastructure that could assist women in integrating an active work life with increased household-related responsibilities in a pandemic scenario (ILO, 2021d). As the pandemic led to an unprecedented rise in care demands at the household level, women shouldered the greatest part of the increased unpaid care work, with many among them having to significantly cut down on their paid working hours to meet all these necessities. Evidence from countries in the APAC region points to the fact that this significant rise in unpaid care and domestic work faced by women during the pandemic is linked to issues such as children being out of school, older and ill family members requiring more intensive care and other family members losing jobs due to the instability of

labour markets. It should be noted that even prior to the pandemic, women in the region spent significantly more time on unpaid care and domestic work than men (Figure 6). As pointed out by ADB (2022a), women have been far more likely to exit the labour force following a job loss than men, partly due (as already mentioned) to the additional care burden falling on their shoulders during the pandemic. Although women were also more likely to re-enter the labour market in the second half of 2020, these labour reallocation patterns in the region appear to indicate a ‘distress employment effect,’ by which women re-join the labour force (often in lower quality and lower productivity jobs) to compensate for lost household income caused by the pandemic.

Figure 6: Average number of minutes spent on unpaid domestic and care work, by sex



Source: United Nations (2023), Minimum Set of Gender Indicators Database.

Moreover, the pandemic affected those at the bottom of the wage scale far more than those better paid and women in APAC are unduly over-represented in lower-paid jobs (ILO 2021d). This resulted in widespread disruptions to the livelihoods of employed women, especially among those that work informally – as several informal businesses were forced by the crisis to close either temporarily or permanently. An analysis from UN Women (2021) suggests that the gendered nature of work across industries can only account for a small percentage of gender-based differences in job loss rates caused by the pandemic. The core reason is the lack of systemic progress towards removing societal barriers for women. While women are disproportionately represented in sectors negatively affected by the COVID-19 crisis, other driving factors include a lack of female representation in leadership positions and rigid gender norms that became even more restrictive over the course of the pandemic. In a way, the pandemic shined a light on the layered inequities that were already characterizing women’s labour force participation well before the crisis began (UN Women 2021).

The International Monetary Fund (IMF), UN Women and UNDP (2021) warned that the COVID-19 crisis risked undermining decades of advancements for women and girls, disproportionately impacting women’s incomes, employment and education opportunities, while increasing pressures associated to unpaid care provision and aggravating gender-based violence.

While many countries in the APAC region have implemented wide-ranging macroeconomic policies (both fiscal and monetary) to mitigate the effects of the pandemic and promote a rapid recovery, little has been done to develop tailored policies addressing gender-specific issues in labour. Fiscal stimulus packages introduced to mitigate the impacts of the pandemic, while greater than those of the 2008-2009 financial crisis, had a very small share of these resources channelled towards gender-responsive measures (ILO, 2021b). Yet, the fact remains that female

workers were disproportionately impacted by the pandemic's multifaceted effects and, therefore, extraordinary policy measures and national resource deployments are needed to promote decent job opportunities for women and ensure that they return to the labour market. Otherwise, there is a very high risk that female workers will be further left behind in the structural transformation process, thus aggravating the considerable distortions and inequalities that characterize female employment in the APAC region's job markets.

2.4 IMPACT ON YOUTH EMPLOYMENT

The pandemic has had a disproportionate impact on the employment of youth aged 15-24 in the APAC region, compared to older workers. This can be explained in part by the fact that the youth segment of the working population was considerably more vulnerable to external shocks when the crisis hit. Prior to the pandemic and as can be seen in Table 8, more than a 100 million young workers in the region were estimated by ADB and ILO (2020) to be employed in sectors that were highly vulnerable to the effects of the crisis, such as wholesale and retail trade, manufacturing, accommodation and food services. Furthermore, young people were (and still are) more commonly employed than adults in less secure, low-wage, short tenure jobs, as well as informal jobs. Prior to the pandemic, 84% of the APAC region's youth did not have access to social protection, compared to 69% of adults. The poverty rate among young workers (moderate and extreme) was 25%, compared to 18% of adults. Moreover, 160 million youth in the region were not in employment, education or training (NEET) prior to the pandemic – roughly 25% of the region's youth population. Finally, due to intersecting dimensions of vulnerability, specific sub-segments of the youth population were more vulnerable to the COVID-19 crisis than others. Young women, for example, account for 25% of the NEET youth population of Southeast Asia, mainly due to sociocultural expectations that they would take up more unpaid care and household work and subsistence production work (ADB, 2022b).

Table 8: Youth employment in hard-hit sectors in APAC, 2020 estimates

Economic sector	Immediate impact of crisis on economic output	Level of employment (million)		Youth share in total sector employment (%)	Sector share in youth employment (%)	Share of young women in youth employment (%)
		Total (15+)	Youth (15-24)			
Wholesale and retail trade	High	261	34	13.1	15.7	35.8
Manufacturing	High	281	35	12.6	16.3	32.7
Real estate; business and administrative activities	High	119	8	6.8	3.7	39.2
Accommodation and food service activities	High	103	25	24.1	11.5	45.5
Transport; storage and communication	Medium-high	137	12	8.6	5.4	17.8
Arts, entertainment and recreation, and other services	Medium-high	100	13	12.7	5.8	45.7
Mining and quarrying	Medium	8	1	14.3	0.5	15.0
Financial and insurance services	Medium	37	3	7.7	1.3	56.6
Construction	Medium	164	18	11.2	8.4	5.1
Agriculture; forestry and fishing	Medium-low	439	46	10.5	21.2	29.4

Source: Data from ILOSTAT

As pointed out by Osborne et al. (2020), the pandemic impacted young workers in APAC in three main ways: 1) through labour disruptions caused by reduced working hours, lower earning and job losses affecting both paid workers and the self-employed; 2) through disruptions affecting young workers' education and vocational training; and 3) through the greater challenges faced in the school-to-work transition process, as well as when moving between jobs in a recession. The impact of the crisis led to a major, further shift among youth in the APAC region towards informal employment and self-employment (mainly gig work), in an attempt to keep income streaming in. For youth entrepreneurship specifically, one in three youth-led enterprises in the region reported a major drop in business in the first months of the pandemic, while one in four was forced to stop operations altogether (Osborne et al., 2020).

The post-pandemic recovery of the APAC region's labour conditions has also been substantially slower for youth, compared to adults. As of 2022, the youth unemployment rate in the region was 14.9%, slightly better than 2021 (15.5%), but still lower than the pre-pandemic benchmark of 2019 (13.3%). This 1.6 percentage point rise between 2019 and 2022 is eight times the corresponding increase for adults in the same period (ILO, 2022c). There is no assurance that this adult-youth gap will narrow as economies recovers. In fact, according to an ILO (2021c) analysis of COVID-19 impacts on labour markets across 58 countries, the youth-adult recovery gap in employment was, on average, either lagging or widening.

Finally, it must be noted that several APAC countries did in fact implement a range of measures aimed at alleviating the impact of the COVID-19 crisis on youth employment specifically. The government of Malaysia, for example, launched a \$487 million fund destined to finance skills building among 200,000 unemployed youth, while providing financial incentives to firms to support the hiring and training of another 300,000 youth. Pakistan strengthened an already existing programme called *Kamyab Jawan* (Youth Entrepreneurship Scheme) that subsidizes credit provided to youth-led enterprises on the part of formal financial institutions. Japan launched a series of public consultation services (counselling, job matching, psychotherapy) specifically aimed at youth who had lost their jobs due to the pandemic (ADB, 2022b).

3. CORE CHALLENGES TO APAC'S LABOUR MARKETS AND STRUCTURAL TRANSFORMATION IN A POST-PANDEMIC SCENARIO



This Section expands on the analytical work carried out so far by exploring a series of macro-level issues that are deemed of particular and pressing importance for APAC economies in terms of the extent and magnitude of their impact (both present and future) on structural transformation, the state of labour markets and the overall socio-economic development in the region. In particular, the Section aims to illustrate how the effects of these macro-level issues are compounding the longer-term repercussions of the COVID-19 crisis, often slowing down or even halting post-pandemic recovery processes (e.g., in terms of economic development, job growth, social welfare system efficiency) in several APAC countries.

3.1 THE EFFECTS OF CLIMATE CHANGE ON STRUCTURAL TRANSFORMATION IN APAC

The impact of climate change on structural transformation processes in the APAC region cannot be underestimated. Several developing economies in the region are still scarcely diversified and strongly dependent on agriculture, which leaves them particularly vulnerable to increasingly frequent and impactful extreme natural events, as well as shifting weather patterns and other manifestations of climate change. As mentioned by Casey (2020), in these countries “the vulnerability to economic and climate shocks are compounding each other, locking countries into an eco-development trap of permanent disruption, economic precarity and slow productivity growth.” Unmitigated climate change can affect the structural transformation path of these countries by decoupling the rural-urban migration phenomenon from sectoral productivity growth, i.e., by inducing ‘premature’ mass migrations of low-skilled labourers away from a degraded agricultural sector towards an underdeveloped industrial sector that is not yet ready to absorb them (UNCTAD, 2021).

Different projections developed by various research entities all point to a potentially dire future scenario in terms of the impact of climate change on APAC economies. According to the Climate Economics Index developed by the Swiss Re Group (2022) which measures how unmitigated climate change would affect 48 of the major national economies, the APAC region stands to lose 26.5% of its current GDP by 2048 due to this phenomenon. China and India are at the forefront in terms of projected losses due to the heavy productive losses caused by heatwaves³² – combined with their limited adaptive capacity. As will be further discussed below, though, China’s recent efforts to shift towards greater clean energy production and carbon capture are set to bolster the country’s capacity to mitigate the rising effects of climate change. ASEAN countries stand to lose even more, with a projected loss of 37.5% of their collective GDP by 2048. Malaysia, the Philippines, Singapore and Thailand are projected to lose an economic output totalling seven times their 2019 GDP by 2050.

In terms of the agricultural economy specifically, a study by the McKinsey Global Institute (2020) shows that an overall reduction in APAC’s agricultural yields is not necessarily the greatest risk associated to the effects of climate change by 2050; higher temperatures could also, for example, lead to higher yields and longer cultivation times of specific crops (e.g., soy, rice), while new places for agricultural production could open up due to changes in the physical environment. On the other hand, production volatility is expected to rise sharply due to shifting weather and temperature patterns and increased climate shocks, destabilizing farmers’ incomes regardless of whether agricultural yields are higher or lower in an agricultural cycle. Oversupply could reduce the prices by which farmers can sell their crops, while undersupply could lead to food shortages and price spikes. Based on historical data, even limited changes to the stock-to-use ratios of key crops carry the risk of triggering considerable price shocks.

With that being said, because many developing economies in the APAC region find themselves at a relatively earlier stage of the structural transformation process, there could be an important silver lining: these countries have the ability to adjust and refine their structural transformation processes using a climate adaptation lens – focused on clean and renewable energy and green technologies – to a much greater extent than heavily carbon-dependent, already diversified economies, which are considerably more locked into high-emission production structures and technologies. The United Nations Conference on Trade and Development (UNCTAD) (2021) sees this as an “advantage,” as countries that are relatively less advanced in their structural transformation processes, rather than having to retrace the steps taken by more industrialized economies, would be able instead to “raise the pace of capital formation by leapfrogging into new low-carbon technologies that are appropriate for their specific economic and ecological conditions.”

Especially as the COVID-19 pandemic forced countries to drastically rethink their policy response toolkits,³³ an opportunity exists for APAC economies to convene and agree on a new and joint set of policy choices that stand at the nexus between structural transformation and climate adaptation, economy and ecology. This would support these economies in evolving towards a low-carbon industrial system, in which manufacture-led development is still central, but its carbon footprint is strongly reduced due to a focus on renewable energy production, green technologies and the circular economy. These system-wide changes, in all evidence, will not be achieved without a strong, proactive engagement of the State, taking the form of an integrated policy approach aimed at tackling the multiple challenges of industrialization from a climate adaptation viewpoint. According to UNCTAD (2021), sophisticated green industrial policies are needed to enable a green structural transformation, in addition to large-scale public investments and financing. These industrial policies will have to tackle and break existing corporate interests around fossil fuels, as well as institute clear rules and regulations that can govern and orient new green investment trajectories. Market-based solutions cannot realistically be expected to optimally address and shoulder the massive systemic risk that will stem from the increasingly pervasive effects of different manifestations of climate change on all sectors of national economies and which are bound to affect especially the poorest, most vulnerable and least 'market-relevant' segments of society. On the other hand, the challenge for States is to ensure that public investments in low-carbon technology do not crowd out private ones, but instead foster them in a manner that is conducive to equitable growth and employment creation.

Projected to account for nearly 80 percent of global growth of the middle-class over the next decade, the APAC region's growing middle-class could also pose challenges in terms of their potential contribution to carbon emissions and environmental degradation, especially if this growth is accompanied by increased consumption and industrial activity that relies heavily on fossil fuels. However, there are strategies that could be implemented to mitigate these impacts and accelerate the transition to a greener economy, including investments in renewable energy, efficient urban planning as cities continue to grow, imposing emissions standards and regulating industrial pollution, and investments in green technology and innovation. Adapting fast enough to meet the scale of middle-class growth in the APAC region will require concerted efforts from governments, businesses, civil society, and individuals.

Promoting a structural transformation path for APAC countries focused on achieving low-carbon industrial systems would prove to be an economic and ecological boon not just for the region, but for the whole world. A series of key data provided by the McKinsey Global Institute (2020) can help make sense of this statement. Agricultural production and deforestation activities in the APAC region are currently responsible for more than 20% of global greenhouse gas (GHG) emissions, while agriculture accounts for 20% of global methane emissions. Industrial GHG emissions per unit of GDP in the APAC region are 60% higher than global averages, while the region is responsible for 80% of global GHG emissions derived from steel and cement. Furthermore, one-third of global GHGs caused by transportation and construction are generated in the APAC region. Thus, massive reductions in GHG emissions could potentially be achieved through a wide-ranging, policy-induced decarbonization effort in the APAC region. A few varied examples listed below, from a McKinsey Global Institute (2020) study, provide an idea of this potential.

- The reforestation potential in the APAC region encompasses approximately 90 million hectares of land, with the potential to absorb up to 45 gigatonnes of CO₂ emissions.
- Promoting the decarbonization of the steel industry in China, through a variety of technologies (e.g., green hydrogen, biomass metallurgy, carbon capture, use and storage), could lead to an annual reduction of 440 metric tonnes of CO₂ by 2030, from current levels of about 1,720 metric tonnes. This industry alone accounts for 18% of China's CO₂ emissions.
- Promoting the full electrification of road transportation in the APAC region could reduce CO₂ emissions in the region by up to 75%.

The example of China is indicative of an APAC economy which has been, in recent years, gradually shifting its policy focus towards a greater engagement in renewable energy production and low-carbon, green technologies. Although this was done initially to promote national energy security, China's engagement in renewable energy production, bolstered by a combination of enabling industrial policies (e.g., tax exemptions, purchase subsidies, public procurement) has led it to become a global leader in the production of mass manufactured low-carbon energy devices, such as solar photovoltaic products. China is today the largest importer and exporter of low-

carbon technologies, as well as the leader in foreign direct investment in renewable energy. This, among other positive effects, has also supported the country's shift towards electric automobile technology, making it the world's foremost market for electric vehicles. China's example is indicative of the experience of a developmental State which is attempting to tackle the challenge of expanding the scope of industrialization by decoupling manufacture-led development from the exploitation of finite natural resources (UNCTAD, 2021).

To conclude, it is critical to underline the fact that 90% of total GHG emissions in the APAC region are generated by just six countries: Australia, China, India, Indonesia, Japan and South Korea. When considering that APAC accounts for 45% of global GHG emissions (up from 25% three decades ago), it is easy to infer the importance that the policy path selected by these countries, in terms of how they decide to further advance their structural transformation processes, holds not just for the region, but for the whole world (McKinsey Global Institute, 2020). Although all these countries have made ambitious commitments towards pursuing decarbonization and achieving net-zero GHG emissions within the next few decades,³⁴ honouring these pledges will require drastic, coordinated policy reforms aimed at fundamentally reshaping the functioning (and appearance) of the core sectors at the basis of the structural transformation process: manufacturing; services; and agriculture.

3.2 IMPLICATIONS OF TECHNOLOGICAL DEVELOPMENT FOR APAC'S LABOUR MARKETS

Technological development and industrialization have played a major role in the group of fast-growing Asian countries characterized by strong economic growth and superior labour market outcomes (using the classification first presented in Section 1.2). For the fast-growing countries that have reached a certain level of industrialization and have registered good labour market performances (e.g., China), the question today is whether further industrialization should be pursued, or whether more attention should be placed on developing various activities in the high-end service sector, given that manufacture-related costs are rising fast (McKinsey 2017a). In the process of transitioning to more service-oriented activities, digital technologies can bring a dramatic boost in productivity. A study by McKinsey (2017b) argues that this increase in productivity could be of crucial assistance to China, for instance, in sustaining its future economic growth, even as the country's working-age population declines. The study estimates, for example, that automating workplaces with artificial intelligence could lead to an annual 0.8 to 1.4 percentage point increase in GDP growth, depending on the speed of adoption. Nevertheless, unlocking this potential in China is also dependent on automating workplaces across the country's traditional industries – not just the technology giants. If China manages to combine this process with a continuous pattern of demand-based economic growth, it holds the potential to become a strong growth pillar sustaining the whole Southeast Asia and East Asia region.

Even APAC countries at earlier stages of development stand to benefit from technological development and industrialization. Hallward-Driemeier and Nayyar (2017) note that: "With reform priorities becoming more urgent, one key lesson is that new technologies and changing globalization patterns increase the complementarities between economy wide and targeted approaches. Yet it may be more feasible, at least in the immediate future, to meet the requirements to be competitive by targeting locations and sectors rather than attempting to reform and provide public investments throughout the whole economy and that given the growing uncertainty about the pace of technological change, horizontal policies that develop transferable skills would reduce risks in the future."

The linkage between technological development and the future of work in the APAC region represents a crucial issue. The discussion on the future of work is often framed in terms of how automatization is affecting the high-end, profitable manufacturing industries in the region and how robots are becoming part of the industrial production processes. Yet, this seems to apply mainly to China and the Republic of Korea. UNCTAD (2017) observes that robotization has been primarily employed in the automotive, electrical and electronic industries, while in most labour-intensive industries (such as garment making) human labour (low-cost and low-skilled) remains the most economically viable option.

As illustrated by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) (2022b): "Technological feasibility doesn't equate to economic viability and the relative cost of different production methods matters in automation choices. Case studies of the apparel, footwear and electronics industries in

APAC developing countries suggest that the comparative advantage of low-cost labour seems to persist in key labour-intensive manufacturing despite ongoing automation.” In line with this, ESCAP (2022) notes that the potential labour-displacement shocks caused by emerging technologies appears to be overestimated by many observers, leading to unsubstantiated doomsday predictions about the large-scale disruptions that the robotic and AI revolution could bring to APAC labour markets, whereas the labour-complementing effect of such technologies appears to be widely underestimated. This labour-complementing effect can take two main forms. First, productivity increases generated by emerging technologies, which reduce the cost of production and/or delivery of specific goods and services, thus increasing demand. With a large enough increase in demand, the resulting employment generation effect can trump the loss of jobs caused by rising automation, resulting in a net employment gain. Second, the creation of entirely new economic sectors and tasks on the wave of new, emerging technologies, in which various forms of human labour have a competitive advantage (ESCAP, 2022).

It must be noted that in those countries in which large numbers of low-skilled workers enter the labour force (as in the group of Asian countries with low growth and weak labour market outcomes described in Section 1.2), rising automation does risk driving up production costs. Therefore, governments in these countries may consider applying judicious policies aimed at encouraging the diffusion of new technologies. Furthermore, policies may also aim to avoid relying solely on the impact generated by such technologies – or possibly subsidize them on a massive scale, at the current stage. China’s experience of “walking on two legs” (i.e., developing its industrial base while maintaining notably high levels of agricultural output and employment) could also be applied to other countries, by combining traditional labour-intensive manufacturing and high technological activities.

In terms of the interaction between COVID-19 and technological change in APAC labour markets, ADB (2021) pointed out how the pandemic had a deep impact on labour and skills demand in terms of “accelerating structural changes linked to automation, the shift to digital economy and changing business processes and workplaces.” It noted that the pandemic elicited an enduring demand for digital adoption in the region, advancing growth in specific sectors of the internet economy and increasing demand for medium- to high-level skills, such as technical and ICT skills. The counter aspect of this trend is that the pandemic drove a wedge between high-skilled workers in occupations that had a high ‘teleworking potential’ (usually located in developed and highly urbanized areas) and low-skilled workers that had no such opportunity, in virtue of both the nature of their occupation and their available resources. Such inequalities were particularly evident in developing economies of the APAC region. The Philippines, for example, showcased this phenomenon, where the types of high-skilled occupations that enabled teleworking (e.g., finance, business process outsourcing) were mainly concentrated in the highly urbanized National Capital Region, Calabarzon and Central Luzon. While these occupations were only moderately affected by the pandemic, the hardest hit sectors in the country were those in which the potential for teleworking was non-existent; these being transportation and storage, construction, accommodation and wholesale and retail trade.

The potential for automation, digitalization, artificial intelligence and other emerging technologies to transform the production landscape of the APAC region and generate new ways of organizing work was already being widely debated well before the pandemic. According to a study by ILO and UN Women (2021), these processes are expected to accelerate following the COVID-19 crisis. The role that new technologies will play in a post-pandemic world will be most likely dependent on each country’s resource availability, as well as the broad economic strategies they choose to put into action. In other words, the final outcomes of rapidly advancing technological progress, in terms of inclusiveness and better opportunities for decent employment, will ultimately depend on political decisions. In this frame, public decision makers will need to pay careful attention in their policymaking processes, particularly to the need to weigh the significant benefits that can arise from the rapid expansion of digital technologies against the considerable risk of aggravating structural inequalities in labour markets (ILO and UN Women, 2021). From a gender perspective, for example, the gender divide in the use of the internet is particularly stark in South Asia where women are 36% less likely to use the internet than men. The gender gap in mobile ownership is also quite significant, at 19% (GSMA, 2021).

3.3 IMPACTS OF THE UKRAINE WAR ON APAC'S ECONOMIES AND LABOUR MARKETS

Russia's invasion of Ukraine, which began in February 2022, generated an ample series of socio-economic ripple effects around the world. Although European economies are taking the brunt of the geo-economic impact of this conflict, the macroeconomic effects of the war are also being felt in APAC economies mainly through a spike in prices of both energy and food which have pushed up inflation and affected poorer households in a disproportionate manner. According to ESCAP (2023), the average rate of inflation in the region's developing economies is estimated to have more than doubled in 2022 to 7.6%, the highest rate since 1998. Key commodities sourced from Russia and Ukraine (e.g., oil, gas, nickel, copper, titanium, neon, palladium, wheat, sunflower oil, fertilizers) have become considerably more costly at a time when prices were already high due to the effects of the pandemic. Logistics and transportation have become considerably more expensive, especially considering that the APAC region is a net oil importer. Another dire forecast relates to the growth of food insecurity in the APAC region, as a result of rising food inflation and the undersupply of fertilizers and key crops from Russia and Ukraine, at a time when food supply chains and inventories in the region were already exhausted by the pandemic. Some APAC countries rely heavily on wheat imports from Ukraine, such as Pakistan (with 39% of total wheat imports coming from Ukraine), Bangladesh (50%) and Sri Lanka (45%) (ESCAP, 2022a).

Concerning the impact of the Ukraine War on job markets in the APAC region, ILO (2022d) points out that the combination of rising inflation, global supply chain disruptions and economic uncertainty is bound to constrain employment growth and reduce real wages, placing additional pressure on social protection systems already strained by the COVID-19 pandemic. Nevertheless, the actual impact on developing APAC economies will vary considerably, with some countries being particularly exposed to the socio-economic repercussions of the war due to their fragile economic structures and uncertain political scenarios, which increase their vulnerability to issues such as rising energy and food prices, reductions in financial inflows from abroad, higher costs of financing and rapid changes in business sentiment (ESCAP 2022a).³⁵

Another important linkage to trace is the connection between the impact of the war and the fight against climate change in the region. The conflict-induced commodity crisis has already led several governments in the region to turn back on their pre-pandemic climate ambitions. As pointed out by Huda (2022), for example, the Philippines in 2022 doubled its fuel subsidy programme for public transport in an effort to reduce inflationary pressures, while it is also planning to increase the use of coal for electricity generation (albeit in the framework of a long-term strategy focused on renewable energy promotion), to meet increasing energy demand. Along a similar line, Malaysia's oil subsidies have grown to more than \$6 billion in 2022, while Thailand and Vietnam have also increased their fossil fuel subsidies.

The international sanctions preventing the export from Russia of critical minerals represents another key factor that curbs APAC countries' ambitions to enact green energy transitions. Nickel, for example, is an important component of batteries for electric vehicles, while neon is a critical input for semiconductors – also essential for such vehicles. Nevertheless, as pointed out by Huda (2022), the conflict-induced commodity crisis represents an opportunity for APAC decision makers to market decarbonization as an economically attractive development model, having showcased the fragility associated to import dependency – especially related to oil. In the current scenario, for example, Southeast Asia will need to increase its oil imports by an additional 65% by 2040 to keep up with its pace of growth, which implies even more vulnerability to external supply shocks such as that of the Ukraine War. As pointed out by Huda (2022), reorienting regional collaboration towards renewable energy and energy transition materials will be critical to set APAC countries on a more resilient and sustainable development path that can guarantee better protection against supply shocks in an increasingly more uncertain (and climate change-affected) global environment.

4. POLICY RECOMMENDATIONS FOR INCLUSIVE AND SUSTAINABLE STRUCTURAL TRANSFORMATION



As seen throughout this study, the COVID-19 pandemic shined a light on some of the most critical structural weaknesses that characterized for decades the socio-economic fabric of APAC's labour markets, including high levels of job informality, low skill levels among a significant segment of the workforce, women's disproportionate burden of unpaid care work and the scarce coverage of social protection for informal workers. As APAC countries continue advancing on their structural transformation paths, these distortions are bound to further marginalize a vast population of low-income and vulnerable workers who are unprepared to cope with future disruptions unless APAC policymakers intervene strongly to address these imbalances. Without intervention, there will be increasing levels of inequality in employment, a growing unmet demand for skilled workers and increasing socio-economic fragility among several other issues. The silver lining in this dire scenario is that the COVID-19 pandemic also provided APAC policymakers with a vital opportunity to reconsider and shift their core policy approaches, with the aim of redirecting the growth of job markets and structural transformation processes towards a more inclusive, sustainable and productive path.

In light of these premises, the following policy recommendations are intended to act as guidelines for policymakers and development agencies engaged in supporting and shaping the structural transformation process in the APAC region. These recommendations focus on promoting a more sustainable process, capable of generating considerable socioeconomic growth while also enhancing inclusiveness, equitability and an increasing degree of regional resilience against what is arguably the greatest challenge facing the APAC region – the polycrisis. The World Economic Forum's Global Risk Report (2023), defines the polycrisis as “a cluster of related risks with compounding effects, such that the overall impact exceeds the sum of each part.” From a policy perspective, cascading and inter-connected crises demand poly-solutions that are firmly rooted in equity. It is critical for APAC policymakers to take into careful consideration the interconnectedness and reinforcing dynamics that characterize the major crisis factors currently threatening the region and to design policy responses that can provide holistic and integrated solutions to these complex problems. That is why the recommendations provided in this Section, although presented separately, are strongly interlinked. They seek to provide inspiration to APAC policymakers to address a range of multifaceted issues that straddle different economic sectors, global trends and societal dynamics.

4.1 PROMOTE A GREEN TRANSITION IN STRUCTURAL TRANSFORMATION PROCESSES

The vast majority of stimulus measures enacted by APAC countries to re-start economies in the wake of the COVID-19 pandemic have been heavily based on continued (or even expanded) investment in fossil fuels and its associated industries, such as mining, ore removal and coal-fired power generation. Unlike Europe, which has arguably been at the forefront in implementing green transition considerations in its pandemic stimulus packages, and the United States, which has sharply adjusted its policy focus towards the development of a more climate-friendly investment ecosystem, of APAC's four largest economies – China, India, Japan and South Korea – only approximately 4% of their combined pandemic stimulus packages made allocations towards green and climate-friendly programmes and measures. Considering that these four economies are primarily responsible for the APAC region's generation of roughly half of the world's GHG emissions, their policy decisions in post-COVID recovery processes are bound to be a crucial factor in determining whether the climate targets set by the Paris Agreement will actually be met, while also strongly influencing the approach towards climate change adopted by other countries across the world (Wei and DeRidder, 2021). Furthermore, and as noted in section 3.3, the inflationary pressures induced by the Ukraine War led some APAC governments to scale back their climate change mitigation ambitions by expanding fossil fuel subsidy programmes and coal exports.

As pointed out by Gaspar and Rhee (2021), APAC policymakers should abandon the idea that a green recovery necessarily implies a sacrifice of potential economic growth. In fact, a variety of green stimulus measures – such as those linked to renewable energy investment, low-energy transport and climate-smart agriculture – can turn out to be win-win solutions for APAC governments, if they are able to shoulder the elevated initial investment costs required to kickstart these innovations. These policy packages and programmes, when properly designed, can generate considerably better short-term socio-economic gains compared to business as usual,³⁶ while also mitigating environmental degradation in the long run. As pointed out by Wei and DeRidder (2021), investing in a green transition can result in “higher levels of employment, better financial and economic returns and more widespread social benefits than policies that seek to prop up archaic, polluting industries and technologies.”

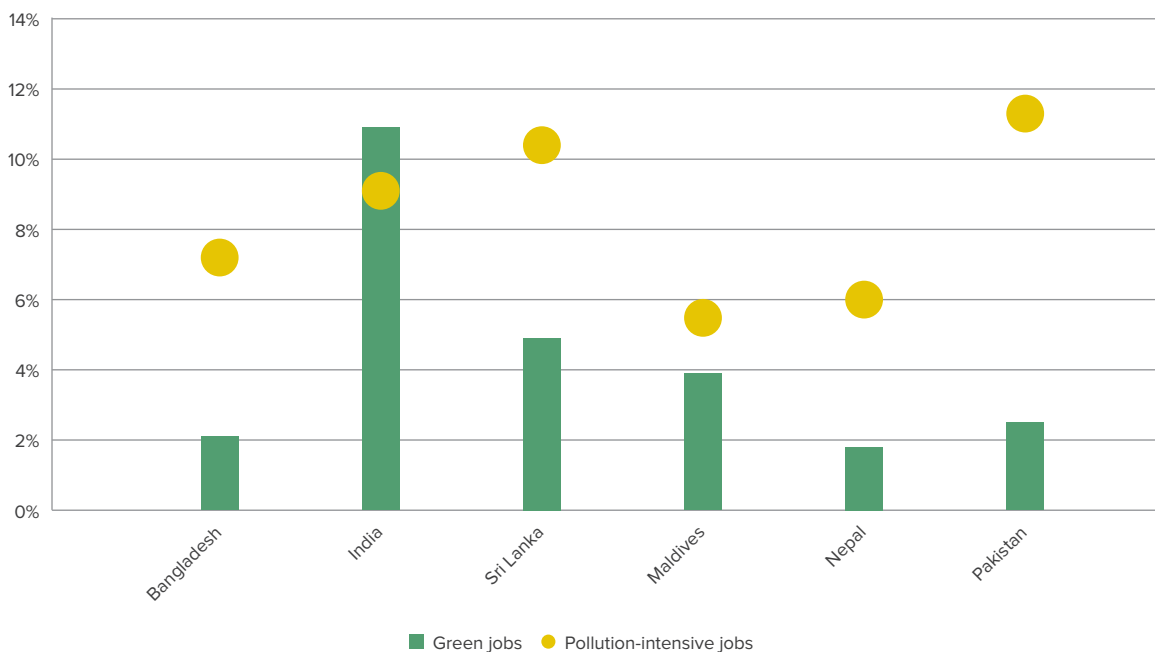
That being said, enacting a green transformation process in the APAC region requires addressing first a pressing challenge that restricts the scope of action of national governments. The impacts of the COVID-19 pandemic and the Ukraine War have considerably constrained the available fiscal space in APAC countries, especially in the low- and middle-income group, due to the massive expansionary fiscal programmes that were adopted to support businesses and households. Several APAC countries registered fiscal deficits in 2020-2021 that were worse than those of the Global Financial Crisis of 2008-2009. Debt stress has built up in several countries across the APAC region, with at least 12 countries at high solvency risk. From the perspective of promoting a green transformation, fiscal constraints imply a need for APAC governments to formulate clear criteria for selecting policies which can achieve rapid progress towards green transformation while also being compatible with poverty alleviation efforts and other Sustainable Development Goals. Furthermore, these policies should be both feasible and affordable to ensure that the available resources are used in the most efficient and targeted way possible (Barbier, 2022).³⁷

From the viewpoint of promoting a greener transformation process, several key policy interventions need to be highlighted, such as: raising carbon taxes for the most polluting fuels while taking into consideration socio-economic impacts; attaching green conditionalities to public financing programmes; introducing fossil fuel subsidy swaps to fund investments in clean and renewable energy; and including more sectors in emissions trading systems (Gaspar and Rhee, 2021; Barbier, 2022).

To avoid negative impacts of a green transition on labour markets in the region, it will be important for governments to develop policies that address the needs of affected workers and businesses, and enable the creation of decent green jobs. As can be seen in Figure 7, data from six countries in the region indicates that pollution-intensive jobs outstripped green jobs in all countries except India, with a range of 6-11 percent (World Bank, 2023c).³⁸ Pollution-intensive jobs are at a high risk of being displaced. In India, which comprises 70 percent of South Asia's labour force, pollution-intensive jobs accounted for about 9 percent of all jobs. Furthermore, the manufacturing and construction sectors in all six countries accounted for more than 50 percent of pollution-intensive jobs, while agriculture accounted for about 1 percent, as can be seen in Figure 8.

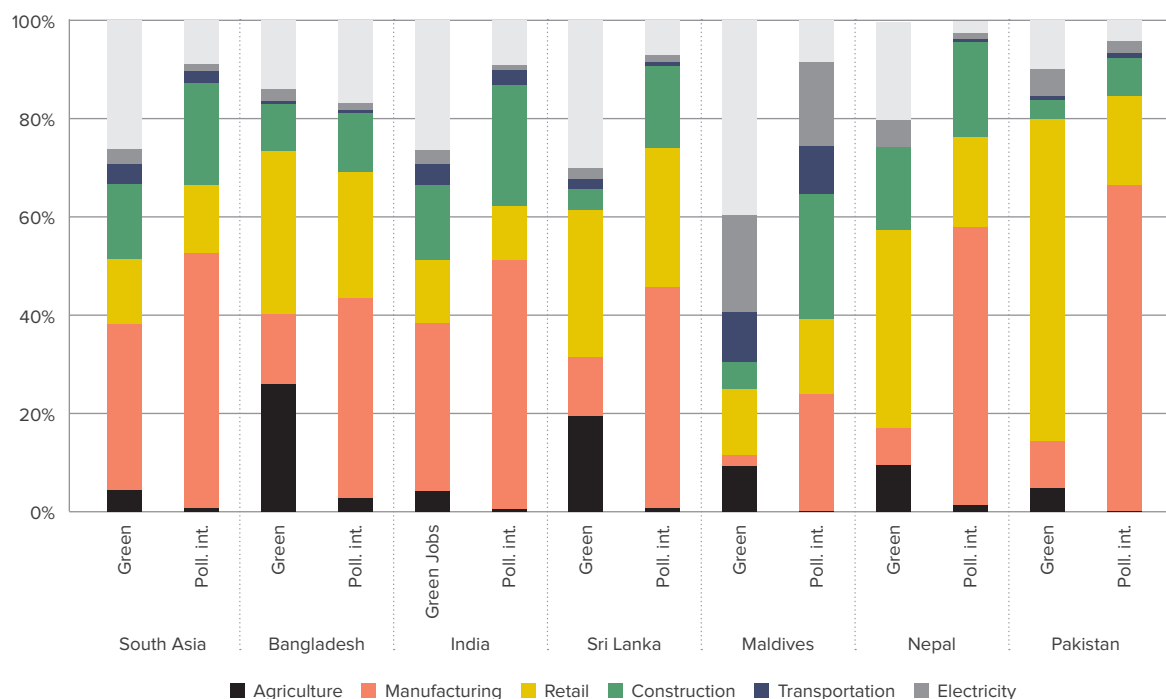
From the specific viewpoint of this study's focus, i.e., the creation of decent green jobs and the development of human capital, the following recommendations are important to highlight.

Figure 7: Share of green jobs and pollution-intensive jobs (percent)



Note: Data from labour force surveys of Bangladesh (2015), India (2018), Maldives (2019), Nepal (2017), Pakistan (2018) and Sri Lanka (2019).

Source: National statistical offices, World Bank (2023c).

Figure 8: Distribution of green jobs and pollution-intensive jobs (percent)

Note: All other sectors include education, financial services and insurance; health and social work, mining and quarrying; public administration and defence; compulsory social security; other community, social, and personal services.

Source: National statistical offices, World Bank (2023c).

Develop public institutional capacity in the green transition and its link to labour markets. Promoting the creation of new, decent jobs linked to climate change mitigation, environmental conservation and other green considerations requires specialized knowledge and capacity on the part of national and subnational policymakers. Achieving policy coherence in the green transition process is far from a simple process when considering the sheer number of different sectors, industries and job markets that such a process would radically influence – and the policy implications this entails.

As such, substantial investment needs to be channelled towards fostering the capacity and knowledge of public institutions at various levels of decision-making to ensure that the mainstreaming of green considerations across sectors, industries and labour markets is advanced in a coordinated, coherent and inclusive manner. Pursuing this recommendation would entail, for example, developing training programmes for governments on the green transition and its links to the demand side and supply side of labour markets, establishing collaboration platforms that bring together government officials, industry leaders and other stakeholders to discuss and design solutions, and enabling South-South experience sharing across countries.

In Indonesia, for example, the National Institute of Public Administration, under its Green Growth Program, offers trainings for both local and national government officials to increase their understanding of and competence in green economy policy formulation (Government of Indonesia, 2023). South-South exchanges between Mongolia and the Kyrgyz Republic on the development and implementation of policy reform for a green economy and the use of green technologies in business have been instrumental in shaping the Kyrgyz Republic's identification of priority areas, particularly in green finance, sustainable public procurement and green jobs (PAGE, 2018).

Link labour market and employment goals to climate change commitments. As it stands, in APAC countries, national goals associated with the promotion of labour markets and employment growth are almost completely detached from international climate change commitments assumed by these countries, such as the Nationally Determined Contributions (NDCs) that have stemmed from the 2015 Paris Agreement. This represents a considerable missed opportunity, given that national initiatives focused on decarbonization and climate change

mitigation hold enormous potential for the creation of green jobs across the region's labour markets. Reviewing and coordinating existing policy commitments, along these two main axes, could result in greater efficiency (and thus better results) in the pursuit of goals related to both decent job creation and the promotion of green transition processes in the region (ILO, 2019a). Policymakers are realizing the opportunity and are beginning to take steps. For example, Cambodia has defined measures under its updated Nationally Determined Contribution that contribute to green jobs creation (Cambodia Ministry of Environment, 2020).

Reduce the skills gap in green technologies. Achieving the green transition will require a massive investment of public and private resources in skills development and capacity building spanning across multiple sectors and industries. With the projected creation of 14.2 million net green jobs by 2030 in the region (ILO, 2019a) and the increasing demand for green skills, APAC policymakers can respond in several ways. For example, policymakers can: strengthen and re-focus existing vocational training capabilities available at national and local levels; set up public investment facilities to finance private business re-skilling initiatives; strengthen linkages between industry and academia to make curriculum fit for purpose; and promote knowledge exchanges with countries characterized by advanced green sectors. In China, for example, the government is taking steps to develop its hydrogen economy, including through enhancing the technical vocational education and training system for the hydrogen industry, to nurture talents needed across the hydrogen value chain (UNDP, 2021a).

For those countries that still rely on coal production to meet a significant share of their electricity demand, a key policy priority could be to build and expand vocational training opportunities for coal industry workers to accompany the coal phase-out process and facilitate these workers' transition into other sectors, such as renewable energy (Asia Foundation, 2021). Australia, for example, is retraining its coal workers for the clean energy future, with estimates suggesting that 20,000 to 25,000 new jobs will be created in the construction, maintenance and operation of renewable power by 2036 (McKay, 2022).

Promote data gathering and measuring capabilities on green jobs. The capacity to measure and monitor the growth and expansion of green jobs across different sectors in the APAC region is quite scarce, which impedes efforts to implement evidence-based policymaking. This is due to a range of factors, including scarce resources for data collection, limited awareness of the importance of green jobs data, lack of a universal definition of green jobs and weak coordination among different agencies and organizations. Furthermore, green jobs often comprise informal and small-scale activities, such as recycling, which can be difficult to track and measure as they may not be formally recognized or documented. The lack of gender-disaggregated data related to green jobs is another challenge, and one that makes it difficult to identify gender disparities and formulate policies to address them.

Countries need to make an effort to establish a standard definition of green jobs that can help to create consistency in the way these jobs are measured and reported. National statistical systems should be strengthened to better capture disaggregated data on green jobs through building capacity in data collection, analysis and reporting and creating robust systems for monitoring and evaluation. Private sector engagement should be enhanced, particularly those operating in the green economy, to help fill data gaps and improve the accuracy of data.

Bolster the flow of investment capital directed at climate-friendly entrepreneurship. For most MSMEs, investing in the purchase of clean energy technology and other climate-friendly business solutions is a capital-intensive endeavour that involves high – and most often unaffordable – upfront costs. This issue is compounded by a general lack of willingness on the part of most formal financial providers (e.g., microfinance institutions, commercial banks, financial cooperatives) to provide financing to enable such investments for several reasons, which include: limited awareness of the potential benefits of investing in climate-friendly MSMEs; lack of the necessary expertise and resources to identify and assess climate-friendly MSMEs that can be supported through their loan products; and limited financing options that are specifically designed to support climate-friendly investments. These issues can make it difficult to offer affordable loans to climate-friendly MSMEs.

Nevertheless, unlocking the flow of investment aimed at climate-friendly MSMEs can represent a game-changing proposition for the APAC region's green transition process. National policymakers can support this in a number of ways: create incentive programmes to promote green financing directed at MSMEs (e.g., subsidies, interest rate rebates); support local financial institutions to develop green financing portfolios; enable MSMEs to adopt environmental, social and governance (ESG) credentials paving the way for them to access finance; assist small-scale entrepreneurs to develop business plans to back loan applications; and support the creation of financial technology (Fintech) solutions to support climate-friendly MSMEs.

The Monetary Authority of Singapore, the Global Legal Entity Identifier Foundation and UNDP, for example, have embarked on a collaborative initiative called ‘Project Savannah’ to develop digital Environmental, Social, and Governance (ESG) credentials for MSMEs worldwide. This initiative aims to strengthen the ability of MSMEs to gain access to global financing and supply chain opportunities by helping them to simplify their ESG reporting processes, enabling them to transmit verified entity information and key ESG data to their business partners (GLEIF, 2023).

To enable MSME financing, Indonesia’s Central Bank issued a regulation in 2021 to encourage banks to disburse more loans to MSMEs. The regulation requires banks to disburse at least 20 percent of their loans to either MSMEs, MSME supply chains or low-income earners, and will gradually raise the mandatory MSME credit ratio to 30 percent in June 2024 (UNDP, 2022c). This regulation has enabled financial institutions to support MSMEs in the green and blue sectors. For example, to support MSMEs in the blue sector, Indonesia’s Bank Mandiri collaborated with the fisheries startup PT Rantai Pasok Teknologi (FishLog), an ecosystem enabler in the fisheries supply chain, to disburse loans to MSMEs through the FishLog platform totalling Indonesian rupiah 50 billion (FishLog, 2023).

Advance policies that enable a just transition. A just transition ensures that the shift towards a more sustainable and low-carbon economy does not disproportionately harm workers, MSMEs and vulnerable populations. It recognizes that transitions that move away from fossil fuels and that adopt cleaner technologies can have significant social and economic impacts. Policies that ensure a just transition should consider the creation of decent jobs that provide job security, fair wages, and safe working conditions; provision of income support to workers and financial assistance to MSMEs during the transition and in industries that are negatively affected by the transition; building the required capacities and skills of workers and enterprises to make and benefit from the transition; and enhancing social inclusion and non-discrimination by targeting vulnerable workers, including women.

To ensure a just transition, countries need to move towards a more comprehensive social protection system which includes measures that enhance the adaptive capacity of workers to absorb and respond to shocks. Such measures include affordable health care, unemployment benefits, and investing in the education and skills of workers in affected industries and enabling their access to new employment opportunities.

Germany, for example, established a comprehensive social protection system that has successfully enabled the just transition of coal workers by linking social protection measures to skills development and employment services. Measures included covering vocational training costs for the employed and unemployed, including for transport; offering job placement support through job centres and employment services largely free of charge; and ensuring job application costs were reimbursed, such as travel expenses for interviews and relocation. In addition, those workers in the coal regions affected by the economic decline who had insufficient or no income and lacked access to unemployment insurance received income support and health insurance coverage (Furnaro, 2021).

4.2 LEVERAGE DIGITAL TRANSFORMATION FOR GROWTH OF JOB MARKETS

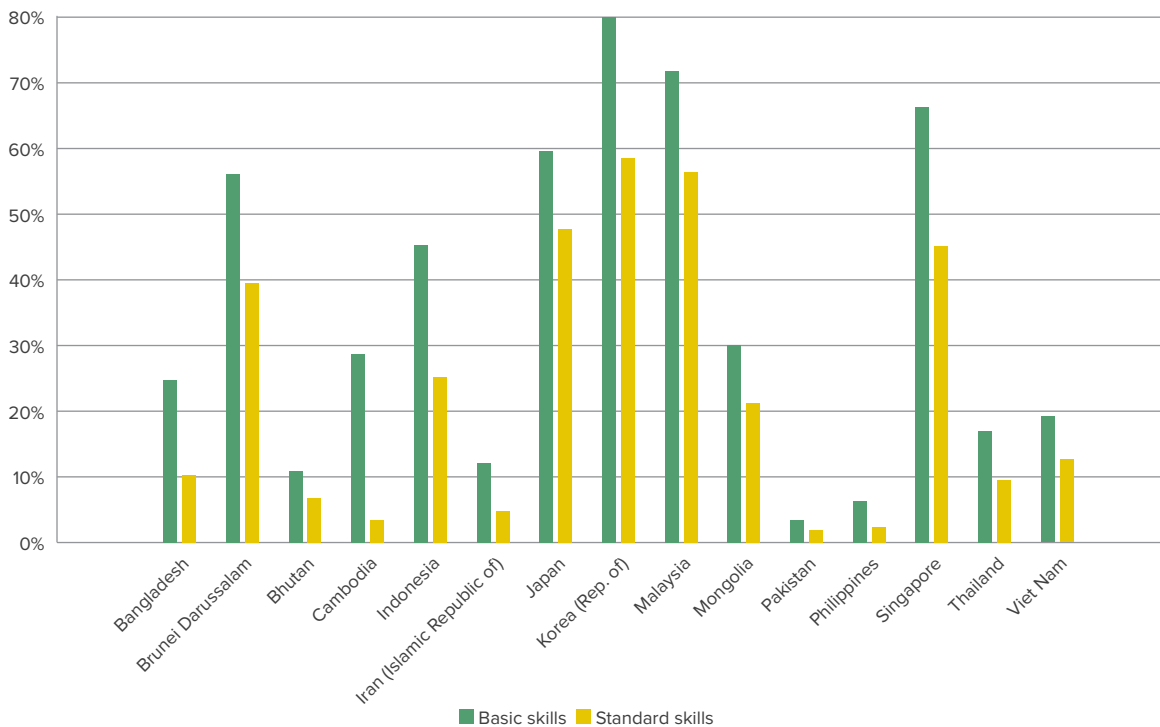
As discussed in Section 3.2, rising levels of digitalization and automation across different industries are bound to reshape APAC labour markets and the types of jobs most in demand, representing simultaneously an invaluable opportunity for advancing socioeconomic growth and a critical threat of further marginalizing vast categories of workers. According to a recent projection by Forrester (2022), one in five jobs in APAC labour markets are expected to be affected by automation in the near future, while one in eight are projected to be replaced because of it.³⁹ While automation is bound to affect all macro-sectors which contribute to the structural transformation of APAC countries (i.e., agriculture, manufacture and services), it is especially bound to disrupt the job security of workers in electrical and electronics, automotive, textiles, business process outsourcing, wholesale and retail. Despite the considerable potential that automation holds in terms of both creating new jobs and enhancing existing ones, without adequate social protection coverage (especially unemployment benefits) and a strong policy investment that bridges the skills gap in various technologies across APAC labour markets, millions of workers will be left vulnerable and resourceless when confronted with these disrupting mega-trends.⁴⁰

Job displacement caused by automation in the APAC region is also characterized by a rising gender imbalance. According to an ILO (2019b) analysis on the future of work in the ASEAN region, women are considerably more at risk than men of losing their jobs on account of automation due to being overrepresented in sectors that will be most affected. Sectors that are bound to be considerably affected, and in which women workers are highly represented across APAC countries, include garment, accommodation and in-person retail (as opposed to e-commerce). On the other hand, it should be noted that women in the APAC region are also more present than men in jobs that are not expected to be replaced by technology anytime soon, such as care-related jobs and social work (ILO, 2022d).

More need exists than ever for tailored employment policies that seek to mitigate the worst spill-over effects of digitalization and automation in APAC labour markets while at the same time channelling these trends towards employment growth that is both more inclusive and sustainable. The latest data shows that the pandemic accelerated the already ongoing processes of digitalization and automation across a wide range of APAC industries, such as banking, logistics, food processing, textiles and many others. As shown by a recent ADB analysis (2022a), the demand for digital skills increased especially in those APAC industries that were hardest hit by the pandemic, such as manufacturing (e.g., garments) and consumer-facing industries (e.g., hospitality). The fragility shown by these industries in the context of the crisis led them to accelerate the process of digital transformation, leading to an unprecedented rise in demand for high-skill, ICT-related jobs (e.g., software and system engineers, business technology analysts, social media managers), with considerable raises in wage premiums for these job categories.

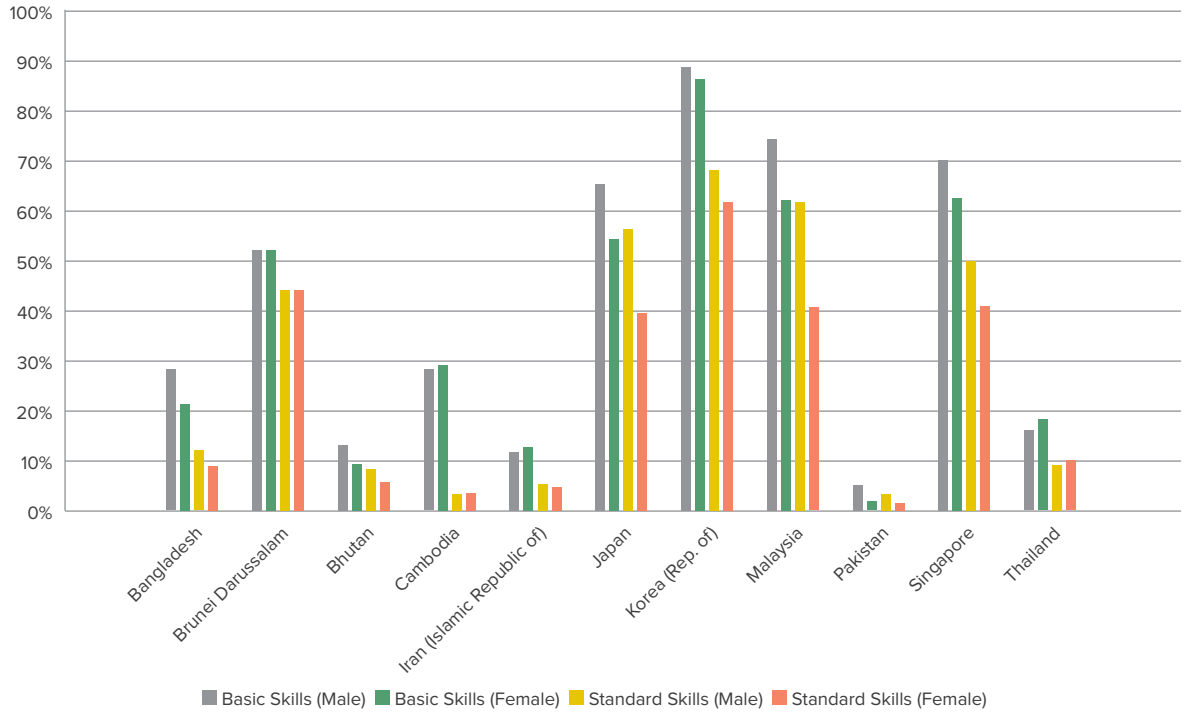
As can be seen in Figure 9, a significant percent of the APAC population lacks even basic levels of ICT skills. Even in high-income APAC countries like Japan and Singapore, more than 30% of the population lacks basic ICT skills. In countries characterized by weak growth and weak labour market outcomes, such as Pakistan and the Philippines, this share can be higher than 90%. This implies that, in the current business-as-usual trajectory, rising digitalization is only bound to widen the existing structural inequalities registered in APAC job markets. Furthermore, gender disparities in both basic and standard skills exist in 7 of the 11 countries with data as shown in Figure 10. In terms of location-based disparities in skill levels, all 9 countries with data show an urban-rural divide in both basic as well as standard skills, as shown in Figure 11.

Figure 9: Percentage of population with ICT skills, latest year available (2017-2022)



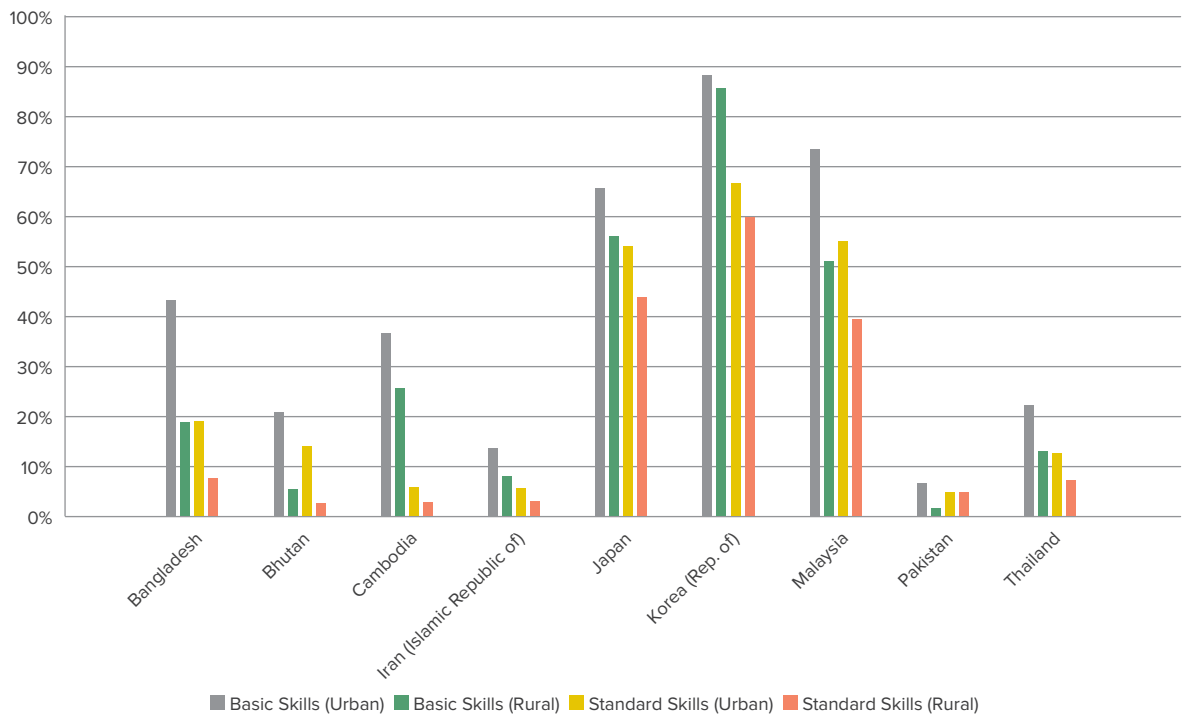
Source: Based on the ITU DataHub (2023).⁴¹

Figure 10: Percentage of population with ICT skills by gender, latest year available (2016-2021)



Source: Based on the ITU DataHub (2023).

Figure 11: Percentage of population with ICT Skills by area (urban or rural), latest year available (2016-2021)



Source: Based on the ITU DataHub (2023).

Another important issue that plagues the region, which has significant labour market implications is that of digital connectivity. About 36% of the population in the APAC region remains offline. Access divides persist between urban and rural areas, with 82% of urban households having access to the internet while only 47% of rural households do (ITU, 2022). Fixed broadband remains unaffordable in most APAC countries. Fixed broadband basket prices as a percentage of monthly gross national income per capita in 2022 for the APAC region stood at 3.2%. The United Nations Broadband Commission for Sustainable Development defines affordability as the availability of broadband access at a price that is less than 2% of the monthly GNI per capita. Regulatory, marketplace and technological barriers impede efforts to achieve universal affordable broadband access across the region. Simulations performed by Cambridge Econometrics indicate that achieving universal broadband coverage could lead to a net increase in employment of nearly 9 million new jobs in the region by 2030 (ILO, 2022c).

Given these premises, the following policy recommendations can be put forward.

Channel public investments towards skills-building in labour markets. To foster adaptability and resilience, it is crucial for APAC policymakers to invest in the skilling, re-skilling and upskilling of workers across various industries, prioritizing those who are most exposed to the twin processes of automation and digitalization. This would be essential to assist workers to remain competitive amid rapidly evolving job environments, as well as to help them transition towards other sectors in which technological development has opened new employment opportunities. On account of the heightened constraints women face in access to education and capacity building across industries in many countries, public investments should prioritize building the capacity of female workers through access to training opportunities. Accessible digital literacy programmes and public education grants that promote women's access to STEM education, among other skills, need to be supported. Efforts also need to be pursued to close the urban-rural ICT skills gap through specialized education and training programmes for rural workers, including digital literacy programmes, leveraging mobile technology for skills development, particularly where rural workers have limited access to computers, and establishing community technology centres in rural areas that enable access to computers, the internet and ICT training. Public funds need to also be invested to strengthen technical and vocational education and training. Private sector engagement in skills development of workers is important and, in this regard, incentive programmes for the private sector can help them carry out mass upskilling programmes for their employees.

APAC provides good examples of interventions to support digital skills-building. The Aspire to Innovate (a2i) programme, a joint initiative of the Government of Bangladesh and UNDP, has helped increase digital literacy levels among the population, particularly among women and marginalized communities, through its digital centres and skills development programmes (Aspire to Innovate, 2023). The programme has helped create new employment opportunities through training individuals in skills, such as coding, mobile app development and digital marketing. The ICT Division of the Government of Bangladesh together with Huawei, a multinational technology corporation, launched the Digital Training Bus Project to bring basic digital skills to women in the rural areas of the country. By the end of 2019, over 63,000 women have been trained using buses equipped with workstations and an additional 166,000 women are expected to be trained by the end of 2023 (Huawei, 2023).

In Thailand, the government's Board of Investment has implemented an incentive scheme to promote the private sector's investment in training their workforce to keep pace with the changing technology-driven landscape. Under this scheme, businesses can claim corporate income tax exemptions for investment capital and expenses in workforce development, particularly for training and internships that develop skills, technology and innovation, with no set minimum amount (Thailand Board of Investment, 2021). Furthermore, to spur collaboration between the private sector and local education and training institutes to equip young graduates with skills of the future, the Board of Investment expanded its investment incentive package; investors that support education and training institutes can receive up to 13 years of corporate income tax exemptions and a 50% corporate income tax reduction for five years (Thailand Board of Investment, 2019).

Improve universal access to digital infrastructure. It is paramount for governments to improve universal access to digital infrastructure, including affordable and better quality high-speed broadband services in both urban and rural areas. Extending broadband into underserved and unserved communities also requires a regulatory environment that can attract investment. The cost-economics of broadband deployments can be transformed by good regulations, enabling unprofitable investments to become profitable (UNDP, 2021b). In addition, harmonized regulations across a region can encourage investment, especially in small markets, such as Small Island Developing States, which might not attract investment on their own.

Collecting high-quality, disaggregated data by regulators, which track broadband availability and adoption, including by income, gender and other factors that characterize marginalized groups, is important to design interventions that advance universal broadband coverage. A well-designed and funded broadband plan is an essential blueprint for addressing digital inequality.

According to the Alliance for Affordable Internet Access in 2020, Malaysia provides a good example of national broadband planning. The country achieved the United Nations Broadband Commission's '1 for 2' affordability threshold — 1GB data for no more than 2% of average monthly income (A4AI, 2020). The country's national broadband plan is driven by an array of supply-side and demand-side regulatory interventions that have enabled widespread affordable internet access.

Promote the digitalization process of MSMEs with a coordinated policy package. As illustrated in Section 2.2, MSMEs represent a particularly vulnerable category of actors in APAC labour markets due to the scarce social protection coverage, extremely high levels of informality, lack of know-how in several key skills (e.g., business management, ICT, financial education) and a host of other factors. This combination of factors makes small-scale entrepreneurs extremely unprepared to weather and adapt to disruptions brought about by rapid technological development, especially in the wake of the COVID-19 pandemic and the resulting heightened state of fragility faced by millions of MSMEs across industries. Furthermore, business digitalization is a capital-intensive process, often unaffordable to MSMEs without public support (both financial and non-financial).

There is, therefore, a strong role for governments to play in accompanying and incentivizing MSMEs throughout the digitalization process, through a combination of financial subsidies, tax benefits, streamlining of red tape, dedicated capacitation programmes (especially on digital and financial literacy) and several other types of interventions.

In Thailand, in 2021, the government launched a public initiative to support business digitalization through its Digital Economy Promotion Agency. A 200% tax deduction is provided to SMEs and MSMEs for purchasing digital services, robotic technology and smart and Internet of Things (IOT) devices (Deloitte, 2021).

Harmonize the green transition and digital transition processes. Considering the impact that the green and digital transitions are projected to have on APAC labour markets, it is critical to design and implement holistic job protection policies. Examples of such policies include accompanying the transition of workers displaced by automation towards the renewable energy sector; incentivizing the uptake of 'green digital' technologies on the part of businesses, such as smart devices to regulate energy consumption; and promoting public investment in job sectors that straddle the line between automation and sustainability, such as e-mobility.

Japan, for example, is currently implementing its Sixth Science and Technology Basic Plan 2021-2025 to promote a sustainable, low-carbon economy using advanced digital technologies and to enable job creation. The plan includes initiatives such as the development of smart cities, the promotion of smart agriculture technologies and systems and the establishment of smart grids, among others. As a result, these initiatives are creating new job opportunities in areas that include digital infrastructure development, agricultural engineering, robotics and automation and smart city planning.

4.3 PRIORITIZE INCLUSIVITY IN POLICIES FOR JOB MARKET RECOVERY AND RESILIENCE TO FUTURE SHOCKS

The process of promoting structural transformation and the recovery of APAC labour markets in a post-pandemic framework must embrace inclusivity as a top priority. This requires addressing the structural gaps, inequalities and distortions that lead specific categories of APAC workers to shoulder a disproportionate burden during economic downturns that put them at a greater risk of being further left behind. In the APAC region, as has been discussed throughout Section 2, women, youth, informal workers and MSMEs are particularly vulnerable to economic fallout, as experienced during the pandemic.

From the perspective of policymakers, several short- and longer-term interventions could be taken into consideration to ensure that the promotion of structural transformation and labour market recovery will not further exacerbate existing inequalities. These include the following recommendations.

Tackle the gender-based gap in skills development and training and access to digital tools. Women workers are at a particular risk of being left behind by the rapidly accelerating digitalization and automation processes that characterize various industries. To pursue equal labour participation in structural transformation processes in the APAC region, it is critical to tackle the gender skills gap. This can be done through appropriate gender-responsive labour policies that increase both short- and longer-term opportunities for training and skills development that are either explicitly tailored to the needs of women or easily accessible by them. Skills development in areas such as digital literacy, digital financial literacy and STEM subjects is vital (APEC, 2020). Addressing the gender gap in digital access must also be made an important priority for promoting gender equality in the region's labour markets.

For example, the Disha project in India, a collaboration between the government, IKEA Foundation and UNDP has empowered women in rural areas by providing them with digital literacy training and access to digital tools, as well as linking them to livelihood opportunities. This has been done by leveraging a network of Common Service Centres in rural areas to deliver training. The project has been implemented in several states in India. As of 2021, the project trained over 200,000 women and girls in digital literacy skills. The project has also set up digital resource centres in rural areas that provide access to computers, internet and other digital tools that are accessible to women.

Promote inclusive entrepreneurship through tailored financing. Access to capital is a key constraint that limits the capacity of women and youth entrepreneurs to kickstart their business ideas or expand their businesses. This is compounded by the unique and heightened challenges these population segments face when trying to access such capital through credit, originating from either public or private sources.

For APAC governments, promoting access to tailored financing for marginalized entrepreneurs can be a strong policy lever to ensure that job markets in the region develop not only more inclusively, but also more effectively. This could be achieved in several ways, for example by: establishing public financial facilities (such as partial credit guarantee schemes) that mitigate the risk faced by formal financial institutions when they provide credit to women and/or youth entrepreneurs; easing the administrative requirements imposed by the financial regulatory framework to apply for credit; promoting the use of alternative forms of loan collateral (such as stock inventory) which could be more easily available to marginalized entrepreneurs; and supporting financial institutions to create targeted financial services that are better tailored to the needs, strengths and weaknesses of marginalized categories of entrepreneurs.

The Philippines, for example, launched a special financing facility targeting women entrepreneurs during the pandemic. This facility was characterized by both a facilitated online application process and a collateral exemption. In Cambodia, the Khmer Enterprise, a joint initiative between the Ministry of Economy and Finance and UNDP, is supporting youth-led enterprises through enabling access to finance via a loan guarantee scheme, among other areas of support (ADB Institute, 2021).

Define and set specific inclusion targets and objectives in national strategies and programmes. Both policies and programmes developed by governments to protect and promote jobs in the framework of large-scale crises should integrate and pursue gender- and youth-specific targets as part of their implementation. Furthermore, policymakers should define tangible and quantifiable objectives as part of the strategic frameworks and commitments on inclusion assumed by their governments to avoid the far too common scenario in which such commitments become extremely challenging to operationalize due to an absence of concrete goals.

In 2020, the Government of Pakistan set clear gender targets to ensure that women could adequately benefit from the different emergency cash programmes it had set up to assist daily workers and entrepreneurs during the pandemic. The government pursued these nationally set goals by ensuring that the requirements for accessing its emergency funds not only took into consideration the specific constraints that affect women workers, but they also adapted the delivery modality of assistance to account for gender-specific limitations, such as time and mobility constraints faced by some women and socio-cultural taboos about interacting with male public agents. (ADB Institute, 2021).

It is important to remember that the argument for promoting inclusiveness in structural transformation processes does not only have social connotations, but also economic ones. For instance, as noted in a McKinsey (2021) report, promoting women's equality in APAC countries could contribute an additional \$4.5 trillion to the collective annual GDP of the region by 2025, a 12% increase compared to the current, business-as-usual growth trajectory.

4.4 EXPAND AND REFINE SOCIAL PROTECTION COVERAGE IN LABOUR MARKETS

As discussed in section 2, the extremely high levels of labour market informality in the APAC region – representing two-thirds of the 2.1 billion strong workforce – resulted in millions of workers and entrepreneurs being excluded during the pandemic from contributory social protection schemes and a range of emergency cash transfer initiatives intended to assist workers to weather and recover from the crisis. This was particularly evident in APAC countries characterized by weak growth and weak labour market outcomes (e.g., Nepal, the Philippines) due to resource constraints that limited the range of emergency assistance that these governments could provide to informal workers. Even in those APAC countries that did provide a modicum of social protection coverage to informal workers, the emergency measures they enacted did little to address the deeper structural imbalances that have characterized APAC labour markets for decades. Thus, the following are key recommendations to consider.

Adjust and expand social protection frameworks to account for the new nature of work. As highlighted by ESCAP (2022), the digital economy does not automatically create 'decent' jobs. In fact, the majority of jobs created by digital platforms straddle the line between wage and self-employment, with these platforms playing the role of enablers and intermediaries of a gig-economy based model, rather than acting as direct employers. It is evident, therefore, that revised social protection frameworks are needed that can guarantee that these new workers can receive adequate employment benefits regardless of their status. Here it is crucial to also take into consideration more comprehensive and "daring" reforms such as universal healthcare and guaranteed minimum income, which can ensure that these workers have access to a permanent, basic layer of social protection throughout different life phases. In addition, pay-as-you-go pensions could be a good option as they can be more portable, allowing workers to continue contributing to their pension regardless of where they work. Furthermore, given that pay-as-you-go pensions may spread the investment risk across a larger pool of contributors, it can potentially reduce the risk for individual gig workers.

A tangible risk exists that the already fragile labour scenario in the APAC region, characterized by high numbers of informal and non-standard jobs, will worsen as digitalization expands its role across various industries unless a strong policy hand mitigates these distortions. A few countries in the region are already working towards expanding their social protection frameworks to include gig workers. For example, in 2020, Indonesia launched a social protection programme called BP Jamsostek for gig workers. This programme provides health insurance, work accident insurance and pension benefits for those who sign up for the programme. The programme is open to all types of gig workers, including those who work for ride-hailing and food delivery platforms (ESCAP, 2022b).

Strengthen social protection systems to support informal workers and the care economy. Given the prevalence of informal employment in the region, governments should consider expanding social protection systems to include informal workers. This could be done in conjunction with efforts to address the root causes of informality in the region's labour markets through expanding workers' access to decent jobs and social security (both contributory and non-contributory). In Cambodia and Malaysia, for example, the governments have ruled that domestic workers, who are largely informal, should have mandatory social security coverage (National Social Security Fund, 2023; Perkeso, 2023).

In terms of support to the care economy, countries may consider extending social protection to households whose members have to discontinue or reduce waged work to take care of family members. This may entail offering paid family leave, childcare and elder care subsidies, paid sick leave and health insurance. Support can also involve providing financial and non-financial assistance to care centres to help them support the care needs of vulnerable populations (APEC, 2020). Japan, for example, has a comprehensive Long-Term Care Insurance (LTCI) system that provides financial assistance to citizens who need long-term care due to age, illness or disability (Yamada

and Arai, 2020). The LTCI system covers a range of care services, including home-based care, institutional care and community-based care. The system also provides support to family caregivers, including respite care and training programmes.

Implement active labour market policies. Efforts focused on reskilling the workforce and increasing access to decent jobs should be coordinated with renewed social protection programmes that can support workers' livelihoods as they upgrade their skillsets and transition into higher-value jobs. This will help by "ensuring a more stable consumption and avoiding negative coping strategies during spells of unemployment or other shocks, such as reducing food expenditures and selling productive asset" (Alisjahbana, 2022). This will prove critical in the context of the most disrupting trends that are set to influence APAC job markets in the upcoming years, namely the rising impact of climate change and the increasing ubiquity of automation and digitalization.

Adopt a lifecycle approach to workers' social protection. Government policy should seek to anticipate and cover different forms of welfare needs for workers based on changing life situations. Such policy interventions could be implemented through a combination of contributory and non-contributory schemes. These could be quite varied, for example: supporting women in the workforce who have to take up unpaid care work; incentivizing gender equality in terms of sharing unpaid care work; offering aging workers different options to retire or continue working; providing parental benefits and survivors' benefits; supporting youth in the school-to-work transition both financially and non-financially; among others.

According to a recent ESCAP projection, extending a comprehensive package of lifecycle-based social protection measures to all workers in the APAC region would require an investment on the part of governments equal to 2% to 6% of the total regional GDP. Despite the massive amounts of resources required, this is an investment that is very likely to provide far higher levels of returns, across a wide range of economic and social indicators, for the entire region (Alisjahbana, 2022).

In the dynamic and diverse landscape of the APAC region, embracing the policy options discussed above holds the potential to reinvigorate structural transformation, reignite productivity growth and build the resilience of the region's labour markets to future shocks.





ENDNOTES

1. Note that, in this paper, the term 'economic openness' refers to the degree to which non-domestic transactions (i.e., imports and exports) take place and influence the size and growth of a national economy (Keman, 2013).
2. Section 1.3 provides a more in-depth analysis of the evolution of structural transformation at the level of select APAC countries over the course of the last decades.
3. Refer to van der Hoeven (2018) for a more in-depth analysis of the various indicators and associated calculations used to classify the countries according to their labour-related outcomes. All data used for the exercise can be found in the World Bank DataBank and ILOSTAT.
4. The Labour Force Participation rate represents the proportion of the population aged 15 and older that is economically active, i.e., all people who supply labour to produce goods and services, be that in the formal or informal sector. It includes people who are currently employed, as well as people who are unemployed but seeking work.
5. It is important to underline that the often-used unemployment rate is not an appropriate measure to gauge how good the labour market functions in developing and emerging countries. In countries without any decent form of unemployment benefits, poor and middle-income workers cannot afford to be unemployed, whereas richer workers are often listed as unemployed waiting for more highly paid jobs (Ghose et al., 2008). China, for example, which is characterized by a rapidly expanding labour market and better labour market outcomes, has consistently registered higher unemployment figures than India, Nepal or the Philippines. On the other hand, Bangladesh (which shifted over the last two decades from being a slow-growth to a medium-growth country) registers low unemployment figures and weak labour market outcomes (van der Hoeven, 2018).
6. Poverty rate at \$2.15 per day (2017 PPP).
7. The working poverty rate conveys the percentage of employed persons living in poverty despite being employed. Poverty is defined using the international poverty line of US\$1.90 per day (PPP).
8. In Lao PDR the poverty rate declined from 23.7% in 1992 to 7.14% in 2018, while in Bangladesh the rate declined from 32.69% in 1985 to 13.47% in 2016 (World Bank, 2023a). The poverty rate is at \$2.15 per day (2017 PPP). The working poor in Lao PDR stood at 10.6% in 2019 while in Bangladesh it stood at 12.1% in 2016 (ILOSTAT, 2023).
11. Using as a reference the World Bank's poverty rate of \$2.15/day 2011 PPP.
12. Two milestones in Viet Nam's trade relations were the bilateral trade agreement with the U.S.A. in 2001 and Viet Nam's accession to the World Trade Organization, as its 150th member, in 2007. Viet Nam holds the top spot in Southeast Asia (together with Singapore) in terms of membership in bilateral and multilateral trade agreements (16 in total), including free trade agreements with both the European Union and United Kingdom, as well as the 2018 Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).
13. As illustrated by Ghose (2021), the growth of the services sector has been mainly driven by domestic demand, rather than being export oriented.
14. The industry sector consists of mining and quarrying, manufacturing, construction and public utilities (electricity, gas and water).
15. As pointed out by Mc. Millan et al. (2016): *"India's underlying growth trend is suppressed by the necessarily slow accumulation of fundamental capabilities—education, infrastructure, and governance—in the economy as a whole."*
16. The percentage of outstanding loans from development banks (as a share of GDP) dropped from 7.4% in 2000 to 0.8% in 2010 (Nayyar, 2018).
17. The term 'household income effect' refers to the impact that changes in a household's income have on its consumption and spending patterns.
18. It should be noted that the Malaysian government has strongly supported the national agricultural sector, especially large-scale tree-crop plantation (e.g., rubber, palm oil, coconut), with significant spending in R&D, land development and vertical integration with processing industries. Smallholder agriculture has also been strongly supported with input subsidies, price support schemes and concessional credit lines (Vos, 2019).
19. This loss of competitiveness can partially be attributed to China's rise in world trade following its entrance in the World Trade Organizations. While this trend affected other Asian countries as well (e.g., Republic of Korea), unlike Malaysia, these nations were successful in creating employment in other high value-added segments of manufacturing value chains, thereby preventing the process of premature de-industrialization.
20. The Gini coefficient is a statistical measure of economic inequality in a population, ranging from 0 (perfect equality) to 1 (perfect inequality). The coefficient measures the dispersion of income or distribution of wealth among the members of a population (CFI, 2022).
21. Which comprises the manufacturing sector, plus mining, utilities and construction.
22. Aside from the aforementioned growth in the Gini coefficient between 2000 and 2020, another measure of the rise in inequality in Indonesia is the ratio between the highest 10% and lowest 10% of the population in terms of held income. This ratio grew from 5.90 in 2000 to 10.67 in 2014. It should also be noted that the ratio between the highest and the lowest 10% of the population in terms of income share grew from 5.03 in 2000 to 10.67 in 2014 (Dartanto et al., 2017).
23. As stated by Warr and Suphannachart (2022): *"The available data show that the incomes of people living in or near the capital, Bangkok, and in the southern region [...] remained much higher than those of people in the heavily rural north and north-east regions, despite massive inflows of poorly educated, low-skilled people from other parts of the country. The differentials between these income levels have barely changed over recent decades."*
24. As of 2016, 10% of farming households in the country (750,000 households in absolute terms) were still landless. Between 11% and 30% of all agricultural land is under some sort of tenancy, a number made difficult to pinpoint with accuracy due to the imprecise data available (Land Portal, 2016).
25. As pointed out by Moazzem and Arno (2018): *"Foreign direct investment not only encourages increases in private investment required to increase productivity but also enables the 'spillover effect,' which happens through transfer of better technology and managerial skills from the economies that provide investment."*

26. As of 2020, the Philippines was ranked third on the list of most restrictive countries for foreign direct investment on the *Foreign Direct Investment Regulatory Restrictiveness Index* developed by the Organization for Economic Cooperation and Development (OECD) (Diola, 2020).
27. Specifically, nine countries from East Asia (Cambodia, China, Indonesia, Lao PDR, Malaysia, Mongolia, Philippines, Thailand and Viet Nam) and five from South Asia (Bangladesh, India, Nepal, Pakistan and Sri Lanka). These countries account for 97% of the population and 77% of the gross national income of the whole of Asia.
28. Employment elasticity indicates the ability of an economy to generate employment opportunities for its population in terms of a percentage of its growth process. It is expressed as a measure of the percentage change in country-level employment associated with a 1 percentage point change in economic growth. An elasticity of 0.4, for example, implies that every 1 percentage point increase of GDP translates into a 0.4 percentage point increase in employment (Kapsos, 2006).
29. Khan (2001) argues that the ideal value for employment elasticity in a developing economy is around 0.7. An employment elasticity of more than 1.0 is only possible as a consequence of a decline in employment productivity, which has an adverse effect on poor people's welfare. The authors are grateful to T. Palanival for this insight.
30. According to 2020 data from the ILOSTAT database, in APAC countries, such as Cambodia, Bangladesh, India, Indonesia, Lao PDR and Pakistan, the informality rates in non-agricultural sectors were higher than 80% (OECD, 2021b).
31. The Gini index or Gini coefficient measures the income distribution across a population within a country or territory. The value of the coefficient ranges from 0 (or 0%) to 1 (or 100%), with 0 representing perfect equality (all citizens have the same income) and 1 representing perfect inequality (one citizen having all the income).
32. According to a projection by the McKinsey Global Institute (2020), India stands to lose 3% of total outdoor working hours due to rising heat, humidity and precipitation by 2050 caused by climate change, under a 'business-as-usual' scenario. China could lose up to 9% of outdoor working hours in the same time span.
33. An interesting reflection on the parallels between the COVID-19 pandemic and the climate change threat, from a policy response viewpoint, comes from the McKinsey Global Institute (2020), which noted "Pandemics and climate risks require the same fundamental shifts, from optimizing the short-term performance of systems to ensuring longer-term resilience. Healthcare systems, physical assets, infrastructure services, supply chains and cities have all been designed to function largely within a very narrow band of conditions. However, physical assumptions may be obsolete as climate variables change, suggesting new thinking about the design of factories, infrastructure and urban areas is required."
34. China, for example, committed to reaching peak emissions by 2030 and achieve carbon neutrality by 2060. Both Japan and South Korea have pledged to reach carbon neutrality by 2050, Indonesia by 2060 and India by 2070. Australia aims to reduce GHG emissions by 26/28% before 2030 and achieve net-zero emissions by 2050/2070 (McKinsey Global Institute, 2021).
35. ESCAP (2022) defines several variables associated with higher-than-average vulnerability to energy price shocks at country level: net fuel imports accounting for more than 3% of total GDP; the share of the national population lacking access to electricity being over 10%; and over half of all electricity produced in the country coming from oil, gas and coal sources. It also defines countries as particularly vulnerable from food price shocks when more than half of the total national supply of cereals, meat/fish, fruits and vegetables is composed of net imports, while either the rate of food insecurity among the national population is higher than 30% or the undernourishment rate is higher than 10%.
36. Considering recent world events, it could be argued that the issue of a green transition in the APAC region is not only socio-economic, but also geopolitical. The Ukraine War highlighted the region's extreme vulnerability to oil and commodity price fluctuations, which could be partially mitigated by promoting far higher levels of investment – through policy incentives – in renewable energy and increased energy efficiency.
37. Barbier (2022) proposed four complementary criteria that APAC governments could take as a reference when deciding on which type of green policies to adopt in the framework of a recovery: The criteria are: 1) be inclusive and fiscally sustainable; 2) seek to achieve immediate progress across several dimensions (e.g., environment, poverty reduction, inclusive growth), rather than sacrificing some goals to achieve others; 3) seek to align economic incentives for longer-term sustainable development; and 4) raise or save revenue, generating the necessary funding for any additional investments, and have a proven track record.
38. 'Pollution-intensive' jobs are defined as occupations that are most common in the most polluting industries and include occupations such as machinery mechanics and textile and garment trades workers (Vona et al. 2018). Annex 3.1 of the World Bank South Asia Development Update (October 2023) defines pollution-intensive jobs in detail. Data are drawn from labour force surveys for Bangladesh (2015), India (2018), the Maldives (2019), Nepal (2017), Pakistan (2018) and Sri Lanka (2019).
39. According to the same projection, in the current business-as-usual trajectory the APAC region stands to lose 63 million jobs due to automation by 2040, with more than 247 million jobs being in jeopardy. Although 28.5 million green jobs (linked for example to renewable energy, smart cities and infrastructure retrofitting) are also projected to be created in the same timeframe, this rising trend will be unable to completely compensate for the loss of jobs caused by automation (Forrester, 2022).
40. Not surprisingly, according to a recent Deloitte (2021) analysis, APAC countries characterized by weak labour market outcomes are also those forecasted to be most vulnerable and least prepared to deal with the rising effects of automation: Bangladesh, India, Pakistan and Viet Nam.
41. Note: The value of basic skills is the average value of the following three computer-based activities, using the most recent data available for a country: using copy and paste tools within a document; sending e-mails with attached files and transferring files between a computer and other devices. The value of standard skills is the average value of the following four computer-based activities, using the most recent data available for a country: using basic arithmetic formula in a spreadsheet; finding, downloading, installing and configuring software; connecting and installing new devices and creating electronic presentations with presentation software.

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