

► Research Brief

July 2021

COVID-19 and employment protection policies: A quantitative analysis of the Asia-Pacific region*

Key points

- ▶ Containment measures during 2020 to slow the transmission of COVID-19 had a pronounced impact on the labour market. In Asia and the Pacific, the ILO estimates that 7.9 per cent of working hours were lost in 2020, relative to the baseline at the end of 2019.
- ▶ Based on available public information, 26 Asia-Pacific economies implemented a new (or adjusted an existing) employment protection policy in response to the crisis. The specific characteristics of these interventions, shaped in part by fiscal constraints, varied widely in regard to the scale of the policy budget allocation, duration of the policy intervention, number of target beneficiaries and timing of the initial policy decision.
- ▶ Overall, working-hour losses were lower among economies that implemented a scheme for four months or longer compared to cases where the policy duration lasted for 3 months or less.
- ▶ Agile policy action is important to provide immediate support to impacted workers during a crisis. To this end, having in place an existing job retention scheme that can be quickly scaled up provides an effective mechanism to help sustain incomes and consumption and protect the critical employment relationship.
- ▶ Although definitive conclusions on causality cannot be drawn, an in-depth examination of the Philippines Small Business Wage Subsidy scheme (which totalled 0.3 per cent of GDP) suggests that there is a positive association between a greater amount of policy expenditure and a decrease in employment losses, particularly among women workers. The results of an econometric procedure indicate that in the supposed absence of the employment retention policy, the percentage decline in employment nationwide might have been 0.6 percentage points higher.

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► 1. Introduction

Since the first reported case of the coronavirus disease (COVID-19) in Wuhan, China in December 2019 and the emergence of cases outside of China in January 2020, authorities worldwide have had to face difficult policy choices to contain the spread of the virus while also trying to minimize the detrimental impact on economic activity and jobs. A range of control measures was implemented in the Asia-Pacific region and around the world as early as the first quarter 2020. These interventions included workplace and school closures, bans of mass gatherings, restrictions on mobility, and international border closures, among other measures.

These COVID-19 containment policies had devastating economic outcomes. With weakened global consumption and economic activity, GDP in 2020 is estimated to have contracted by 3.3 per cent worldwide.¹ Consequently, the detrimental impacts on the labour market included permanent job losses, increased inactivity and unemployment and a decrease in labour-related income and working hours.² The ILO estimates that in 2020 the Asia-Pacific region endured a loss in aggregate working hours of 7.9 per cent relative to the pre-crisis baseline at the end of 2019.³

Governments have strived to navigate the economic crisis and sustain economic activity through different fiscal policy measures. In Asia and the Pacific, the median fiscal policy response to the COVID-19 pandemic amounted to 12.4 per cent of GDP.⁴ The economic stimulus included interventions such as financial lending support to businesses and households, employment and income protection schemes, and cash transfers to sustain household consumption.

The prolonged and uncertain nature of the pandemic and economic crisis has only complicated the policy decision-

making process. Authorities have had to constantly re-assess policy positions, extending or reinstating containment measures with new waves of COVID-19 cases. As the economic fallout continued to intensify in 2020 and into 2021, additional rounds of fiscal stimulus were announced in many countries with adequate public expenditure capacity.

While the speed and scale of the policy response in many economies were exemplary, less is known about the effectiveness of the policy instruments employed, particularly those aimed specifically at protecting jobs. To that end, this research brief provides an overview of employment retention policies in response to the COVID-19 crisis in the Asia-Pacific region and highlights the relationship with labour market outcomes. Through both descriptive and econometric analysis, it examines policy dynamics in 37 economies in the region. A better understanding of the employment protection schemes is key to help inform policymakers during not only the uncertain recovery phase of the ongoing COVID-19 pandemic but also future crises.

Following the introduction, section 2 describes the data used and results of the multi-economy analysis. Section 3 is a case study which examines more closely the within-country dynamics of the Philippines. Specifically, it analyzes the Philippines Small Business Wage Subsidy (SBWS) scheme and labour market impacts across the country's 17 regions. The Philippines is highlighted due to the availability of robust policy and labour market data at the subnational level. Section 4 concludes with a discussion of policy implications for the crisis recovery.

¹ IMF, *World Economic Outlook, April 2021: Managing divergent recoveries*, 2021.

² For further discussion, see ILO, *Asia-Pacific Employment and Social Outlook 2020: Navigating the crisis towards a human-centred future of work*, 2020.

³ ILO, ILOSTAT Database.

⁴ ILO, 2020, op. cit. The estimated fiscal policy response includes expenditure announcements as of 16 Sep. 2020 for (i) liquidity support, (ii) credit creation, (iii) direct long-term lending, (iv) equity support, (v) government support to income and revenue and (vi) other expenditures without breakdowns but excludes announcements of international assistance provided to other economies.

► 2. Employment protection policies in Asia-Pacific

Policy database and sources

The analysis of employment protection policies across the Asia-Pacific region covers 37 economies and is based on a compilation of policy information publically available through official government websites, online policy databases and reports of multilateral organizations (including the Asian Development Bank, the International Labour Organization, the International Monetary Fund and the World Bank), and national online media reports (see Annex 1, Table A1.1). In 2020, economies in Asia and the Pacific implemented different approaches to stabilize employment and employment-related income during the COVID-19 crisis. These interventions include, for example, official notices encouraging employers to retain their workforce, public works schemes, reductions in unemployment and social security tax requirements, and investments in public job search assistance, among other measures.

However, in order to better draw distinct policy conclusions, the interventions included in this analysis are limited to publically financed employment protection policies implemented in 2020 to retain existing jobs and counter the negative impacts of the COVID-19 crisis. They include both pre-existing schemes with adjustments in the benefit amount or coverage as well as measures that were newly designed and introduced in response to the crisis. The policy benefits were disbursed as direct wage subsidies, cash allowances or business loans specifically to offset wage and labour costs. Moreover, given the lack of publically accessible, ex-post policy statistics, the analysis relies primarily on information related to policy announcements at the outset of implementation and may not reflect the full extent that a policy reached its target beneficiaries or expenditures were completely disbursed as designed.⁵

Policy features and descriptive statistics

An examination of the COVID-19 employment retention schemes across the region in 2020 reveals

some common characteristics. First, many economies made job protection the explicit policy goal by providing benefits contingent upon the employer maintaining the employment relationship even in cases of reduced hours of work or extended leave. Second, aside from a few exceptions where policy support included the self-employed, the vast majority of the schemes provided coverage to only paid wage employees.⁶ Third, a common criteria for eligibility was evidence of the COVID-19 crisis impact resulting in mandated temporary business closure or a decrease in enterprise revenues of a minimum threshold. Finally, proof of enterprise registration and employee enrollment in the national social security or employment insurance scheme was a prerequisite for receiving wage subsidies in many cases, obviously limiting beneficiaries to those in formal work arrangements.

Aside from these common features, policies varied from country to country in terms of design, target beneficiaries and the level of benefits. Some countries targeted assistance to vulnerable enterprises or industries. For instance, countries such as Bangladesh, Cambodia and Samoa limited their policy support to specific sectors, including export-oriented garment manufacturing and tourism which employ significant numbers of women workers and were particularly hard hit by the slowdown in global consumer demand and international border closures. In numerous countries – including Australia, Brunei Darussalam, Japan, Maldives, Republic of Korea, Philippines and Thailand – an emphasis on supporting micro, small and medium enterprises (MSMEs) was an explicit component of their respective schemes in terms of programme eligibility or in differentiating the level of subsidy benefits provided.

Moreover, at-risk workers were the primary beneficiaries in some cases. For example, in Brunei Darussalam, India, Indonesia, Malaysia and Thailand, policy rules set a maximum threshold of beneficiary wage levels in order to support wage earners at the lower end of the pay scale. Countries such as Australia and Brunei Darussalam

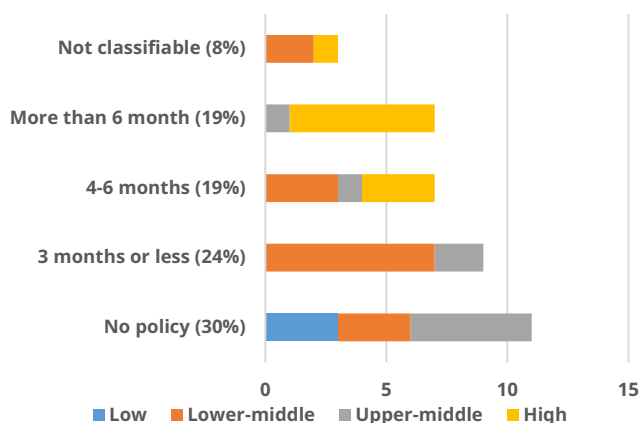
⁵ Economies with ex-post policy information include Cambodia, Malaysia, Republic of Korea, Philippines and Taiwan (China).

⁶ Some self-employed workers were eligible under measures implemented in such economies as Hong Kong (China), Republic of Korea, Macau (China), New Zealand, and Thailand.

implemented also a new or revised an existing employment programme to subsidize wages of young graduates and apprentices. In addition, policies provided income support to protect the self-employed and other vulnerable workers in such economies as Hong Kong (China), Macau (China), Republic of Korea and Thailand.

The duration of COVID-19 employment retention policies varied across the Asia-Pacific region, apparently due in part to fiscal expenditure constraints. Overall, around 70 per cent (or 26) of the 37 economies implemented in 2020 at least one temporary employment protection policy matching the aforementioned criteria in response to the COVID-19 crisis (see Figure 1). Implementation lasted for a maximum of three months in nine economies, including seven lower-middle income countries: Bangladesh, India, Myanmar, Philippines, Pakistan, Timor-Leste and Viet Nam. By contrast, of the seven economies that adopted an employment protection programme that was carried out for a period of more than six months, all were high-income with the exception of upper-middle income Malaysia.

► **Figure 1. Number of economies in Asia and the Pacific by income group and duration of employment protection policy implementation in 2020 in response to the COVID-19 crisis (per cent)**

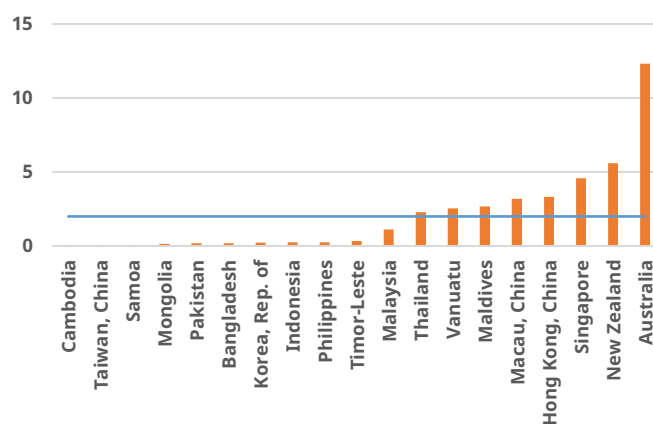


Note: N=37. Figures in parentheses represent the distribution as a share of the total. For economies with more than one relevant policy, the policy with the longest duration is reflected.

Source: Same as Annex 1, Table A1.1.

Variations in the choice and design of the temporary COVID-19 employment protection policies are also reflected in budgetary commitments. Of the 19 economies where budgetary information is available, eight announced an expenditure allocation equivalent to 2 per cent or more of GDP (see Figure 2). Two countries, namely New Zealand and Australia, earmarked more than 5 per cent of GDP towards their employment retention schemes. Collectively, these eight economies on the upper tier of the policy expenditure scale include five high-income economies, as well as two upper-middle income countries (Maldives and Thailand) and one lower-middle income country (Vanuatu). Conversely, seven of the eleven economies that allocated budgetary commitments of less than 2 per cent of GDP were lower-middle income. Notably, in the Republic of Korea, the relatively small allocation for the employment protection measures reflects in part the country's wider fiscal policy response strategy geared towards robust support for boosting household consumption through cash allowances, expanding unemployment benefits and direct long-term lending assistance to businesses and households.⁷

► **Figure 2. Announced employment protection policy budget in response to the COVID-19 crisis (per cent of GDP)**



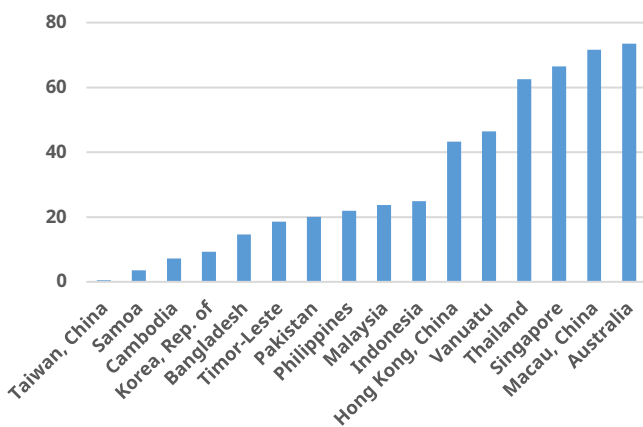
Note: The blue line represents 2 per cent of 2020 GDP. Estimates for Cambodia, Malaysia, Republic of Korea, Philippines and Taiwan (China) indicate actual policy expenditures. For economies with multiple relevant policies, estimates reflect the aggregate policy budget.

Source: Same as Annex 1, Table A1.1.

⁷ The total fiscal policy response in the Republic of Korea had amounted to 16.4 per cent of 2019 GDP, as of 28 June 2021. Source: Asian Development Bank: [ADB COVID-19 Policy Database](#). For further discussion of the COVID-19 crisis response in the Republic of Korea, see also: ILO, *Republic of Korea: A rapid assessment of the employment impacts of COVID-19, 2020a*.

The scale of coverage in each economy, however, varied widely (see Figure 3). Of these 16 economies with comparable information, the employment retention schemes on average supported less than one-third of wage employees overall. In four economies, namely Australia, Macau (China), Singapore and Thailand, the temporary job support measures were designed to reach a considerable majority of workers. Conversely, the lower share of coverage of no more than 15 per cent in such countries as Bangladesh, Cambodia and Samoa is a reflection of policy design that targeted very limited economic sectors (for example, garment manufacturing and tourism) that were particularly hard hit by the COVID-19 crisis.

► **Figure 3. Estimated target beneficiaries of employment protection policies in response to the COVID-19 crisis (per cent of wage employment)**



Note: Reflects the target number of beneficiaries at the time of the policy announcement, except for Cambodia, Malaysia, Philippines and Taiwan (China) which indicates the actual number of reported beneficiaries. For comparability, figures are presented as a share of the ILO modelled estimates of wage employment in 2019, except for the Republic of Korea and Thailand which are based on ILO modelled estimate of total employment.

Source: Author's estimates based on Annex 1, Table A1.1; ILO, ILOSTAT Database.

Policy and employment dynamics

Measures to contain the spread of COVID-19 paralyzed economic activity throughout the Asia-Pacific region, with contractions in employment and working hours.⁸

For the region as a whole, working-hour losses in 2020 amounted to 7.9 per cent compared to levels at the end of 2019, or the equivalence of 138 million full-time jobs (see Figure 4, Panel A).⁹ By subregion, the largest estimated contraction was recorded in South Asia (12.7 per cent), followed by Southeast Asia (8.4 per cent).¹⁰ By income level, lower-middle income economies fared the worse by far across the region, as the share of working hours lost amounted to 12.8 per cent. This contraction was around 2.5 times the scale of working hours lost in the low income, upper-middle income, and high income economies of Asia and the Pacific. Moreover, these deteriorated labour market conditions disproportionately impacted women and young workers.¹¹

Figure 4, Panel B presents the same data on estimated working-hour losses in 2020 grouped by Asia-Pacific economies based on the duration of their temporary employment protection policies in response to the COVID-19 crisis. The nine economies with a temporary job retention scheme of a maximum of three months had the highest median working hours lost (11.4 per cent). As policy implementation lengthened to four to six months and more than six months, median losses in working hours decreased overall to 4.8 per cent and 4.7 per cent, respectively. One factor shaping this apparent relationship between policy duration and working hours lost could be fiscal capacity. As discussed above, wealthier economies in the region were more likely to invest in employment protection schemes of a longer duration and also endured relatively lower contractions in working hours.

⁸ Instead of direct employment losses, working-hour losses are examined in the regional, cross-country analysis due to greater data availability and wider range of country coverage.

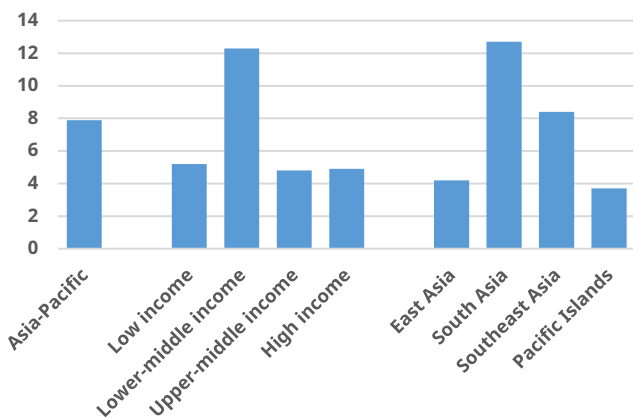
⁹ Estimate of full-time equivalent jobs is based on 48 working hours per week. Working hours lost due to the COVID-19 crisis are ILO modelled estimates representing the percentage of hours lost compared to the baseline (the latest pre-crisis quarter, i.e., the 4th quarter of 2019, seasonally adjusted). The figures reported should not be interpreted as a quarterly or an inter-annual growth rate. Given the exceptional situation, including the scarcity of relevant data, the estimates are subject to a substantial amount of uncertainty. For more information, refer to [ILO modelled estimates and projections](#).

¹⁰ For an examination of country-level estimates of losses in working hours, see: ILO, [How did COVID -19 impact working hours in Asia-Pacific economies in 2020?](#), 2021.

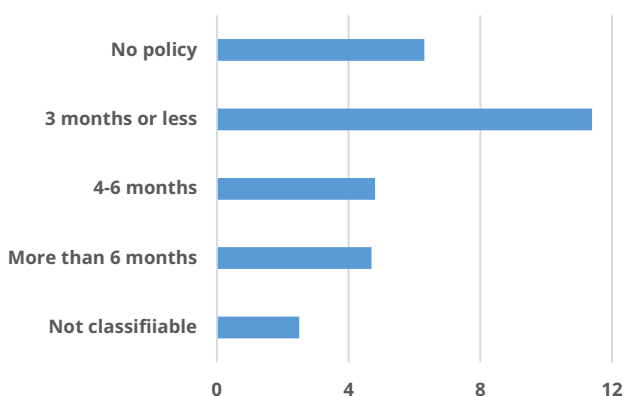
¹¹ For further discussion on the COVID-19 impacts in Asia and the Pacific on women, youth and other vulnerable groups, see: ILO, 2020, op. cit.

► **Figure 4. Estimated working hours lost due to the COVID-19 crisis in Asia and the Pacific (per cent)**

A. By income group and subregion



B. By duration of temporary employment protection policy implementation in 2020



Note: Represents the percentage of hours lost compared to the pre-crisis baseline (quarter 4 of 2019, seasonally adjusted).

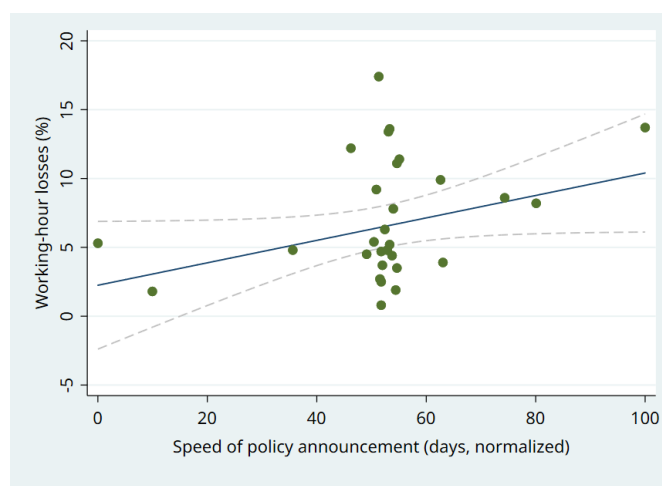
Source: Author's estimates based on Annex 1, Table A1.1; ILO, ILOSTAT Database.

Economies with fiscal constraints may face limits in leveraging temporary employment protection policies to influence employment outcomes. Nevertheless, decisive policymaking is critical to provide immediate support to impacted workers, sustain consumption and incomes and uphold the employment relationship. Swift policy action could also help offset the negative impacts on employment and working time by providing policy certainty, helping to spur a greater level of

economic confidence for both employers and workers and facilitating better business planning in regard to human resource requirements and working time arrangements.

Among the Asia-Pacific economies with relevant data, a statistical correlation is evident between the speed of the policy announcement and estimated working-hour losses (see Figure 5). Specifically, economies that were quicker in officially announcing their employment protection policy, relative to the date of reaching a threshold of reported COVID-19 cases per capita, tended to have lower working-hour losses.¹²

► **Figure 5. Relationship between speed of employment protection policy announcement (days) and working-hour losses (per cent) in 2020**



Note: The figure shows the relationship between ILO modelled estimates of working-hour losses (per cent) and the speed of the employment protection policy announcement in 26 Asia-Pacific economies. The latter variable is measured as the number of days between the date of the policy announcement and the date that the economy initially reached the threshold of one reported case of COVID-19 per one million persons, normalized to a scale of 0 to 100. The blue line represents the linear fit, and the area between the dotted lines indicates the 95 per cent confidence interval of that linear fit.

Source: Author's estimates based on Annex 1, Table A1.1; ILO, ILOSTAT Database.

A simple econometric regression was conducted to test the strength of this correlation, while controlling for national income level, as measured by GDP per capita. The estimation results show that after controlling for income, the relationship between the speed of the job protection policy announcement and working-hour

¹² The speed of the policy announcement is measured as the number of days between the date of the policy announcement and the date that the economy initially reached the threshold of one reported case of COVID-19 per one million persons, normalized to a scale of 0 to 100.

losses remained positive and was statistically significant.¹³ Although categorical conclusions cannot be drawn from this analysis, the results suggest that the speed of policy decisions can have an impact.¹⁴

One approach to accelerate policy action is to have an existing job support programme already in place. Brunei Darussalam, Japan and Republic of Korea had established before the crisis a limited national employment support scheme. In response to the unfolding COVID-19 crisis, Japan and the Republic of Korea in particular were relatively agile in making public

announcements of increased budgetary commitments to scale up their existing job protection programmes, relax eligibility requirements and expand benefits.

► 3. Philippines Small Business Wage Subsidy (SBWS)

Background

The Philippines reported its first COVID-19 case on 30 January 2020, and first related death on 7 March.¹⁵ Despite continuous efforts by authorities to contain local transmission, almost 1.3 million confirmed cases had been reported as of 11 June 2021, ranking the Philippines fourth highest in the Asia-Pacific region in terms of cumulative cases.¹⁶ Starting in March 2020, containment measures were implemented and the economy and labour market were consequently devastated. GDP contracted on a year-on-year basis for three consecutive quarters in 2020: 16.9 per cent in the second quarter, 11.4 per cent in the third quarter and 8.3 in the fourth quarter.¹⁷ Likewise, employment levels decreased by 19.9 per cent (8.4 million) in the second quarter and 3.8 per cent (1.7 million) in the third quarter, with sizeable increases in underemployment, inactivity and unemployment.

The pandemic control measures and fiscal policy response in the Philippines have varied across localities and regions, reflecting the heterogeneous impact of the pandemic across the country. In order to contain the spread of COVID-19, lockdowns of varying degrees of strictness were imposed in numerous parts of the country and officially characterized as community quarantines by the Government. The Enhanced Community Quarantine (ECQ) was the strictest of these lockdown measures. Residents in localities under the ECQ were ordered to stay at home and restricted from travelling to other cities or barangays. The largest implementation of the ECQ commenced in mid-March 2020 in Luzon, which includes the dense capital region of Metro Manila.¹⁸ In conjunction with the ECQ, the Bayanihan to Heal as One Act also called for limitations on all forms of transportation, work suspensions and the setting up of alternative working arrangements such as teleworking, cancellation of mass gatherings

¹³ Results are statistically significant at the 95 per cent confidence interval. The coefficient of the policy speed variable is 0.114, with a t-stat of 2.75 and an r-squared value of 0.28.

¹⁴ The statistical relationship could also be influenced by additional factors such as the implementation of related measures aimed at supporting self-employed workers and policies to sustain household consumption, for example, which also would have impacted aggregate working hours.

¹⁵ ILO, *COVID-19 labour market impact in the Philippines: Assessment and national policy responses*, 2020b.

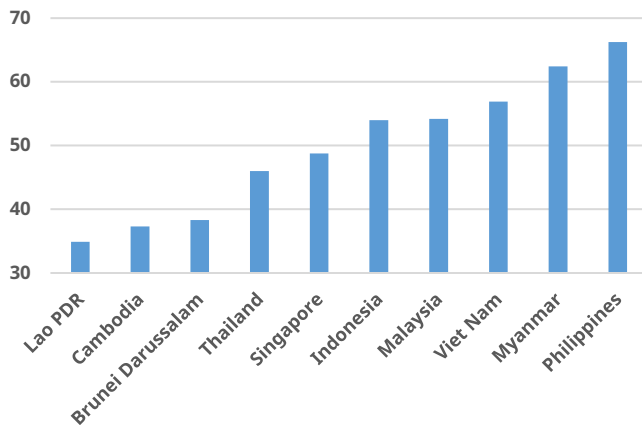
¹⁶ In the Asia-Pacific region, the Philippines ranked behind only India (approximately 29.1 million cases), Islamic Republic of Iran (nearly 3 million cases) and Indonesia (almost 1.9 million cases) as of 11 June 2021. See: WHO [Coronavirus Disease \(COVID-19\) Dashboard](#).

¹⁷ Quarterly economic and labour market data are based on Philippines Statistics Authority.

¹⁸ The Luzon island group is composed of eight administrative regions: Ilocos (Region I), Cagayan Valley (Region II), Central Luzon (Region III), Calabarzon (Region IV-A), Mimaropa (Region IV-B), Bicol Region (Region V), National Capital Region and Cordillera Administrative Region.

and closure of non-essential businesses.¹⁹ The lockdown measures in the Philippines were comparatively the most stringent across the Association of Southeast Asian Nations (ASEAN) region (see Figure 6).

► **Figure 6. Stringency index in ASEAN, average of 2020**

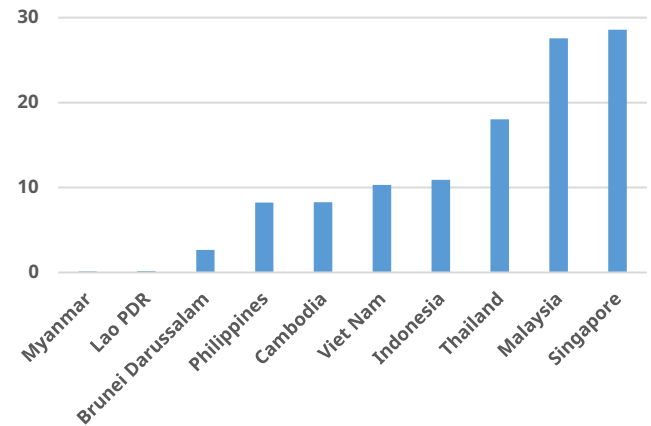


Note: Stringency index records the strictness of lockdown (containment) policies that primarily restrict people's behaviour, such as workplace and public transportation closings, restrictions on gathering and mobility, and stay at home requirements.
Source: Oxford COVID-19 Government Response Tracker.

To address the consequent economic and jobs crisis, a number of fiscal policy interventions were implemented to sustain the economy and support the most vulnerable segments of the population.²⁰ As of 26 April 2021, total fiscal stimulus amounted to 8.2 per cent of GDP, or nearly US\$30.3 billion.²¹ Around 60 per cent of the total policy expenditure was allocated towards income support such as tax deferrals and subsidies to households and workers, among other measures. Relative to other countries in ASEAN, the scale of the fiscal policies in the Philippines ranked among the

middle tier, alongside Cambodia, Indonesia and Viet Nam (see Figure 7).

► **Figure 7. Fiscal policy expenditure as a share of GDP in ASEAN (per cent)**



Note: As of 26 April 2021. GDP in 2019.
Source: Asian Development Bank, ADB COVID-19 Policy Database.

Small Business Wage Subsidy Programme

One component of the fiscal policy response was the Small Business Wage Subsidy (SBWS) programme, administered by the Department of Finance. This national scheme provided a wage subsidy for affected employees of small businesses to help protect jobs and mitigate the impact of the ECQ in Luzon and in various local government units throughout the country.²²

In order to benefit from the scheme, businesses had to meet two eligibility criteria based on the size of the business and the extent of the impact of the ECQ on operations. In order to meet the first condition, the small business could not be a part of the Large Taxpayer Services List of the Bureau of Internal Revenue.²³ The second criteria related to the impact of

¹⁹ From 16-31 May, Metro Manila and the Province of Laguna and Cebu City were placed under "Modified Enhanced Community Quarantine" (MECQ), allowing for limited movement of people to access essential services and to go to their workplaces, limited transportation for work and for movement of essential goods and services, and a gradual reopening of the economy. By comparison, the general community quarantine (GCQ), which was introduced on May 1, was generally less stringent than ECQ and MECQ. Public transportation was allowed at a reduced capacity and certain businesses were allowed to operate at half to full capacity depending on the industry. In addition, the modified general community quarantine (MGCQ) was yet another type of lockdown, considered a level less strict than the GCQ.

²⁰ For a full discussion of national policy responses to the COVID-19 crisis, see ILO, 2020b, op. cit.

²¹ Asian Development Bank: [ADB COVID-19 Policy Database](#).

²² For further details, see the Philippines [Department of Finance](#).

²³ The Philippines employs two criteria in operationally defining micro, small and medium enterprises (MSMEs), namely employment and asset size. The Philippines Statistics Authority classifies an enterprise as a micro enterprise if it has less than 10 employees, small if it has 10-99 employees, medium with 100-199 employees, and large if it has 200 or more employees. On the other hand, the Small and Medium Enterprise Development Council (SMEDC) uses asset size as its basis for classification. Accordingly, an enterprise is classified as a micro enterprise if it has an asset size of up to

the ECQ and industrial classification of the business. Non-essential businesses (Category A) that were forced to temporarily close or suspend operations and quasi-essential businesses (Category B) that were permitted to operate with only minimal staff were eligible under the programme.²⁴ In addition, employers in areas where other forms of quarantine were put in place by the local government unit could also qualify.

The wage subsidy was paid for up to two months during the period of 1 May to 28 June 2020 so that affected small businesses could retain their employees during the quarantine period. Through the Social Security System (SSS), applications were submitted by employers, and payments were made directly to employees. The wage subsidy amounted to between 5,000 to 8,000 pesos (US\$99 to 159) per month per eligible employee, based on the regional minimum wage level.²⁵

Prominent policy features

The SBWS was successful in reaching approximately 3.1 million beneficiary wage earners, or around 91 per cent of the initial programme target of 3.4 million employees of small businesses.²⁶ While the beneficiaries were spread across all 17 regions, more than half (54 per cent) were concentrated in the National Capital Region. As a share of total wage employment, the number of subsidy recipients nationwide averaged 12.4 per cent. The cross-region differences were sizeable, ranging from less than 1 per cent in the Bangsamoro Autonomous Region in Muslim Mindanao to nearly 43 per cent in the National Capital Region (see Figure 8, Panel A). This dynamic heavily reflected variances in the concentration of micro, small

and medium enterprises (MSMEs) between localities, in addition to potential policy implementation challenges.²⁷

The scheme, through two separate tranches, paid out in total around 45.6 billion pesos (US\$939.2 million) in wage subsidies, or approximately 0.3 per cent of GDP.²⁸ Total subsidy disbursements, however, varied widely from region to region (see Figure 8, Panel B). Reflecting the higher number of MSMEs, the three leading regions in terms of aggregate subsidy payments – namely the National Capital Region, Region IV-A (CALABARZON) and Region III (Central Luzon) – collectively accounted for 84.5 per cent of the total allocations. Conversely, the bottom three regions (Bangsamoro Autonomous Region in Muslim Mindanao, Region XIII (Caraga) and Cordillera Administrative Region) accounted for around only 0.7 per cent of total programme expenditure.

The community lockdown measures aimed at containing the spread of COVID-19 and the consequent policy response to protect jobs in small businesses disproportionately affected higher income regions. The implementation of the ECQ that was initiated in mid-March 2020 to control the transmission of COVID-19 was most stringent in the higher-income regions. During the first and second quarters, the three wealthiest regions – specifically the National Capital Region, Region III (Central Luzon) and Region IV-A (CALABARZON) – were each placed under the ECQ for a total of 61 days, the highest across the country.²⁹

PhP3,000,000, small if its asset size is between P3,000,001 and P15,000,000, medium if between P15,000,001 and P100,000,000, and large if its asset size is P100,000,001 or more. See: Department of Trade and Industry, *2019 Philippine MSME Statistics in Brief*, 2019.

²⁴ Category A (non-essentials) sectors included non-food raw materials/non-essential manufacturing, tobacco, construction, airlines, non-essential services, hotels and restaurants, rental and leasing of personal goods and entertainment. Category B (quasi-essentials) sectors consisted of manufacturing of textiles, garments, and leather for export, electronics manufacturing, retail trade, public transportation and trucking and cargo handling of food and non-food products, business process outsourcing, banks and personal service and domestic activities (for example, salons, laundry, funeral services, domestic workers, others).

²⁵ Official exchange rate based on the [Central Bank of the Philippines](#).

²⁶ SBWS programme target based on J. Villanueva, “SSS returns P5-B unused wage subsidy allocation to BTR”, *Philippines News Agency*, 2 July 2020.

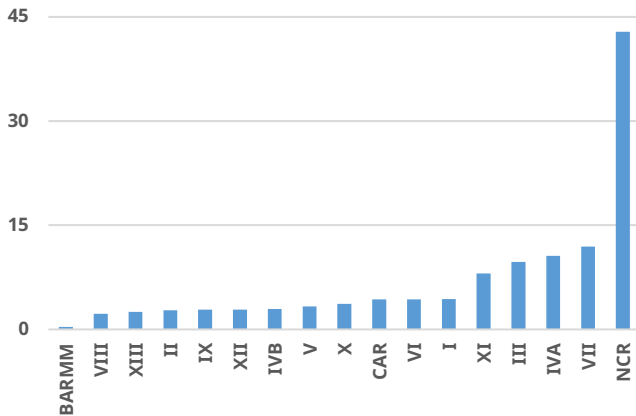
²⁷ Other factors that may have shaped the cross-region differences include implementation challenges related to awareness, communication and coordination support for MSMEs to access the scheme. For further discussion, see: World Bank, *East Asia and the Pacific Economic Update, October 2020: From containment to recovery*, 2020, pp. 13-14.

²⁸ Author's estimates based on SBWS programme data (as of 13 August 2020) provided by the Philippines Department of Finance, and IMF, *World Economic Outlook Database*, April 2021.

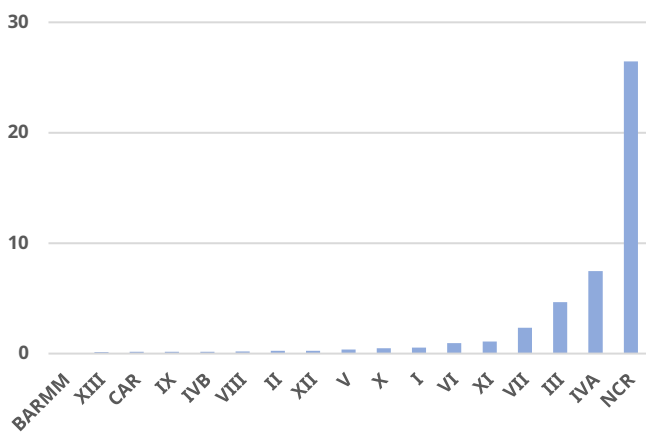
²⁹ Author's compilation of quarantine data based on official Government announcements and media reports.

► **Figure 8. Total SBWS beneficiaries and disbursements by region**

Panel A. Beneficiaries as a share of wage employment (per cent)



Panel B. Total SBWS disbursements (billion PHP)



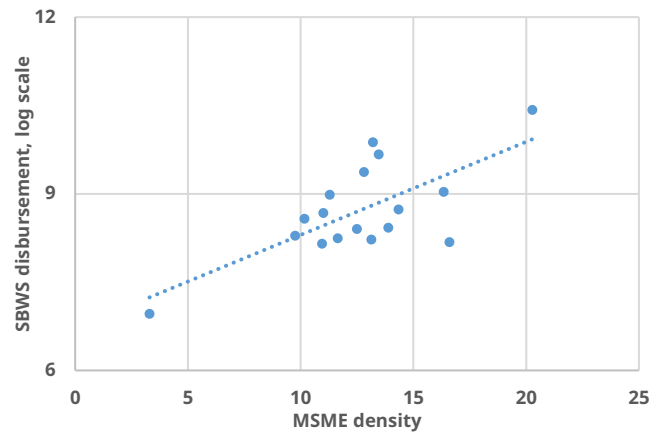
Note: Data as of 13 August 2020. BARMM=Bangsamoro Autonomous Region in Muslim Mindanao, CAR=Cordillera Administrative Region, and NCR=National Capital Region.
Source: Author's estimates based on SBWS data from Philippines Department of Finance; Philippines Statistics Authority, Labour Force Survey.

Subsequently, the policy response to protect jobs in small businesses was concentrated in wealthier regions. A positive correlation is evident between SBWS disbursements, the density of MSMEs and regional income per capita (see Figure 9). Higher-income regional economies, where MSMEs tend to be concentrated, were larger recipients of the employment protection support. While the policy design

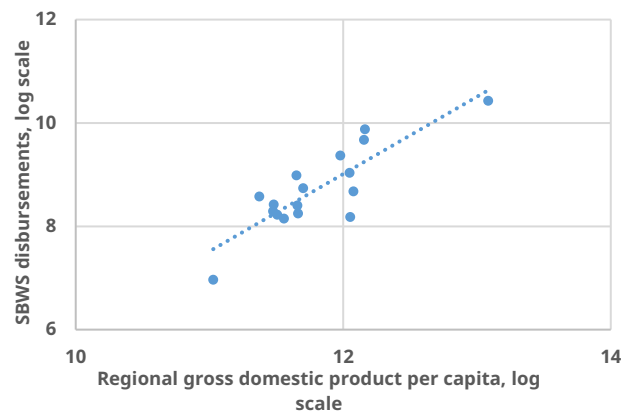
appropriately targeted employees of small businesses which were more at-risk, the subsidies also provided progressively greater assistance to the higher-income regions that were more impacted initially by the pandemic and related containment measures.³⁰

► **Figure 9. Relationship with SBWS total disbursements (PHP)**

Panel A. MSME density, 2019



Panel B. Regional gross domestic product per capita (PHP), 2019



Note: Panel A plots the relationship between the number of MSMEs per 1,000 working-age persons and total disbursements of the SBWS programme for all 17 administrative regions, with each dot representing an individual region. The dotted line represents the linear fit. T-stat is equal to 3.82 and r-squared is equal to 0.49. Likewise, panel B plots the association between regional gross domestic product per capita and total disbursements of the SBWS programme, with the dotted line representing the linear fit. T-stat is equal to 6.28 and r-squared is equal to 0.72.
Source: Author's estimates based on Philippines Department of Finance and Philippines Statistics Authority.

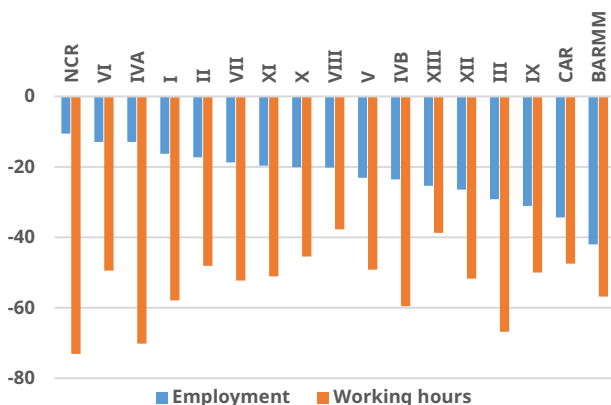
³⁰ A simple linear regression between the log of regional gross domestic product in 2019 and the log of cumulative COVID-19 cases during the first and second quarters 2020 reveals a robust, positive statistical relationship (t-stat of 4.46 and r-squared of 0.57). Source: author's estimates based on official data from the Philippines Department of Health and Philippines Statistics Authority.

Policy and employment dynamics

The timing of the SBWS policy implementation, commencing at the beginning of May 2020, was relatively swift. Soon after the first reported COVID-19 case on 30 January 2020, cumulative cases nationwide had passed 11,000 by 15 April, reflecting a deteriorating public health situation. Labour force survey estimates for the April round, with data collection starting from 18 April, revealed that the related containment policies and economic slowdown were already having a profound impact on the labour market. Overall, employment and aggregate working hours nationwide had contracted year-on-year by 19.9 per cent and 58.2 per cent, respectively.

In a number of regions, moreover, the impact was even more severe (see Figure 10). The decline in employment exceeded 30 per cent in Region IX (Zamboanga Peninsula), Cordillera Administrative Region and Bangsamoro Autonomous Region in Muslim Mindanao. By comparison, the greatest declines in aggregate working hours were recorded in the National Capital Region, Region IVA (CALABARZON) and Region III (Central Luzon).

► **Figure 10. Decline in total employment and aggregate working hours by region, April 2020 (per cent, year-on-year)**



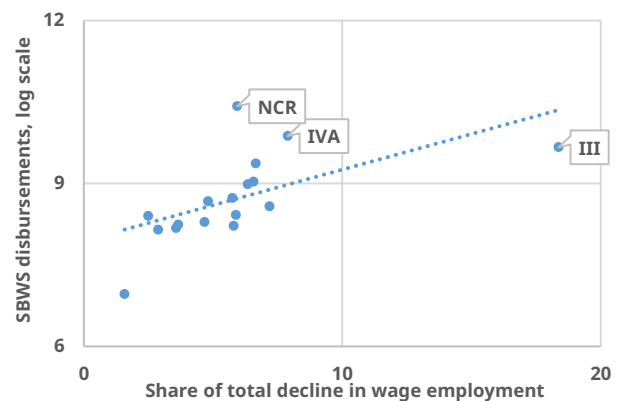
Note: BARMM=Bangsamoro Autonomous Region in Muslim Mindanao, CAR=Cordillera Administrative Region, and NCR=National Capital Region.

Source: Author’s estimates based on Philippines Statistics Authority, Labour Force Survey.

In terms of supporting local regional economies to stem job losses, the SBWS subsidies appear to follow a general trend. Overall, regions which accounted for larger contractions in wage employment (measured as the share of the national aggregate) in April 2020 subsequently received a comparatively larger disbursement of job protection subsidies (see Figure 11). For example, Region III (Central Luzon) accounted for both the highest share of wage employment losses (18.4 per cent) and the third highest disbursement from the SBWS.

Conversely, a few regions stand out as outliers to this trend, including the National Capital Region and Region IVA (CALABARZON) which received substantially greater disbursement amounts relative to wage employment losses. Given the size and importance of both regions to the national economy and MSME development, however, the disproportionate level of employment protection support seems strategic. The National Capital Region and Region IVA were the localities for the largest concentration of MSMEs and also the two largest regional economies in 2019, accounting for respectively 32.2 per cent and 14.6 per cent of GDP.³¹

► **Figure 11. Share of total year-on-year decline in wage employment, April 2020 (per cent) and SBWS total disbursements (PHP) by region**



Note: NCR=National Capital Region. The figure plots the relationship between the regional share of total wage employment losses during April 2020 and subsequent total disbursements of the SBWS programme for all 17 administrative regions, with each dot representing an individual region. The dotted line represents the linear fit. T-stat is equal to 25.51 and r-squared is equal to 0.36.

Source: Author’s estimates based on Philippines Department of Finance and Philippines Statistics Authority.

³¹ Author’s estimates based on Philippines Statistics Authority.

In July 2020, employment losses continued but at a slower pace than in April. Overall, the year-on-year decline in employment amounted to 3.8 per cent, but as high as 10.5 per cent in Region V (Bicol Region). An econometric analysis of the SBWS policy implementation during May-June 2020 and employment trends in July provides some evidence of the positive effect of the wage subsidies to stem job losses (see Annex 2 for technical details). The econometric procedure measures the relationship between the SBWS disbursement (as a share of the regional gross domestic product) and the percentage decline in total employment for all 17 regions. In addition, it controls for the disruption in consumption and production as a result of mobility restrictions and other containment measures, the region-specific, pre-crisis risk exposure to the COVID-19 pandemic and concentration of MSMEs.

Although definitive conclusions cannot be made due to data limitations, the regression results suggest

several key findings.³² The SBWS employment protection policy appears to have had a positive association with offsetting job decreases. On average, a greater level of SBWS disbursements (as a share of the regional gross domestic product) is correlated with a reduction in employment losses.³³ The econometric simulation suggests that in the hypothetical absence of the employment protection policy, the aggregate decline in employment nationwide might have been 4.5 per cent in July 2020, as opposed to the official reported estimate of 3.8 per cent.³⁴

Similar specifications were estimated for the decline in women's employment, and the results show that SBWS payments also had a positive correlation with lower employment losses. The estimated percentage decline in aggregate job losses for women could have been 4.9 per cent in the simulated scenario without the wage subsidy support, instead of the actual contraction of 4.1 per cent reported in July 2020.

► 4. Conclusion and policy considerations

As new reported cases of COVID-19 spike in some Asia-Pacific economies and the rollout of national vaccination programmes remains sluggish overall, a strong region-wide labour market recovery in 2021 may be tenuous. The latest ILO estimates indicate a contraction of working hours relative to the pre-crisis baseline in Asia and the Pacific of 3 per cent in the first and second quarters of 2021.³⁵ Policymakers may need to continue and leverage robust support for employment retention policies as one of various tools for navigating the prolonged economic and jobs crisis and to advance a human-centred recovery. Such efforts should be underpinned by the principles of inclusive

economic growth and employment, protection of all workers, universal social protection and social dialogue.³⁶

Given the uncertain labour market outlook, this research brief highlights several important findings that can help guide the recovery. First, employment protection policies can be an effective measure to sustain jobs during crisis, uphold the critical employer-employee relationship and boost incomes. Fiscal constraints, however, may limit the policy design in terms of disbursement amounts, coverage and duration particularly in low-income and lower-middle income economies. In such cases, job retention

³² It is important to note that the estimation procedure examines only the statistical relationship, and not causality, between the short-term, immediate employment outcomes and the supportive employment retention policy and also not the long-term cumulative impact on employment and more broadly economic activity.

³³ Results are statistically significant at the 95 per cent confidence interval.

³⁴ Author's estimates based on the econometric procedure outlined in Annex 2.

³⁵ ILO, *World Employment and Social Outlook: Trends 2021*, 2021.

³⁶ For an in-depth discussion of a policy framework for a human-centred recovery, see: ILO, *Resolution concerning a global call to action for a human-centred recovery from the COVID-19 crisis that is inclusive, sustainable and resilient*, International Labour Conference, 109th Session, 17 June 2021a.

schemes, if well-targeted, may be limited yet still be an important lever to help address equity concerns. A focus on job and wage support for MSMEs and employees at the bottom of the wage ladder could be integral to this end. Such efforts would also indirectly help youth and other disadvantaged groups who often are disproportionately concentrated among low-paid workers in the region. Targeting specific sectors such as garment manufacturing and tourism in the policy design can also facilitate wage assistance to women who were among the hardest hit during the crisis.

Second, decisive policy making can potentially make a difference in providing immediate relief to impacted workers and sustain incomes. The approach of a few Asia-Pacific countries highlights the benefits of investing in and establishing a job retention scheme, even if limited, during non-crisis times that can be quickly scaled up. Having in place a pre-existing employment support mechanism can simplify policy design considerations, accelerate implementation and streamline the delivery of support to target beneficiaries when a crisis does strike.

Third, the crisis has made too clear the urgent need to promote employment formalization in developing Asia and the Pacific. In many developing countries in the region, the coverage of the COVID-19 employment protection measure was severely hampered by the sizeable level of labour market informality. Increasing formal registration of businesses and workers would greatly expand the policy instruments and support mechanisms during a crisis to reach the most vulnerable segments of society and sustain household consumption needs.

Finally, strengthening the public information base on the implementation of employment protection policies and other related crisis response measures is fundamental to understanding policy effectiveness. Such efforts would require investing in (ex-post) policy data collection, reporting and digital dissemination. Enhanced policy statistics would not only increase transparency and confidence in policymaking but also help draw lessons from the crisis and inform future policy decisions.

► Annex 1: Asia-Pacific COVID-19 Employment Protection Policy Database

Table A1.1 Employment protection policy responses to COVID-19 crisis in Asia and the Pacific in 2020

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Australia	JobKeeper	Bi-weekly wage subsidy of up to 1,500 NCU per employee	30-Mar-20	More than 6 months	6,000,000	10.8	Decrease in revenue of a minimum threshold
Australia	Boosting Cash Flow For Employers	Temporary cash allowances to SMEs to manage cash flow challenges and help businesses pay wages and retain employees	22-Mar-20	3 months or less	7,800,000	1.6	Registered SMEs with annual revenue under a maximum threshold
Australia	Supporting Apprentices and Trainees Wage Subsidy	Wage subsidy of 50 per cent for apprentices and trainees, up to 7,000 NCU per quarter	12-Mar-20	More than 6 months	180,000	Less than 1	Registered SMEs with number of staff below a maximum threshold
Bangladesh	Wage subsidy to export-oriented sectors	Wages subsidies channelled through bank loans to help pay salaries of 4 million workers in export-oriented sectors (mainly ready-made garments)	25-Mar-20	3 months or less	4,000,000	Less than 1	Limited to specific economic sectors

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Brunei Darussalam	Wage subsidy for MSME	Wage subsidy for MSMEs with less than 100 employees and employees that receive less than 1,500 NCU and contribute to the national social security system	29-Mar-20	3 months or less	n.a.	n.a.	Registered MSMEs with number of staff below a maximum threshold; registered employees earning less than a maximum threshold
Brunei Darussalam	Expanding i-Ready paid apprentice scheme	Expands coverage and increases monthly allowance of paid apprenticeship scheme for diploma and degree holders	29-Mar-20	More than 6 months	n.a.	n.a.	Apprentices only with different subsidy benefits based on level of education
Cambodia	Wage subsidy for garments and tourism	Wage subsidy for enterprises in garment and tourism industry that have suspended operations and furloughed workers	2-Apr-20	4-6 months	350,000	Less than 1	Limited to specific economic sectors
Hong Kong, China	Employment Support Scheme (ESS)	Temporary financial assistance to registered companies and self-employed to pay wages and retain employees	18-May-20	4-6 months	1,500,000	3.4	
India	Aatma Nirbhar Bharat Rozgar Yojana	Scheme provides subsidies equivalent to 24 per cent of wages as contribution to national social security scheme for any new employee in a registered enterprise with monthly wages less than 15,000 NCU	15-Nov-20	Less than 3 months	n.a.	n.a.	Registered employees earning less than a maximum threshold

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Indonesia	Wage subsidy programme	Wage subsidies equivalent to 2.4 million NCU to workers earning less than 5 million NCU and that are active members of the national social security system	4-Aug-20	4-6 months	15,700,000	Less than 1	Registered employees earning less than a maximum threshold
Japan	Employment Adjustment Subsidy	Wage subsidy scheme to support employers who suffered from business downturn but maintain employment by paying leave allowance and letting employees take partly paid leave, with higher subsidy benefits for SMEs.	27-Feb-20	More than 6 months	456,639 (at peak in August 2020)	n.a.	Decrease in production of a minimum threshold
Korea, Republic of	Employment Retention Subsidy	Wage subsidy scheme to firms with sales decrease of a minimum threshold to support paid short-time work or leave of work, with higher subsidy benefits for SMEs.	1-Apr-20	More than 6 months	770,000	Less than 1	Decrease in revenue of a minimum threshold
Korea, Republic of	Emergency Employment Stability Subsidy	Employment income support for self-employed and employees under unpaid leave who earned income during Dec-20 to Jan-21 but saw 25 per cent or more reduction in income due to COVID	1-Mar-20	More than 6 months	1,760,000	Less than 1	Decrease in revenue of a minimum threshold

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Macau, China	Employment and Income Support	Income transfers to eligible employees amounting to 5,000 NCU per month for three months	13-Feb-20	3 months or less	250,000	1.8	
Macau, China	Income Support to Firms and Self-employed	One-time income transfers (ranging from 15,000 to 200,000 NCU) to self-employed professionals and eligible firms, contingent upon not laying off employees	13-Feb-20	3 months or less	n.a.	1.1	
Macau, China	Income Support to Vulnerable Workers	One-time income transfers of 10,000 NCU to taxi drivers leasing a taxi, lessees of wet market stalls, holders of hawkker licenses or holders of tricycle rickshaw licenses	13-Feb-20	3 months or less	n.a.	n.a.	Self-employed workers in specific economic sectors
Malaysia	Wage Subsidy Programme 1.0 and 2.0	Financial assistance programme paid to employers who experienced a year-on-year decrease in sales or revenues of at least 30 per cent following mandatory lockdown measures, covering local employees earning 4,000 NCU or less, and contingent upon not retrenching subsidized employees	27-Mar-20	More than 6 months	3,960,000	1.1	Decrease in revenue of a minimum threshold; registered employees earning less than a maximum threshold

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Maldives	Emergency Loans to Protect Jobs	Emergency loans with six-month grace period and repayment period of three years for SMEs and self-employed to pay full salaries to employees, contingent upon retaining local workforce and paying full salaries to those with wages below 10,000 NCU	1-Apr-20	3 months or less	n.a.	2.1	Registered SMEs and self-employed
Mongolia	Job Retention Allowance	Salary subsidies of 200,000 NCU per employee for enterprises that have suffered 50 per cent or more reduction in revenues but retained jobs	27-Mar-20	Not classifiable	n.a.	Less than 1	Decrease in revenue of a minimum threshold
Myanmar	Wage Subsidies for Factory Workers	Financial assistance equivalent to 40 per cent of wages to workers enrolled in the social security scheme and working in registered factories that were temporarily closed for inspection during the COVID-19 outbreak.	30-Apr-20	3 months or less	n.a.	n.a.	Registered factories and workers enrolled in the national social security system
New Caledonia	Compensation Allowance for People in Confinement	Wage allowances to employees and self-employed workers placed under observation in the event of infection, suspected infection or quarantine, and were unable to exercise their professional activity at a distance or at home during the period of confinement	11-Apr-20	Not classifiable	n.a.	n.a.	

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
New Zealand	2020 COVID-19 Wage Subsidy and Resurgence Wage Subsidy Schemes	Scheme for employers and self-employed people who would otherwise have had to lay off staff or reduce their hours due to COVID-19.	17-Mar-20	4-6 months	n.a.	More than 6	Decrease in revenue of a minimum threshold
Pakistan	Cash Allowance Scheme for Daily Wage Earners	Scheme totalling 75 billion NCU, providing one-time cash allowance to daily wage workers	24-Mar-20	3 months or less	6,200,000	Less than 1	Daily wage workers
Philippines	Small Business Wage Subsidy	Scheme of 45.7 billion NCU to pay wages according to the local minimum wage for employees of small businesses mandated to close under the period of community lockdowns	1-Apr-20	3 months or less	6,186,102	Less than 1	Registered SMEs; limited to specific economic sectors
Samoa	Wage Subsidy Scheme	Wage subsidy scheme of 1.2 million NCU available to employees in the affected tourism, hospitality and export manufacturing industries that struggled to retain employees because of COVID-19	30-Sep-20	3 months or less	1,200	Less than 1	Limited to specific economic sectors

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Singapore	Job Support Scheme (JSS)	The JSS, totalling 21.5 billion NCU, provides wage support for employers to retain their local employees (Singapore Citizens and Permanent Residents) during this period of economic uncertainty	18-Feb-20	More than 6 months	2,000,000	4.6	All active employers except for government organization
Solomon Islands	Wage Subsidy Scheme	Wage subsidies to retain workers and pay salaries of public servants classified as non-essential	8-Apr-20	Not classifiable	n.a.	n.a.	Limited to non-essential public servants
Taiwan, China	Peace of Mind Employment Plan	Wage subsidy provided to workers who have been on work break or have had to take reduced working hours in order to decrease the impact of reduced wages and assist in stabilizing employment	21-Apr-20	More than 6 months	43,000	Less than 1	Registered employees in the national employment insurance system
Taiwan, China	Charging and Re-departure Training Program	Wage and training subsidy scheme to supplement salaries for furloughed or short-time workers and to encourage training while on leave	21-Apr-20	More than 6 months	25,000	Less than 1	
Thailand	Income Support to Self-employed Workers	Income assistance scheme for temporary and freelance workers, farmers, and entrepreneurs affected by COVID-19 and are outside the national social security system	10-Mar-20	4-6 months	24,000,000	2.3	Workers outside the national social security system

Country	Policy name	Brief policy description	Initial date of policy announcement	Duration of policy implementation in 2020	Estimated number of beneficiary workers	Estimated policy budget (% of 2020 GDP)	Eligibility restrictions
Thailand	Wage Subsidy Scheme to SMEs	Income assistance to SMEs, allowing deductions of wage expenses for registered employees who receive salaries not exceeding 15,000 NCU per month or 500 NCU per day	10-Mar-20	4-6 months	1,000,000	n.a.	Registered SMEs with annual revenue and number of staff below a maximum threshold; registered employees earning less than a maximum threshold
Timor-Leste	Wage Subsidy Scheme	Wage subsidies for registered, formal sector employees equivalent to 60 per cent of the wage costs in the event of the suspension of the employment contract or reduction of working hours due to COVID-19	20-Apr-20	3 months or less	30,000	Less than 1	Registered employees enrolled in the national social security system
Vanuatu	Employment Stabilization Fund	Scheme totalling 2.5 billion NCU that provides wage subsidies up to 30,000 NCU per employee per month, plus an additional 12 per cent to the employer, to support employment retention	1-Apr-20	4-6 months	18,000	2.5	
Viet Nam	Wage subsidy scheme	Wage subsidies for employees whose employment contracts were temporarily suspended or had to take unpaid leave for more than one month	9-Apr-20	3 months or less	n.a.	n.a.	

Note: NCU denotes national currency units; MSME denotes micro, small and medium enterprises; SME denotes small and medium enterprises. See Section 2 for further discussion of policy criteria for database inclusion. The following eleven Asia-Pacific economies were included in the regional analysis but did not implement a new or revise an

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existing employment protection policy that fit the criteria defined in Section 2: Afghanistan, Bhutan, China, Fiji, Islamic Republic of Iran, Democratic People's Republic of Korea, Lao People's Democratic Republic, Nepal, Papua New Guinea, Sri Lanka and Tonga.

Source: Author's compilation and estimates based on official government websites and reports; Asian Development Bank (ADB), [COVID-19 Policy Database](#); ADB, *Kingdom of Cambodia: COVID-19 Active response and expenditure support program first quarterly monitoring report (July–September 2020)*, March 2021; ADB, *Sustainable recovery options for Mongolia's micro, small, and medium-sized enterprises*, December 2020; Bank of Thailand, [Monetary Policy Report](#), June 2020; ILO, [COVID-19 Country Policy Responses](#); ILO, [ILOSTAT Database](#); ILO, [Social Protection Responses to COVID-19 Crisis around the World](#); ILO, *Temporary wage subsidies*, May 2020; ILO and UNESCAP, *Social protection responses to COVID-19 in Asia and the Pacific: The story so far and future considerations*, 2020; International Monetary Fund (IMF), [Policy Responses to COVID-19 Policy Tracker](#); IMF, World Economic Outlook Database, April 2021; G.L. Nanau and M. Labu-Nanau, *The Solomon Islands' social policy response to Covid-19: Between Wantok and economic stimulus package*, 2021; S. Oh, *Employment safety net and policy under COVID-19: Korea's case*, Presentation at Republic of Korea-ASEAN Policy Sharing Workshop in Employment and Labor Sector, 26 March 2021; Philippines Department of Finance, Small Business Wage Subsidy Data; UNESCAP, [Asia-Pacific Countries' COVID-19 Policy Responses](#); national online news reports.

► Annex 2: Methodology to estimate effect of Philippines Small Business Wage Subsidy on employment

Evaluating programme impact is a complex challenge that goes beyond the scope of this research brief. Thus, the approach used in this analysis instead focuses on measuring whether the Philippines Small Business Wage Subsidy (SBWS) programme had an immediate effect on employment. It adopts a similar empirical framework applied in the ILO COVID-19 Monitor, 6th edition that enables quantifying the relationship between actual employment outcomes and the scale of policy intervention. Importantly, the approach does not try to estimate a causal relationship.³⁷

Empirical framework

The estimation for the decline in employment is represented by the following equation:

$$\nabla E_r = \gamma EP_r + u_r$$

where ∇E_r denotes the year-on-year decline in employment in region r during the month of July 2020. The key explanatory variable of interest, represented by EP_r , is the scale of the employment protection policy implementation in a given region r during the months of May and June 2020, with γ indicating the parameter that estimates the relationship between the two variables. Finally, u_r denotes the effect of all other drivers of the decrease in employment.

The estimation approach adopts similar assumptions as in ILO (2020c) to decompose the remaining factors that affect the employment contraction, specifically:

$$u_r = \alpha + \beta dhr_r + \beta ehr_r + \beta msme_r + \varepsilon_r$$

in which α and ε_r denote respectively the constant and residual terms. The remaining components include a variable dhr representing the disruption on consumption and production as a result of restrictive measures to contain the spread of COVID-19 in region r during the month of June. The expectation is that regions that experienced harsher containment measures would consequently record greater employment losses due to the related contraction in consumption and production. Another control variable ehr represents the share of employment in economic sectors at high-risk of disruption due to a fall in domestic and international consumer demand. A higher economic risk exposure before the onset of the crisis is expected to be associated with greater economic deceleration and consequently employment declines during the pandemic. Finally, given that the employment retention scheme is limited to small businesses, an independent variable $msme_r$, reflecting the density of MSMEs in a given region, is included in the specifications. In the absence of policy support, regions with a higher density of MSMEs would hypothetically have higher employment losses due to the disparate challenges that smaller businesses face in regard to cash flow and other business constraints during the crisis.³⁸

Combining these two equations, the decrease in employment is expressed as

$$\nabla E_r = \alpha + \gamma EP_r + \beta dhr_r + \beta ehr_r + \beta msme_r + \varepsilon_r$$

and allows for quantifying the relationship between the scale of the SBWS programme and the decline in employment during July 2020, after controlling for restrictive containment policies, the region-specific economic risk exposure to the crisis and the density of MSMEs. To estimate this empirical relationship, a simple ordinary least squares (OLS) regression is applied.

³⁷ For detailed discussion of the estimation approach and its limitations, see: ILO, *ILO Monitor: COVID-19 and the world of work, Sixth edition: Updated estimates and analysis*, 2020c.

³⁸ A proxy variable to represent employment vulnerability and informality, measured as the share of own-account workers and contributing family workers in total employment, was tested but not ultimately included due to high collinearity with the other control variables.

Data used

The primary outcome variable in the analysis of the Small Business Wage Subsidy (SBWS) scheme is the year-on-year percentage change in employment, aggregated for both women and men and separately for women only. The principle explanatory variable is an index of the scale of the SBWS policy implementation in each region. All variables are measured at the region level, with all 17 administrative regions of the Philippines included.

Table A1 presents the proxies used for each variable in the analysis and their corresponding data source. Summary statistics are displayed in Table A2.

► **Table A1. Variables employed in Philippines Small Business Wage Subsidy (SBWS) econometric analysis**

Variable	Symbol	Data used	Data source
Decline in employment	∇E_r	Year-on-year percentage decrease in employment (ages 15+) during July 2020.	Philippines Statistics Authority (PSA), Labour Force Surveys.
Index of scale of SBWS programme	EP_r	Total wage subsidies paid during May-June 2020 as a share of gross regional domestic product in 2019	Department of Finance; PSA, Labour Force Surveys.
Index of disruption caused by public health situation and community quarantine measures	dhr_r	Average daily decline in mobility (average of workplace and retail mobility) during June 2020.	Google Community Mobility Reports.
Share of high-risk employment	ehr_r	Share of employment in the four sectors (manufacturing, construction, wholesale and retail trade, and accommodation and food services) identified as high-risk of COVID-19 disruption at the baseline of fourth quarter 2019.	PSA, Labour Force Surveys.
Density of MSMEs	$msme_r$	Ratio of MSMEs to the working-age population at the baseline in 2019.	Department of Trade and Industry; PSA, Labour Force Surveys.

► **Table A2. Summary statistics**

Variable	N	Mean	Std. Dev.	Min	Max
Decline in employment, total	17	0.032	0.063	-0.174	0.105
Decline in employment, female	17	0.021	0.101	-0.311	0.124
SBWS as share of gross regional domestic product, normalized	17	0.251	0.254	0.000	1.000
Decline in mobility	17	0.359	0.085	0.204	0.529
Share of high-risk employment	17	0.386	0.078	0.264	0.536
MSME density	17	0.126	0.004	0.003	0.020

Estimation results

The results of the OLS regression applying the equation:

$$\nabla E_r = \alpha + \gamma EP_r + \beta dhr_r + \beta ehr_r + \beta msme_r + \varepsilon_r$$

are presented in table A3. Two specifications are included, namely to estimate the effect on the decline in total employment (1) and the decline in female employment (2).

► **Table A3. Regression results**

	(1) Decline in total employment	(2) Decline in female employment
SBWS share of GRDP, normalized	-0.218** (0.0862)	-0.376** (0.142)
Decline in mobility	0.385* (0.179)	0.395 (0.295)
Share of high-risk employment	0.486* (0.228)	1.054** (0.376)
MSME density	7.618 (5.009)	15.11* (8.278)
Constant	-0.346*** (0.0966)	-0.635*** (0.160)
Observations	17	17
R-squared	0.658	0.636

Note: Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

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