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# Unpacking Issues in the Gig Economy: Policy Approaches to Empower Women in APEC

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## KEY MESSAGES

- APEC has consistently worked to advance women's economic empowerment and integration, but progress was set back by the COVID-19 pandemic. Many women, on losing their jobs, likely transitioned into independent work as this offers them greater flexibility and autonomy.
- Independent work could be thought of as the itemisation of a specific resource. The gig economy, for example, itemises labour. Gig workers are characterised by three traits: (1) a high degree of autonomy; (2) payment by task, assignment or sales; and (3) short-term, temporary and on-demand engagements.
- Broadly, the gig economy is a non-standard labour market characterised by temporary, short-term or on-demand work arrangements where individuals provide services to clients on a project-by-project basis. In the APEC region, the size of the gig economy ranges from 0.7 percent to 38.1 percent of an economy's total labour force.
- Globally, women are active in the gig economy, accounting for about 42 percent of online gig workers. Across APEC, female gig workers are between 19 percent to 56 percent of an economy's total gig workers, and are often found in historically feminised occupations.
- Gig work provides women with the opportunity to level the gender gap in labour participation. However, participating in the gig economy has its challenges, which could and has led to significant attrition. While some of these challenges hinder men as well as women, others may be more nuanced, with women being disproportionately affected.
- The issues faced by female gig workers include socio-cultural gender biases, unequal pay and difficulty accessing finance, as well as insufficient labour regulations and social protection coverage.
- To reduce the precarity of women working in the gig economy, policymakers and stakeholders could counter socio-cultural gender biases through behaviour modification activities; place greater focus on regulating gig work; and develop accessible social protection and other tailored support for female gig workers.

Fostering inclusivity is part of APEC's Putrajaya Vision 2040.<sup>1</sup> Achieving this vision requires APEC to actively support those with untapped economic potential such as women. According to an APEC

<sup>1</sup> Asia Pacific Economic Cooperation (APEC), "2020 Leaders' Declaration: APEC Putrajaya Vision 2040," 2020, [https://www.apec.org/meeting-papers/leaders-declarations/2020/2020\\_aelm/annex-a](https://www.apec.org/meeting-papers/leaders-declarations/2020/2020_aelm/annex-a)

study in 2020, the region could lose around USD 94 billion simply by excluding women from the digital economy.<sup>2</sup>

<sup>2</sup> APEC, "The Untapped Economic Potential of Including Women in the Digital Economy in the APEC Region" (Singapore: APEC, 2022), <https://www.apec.org/publications/2022/09/the-untapped-economic-potential-of-including-women-in-the-digital-economy-in-the-apec-region>

**Advancing Free Trade for Asia-Pacific Prosperity**

APEC Member Economies: Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; Philippines; Russia; Singapore; Chinese Taipei; Thailand; United States of America; and Viet Nam.

Recognising the economic gravity that women represent, APEC has been consistently working to advance women's economic empowerment and integration. The La Serena Roadmap for Women and Inclusive Growth (2019–2030) builds on decades of continuous work on women, providing clear key action areas to guide APEC economies to identify and address systemic barriers, widen access to opportunities and markets, encourage the collection of sex-disaggregated data to craft better-targeted policies, and boost labour participation.<sup>3</sup>

Unfortunately, progress on women's participation in the workforce was set back by the contraction of the services sector during the COVID-19 pandemic, which caused at least 10 million women to lose their jobs in 2020.<sup>4</sup> Many of these women likely transitioned into independent work that offers flexibility and autonomy<sup>5</sup> – an arrangement made even more possible by the accelerated digitalisation of certain services categories.<sup>6</sup>

However, alongside the benefits, independent work is also steeped in problems, some of which can have women-related nuances. Some of these problems also mirror those in the informal economy, such as difficulties in accessing financial resources and social protection. Despite its drawbacks, the flexible nature of independent work attracts women who are looking to balance work and family responsibilities, albeit placing them in a potentially precarious position.

This policy brief discusses women's participation in independent work, particularly in the gig economy, and unpacks women-related issues that hinder women's greater economic participation in this area. It also offers policymakers different policy approaches to advance women's economic empowerment and integration.

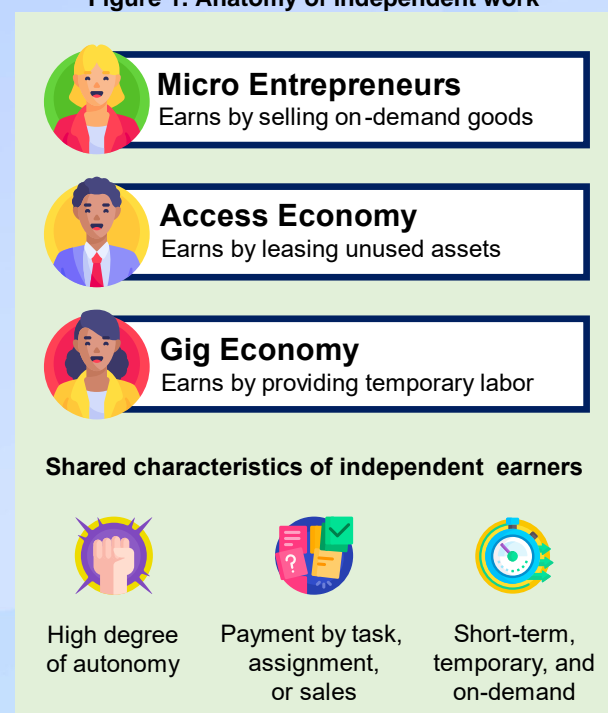
## Understanding the Prevalence of Gig Work

### *Gig work as a subset of independent work*

Independent work, as defined by McKinsey Global Institute, refers to various ways individuals earn income outside traditional long-term employer–

employee setups.<sup>7</sup> Independent earners share three key characteristics: a high degree of autonomy; payment by task, assignment, or sales; and short-term, temporary and on-demand engagements (Figure 1). Individuals with continuously renewed contracts (permatemps) and business owners who hire employees are not categorised as independent earners in this context. As a non-standard form of work, independent earners have the flexibility to progress in various ways, depending on their needs and circumstances. For example, they may decide to pursue a string of projects as a freelancer, eventually choosing to establish their own business and become a proprietor.

**Figure 1. Anatomy of independent work**



Source: Adapted from James Manyika et al., "Independent Work: Choice, Necessity, and the Gig Economy," McKinsey Global Institute, 10 October 2016, <https://www.mckinsey.com/featured-insights/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy>

Independent work could be thought of as the itemisation of a specific resource. For example, microentrepreneurs itemise goods, the access

<sup>3</sup> APEC, "2019 APEC Ministerial Documents: The La Serena Roadmap for Women and Inclusive Growth (2019–2030)," 2019, [https://www.apec.org/meeting-papers/annual-ministerial-meetings/2019/2019\\_amm/annex-a](https://www.apec.org/meeting-papers/annual-ministerial-meetings/2019/2019_amm/annex-a)

<sup>4</sup> APEC Policy Support Unit (PSU) calculations using data from the International Labour Organization (ILO) (accessed 9 October 2023). Data for China; Malaysia; New Zealand; Papua New Guinea; Singapore; and Chinese Taipei are unavailable.

<sup>5</sup> Rebecca Henderson, "How COVID-19 Has Transformed the Gig Economy," *Forbes*, 10 December 2020, <https://www.forbes.com/sites/rebeccahenderson/2020/12/10/how-covid-19-has-transformed-the-gig-economy/?sh=79cc6fe06c99>

<sup>6</sup> Andre Wirjo, Nguyen Thu Quynh and Sylwyn Calizo Jr, "Resiliency in a Post-Pandemic APEC: Approaches to Driving Growth in Digital Services," APEC Policy Brief 47, APEC PSU, 2022, [https://www.apec.org/docs/default-source/publications/2022/8/resiliency-in-a-post-pandemic-apec-approaches-to-driving-growth-in-digital-services/222\\_psu\\_resiliency-in-a-post-pandemic-apec.pdf](https://www.apec.org/docs/default-source/publications/2022/8/resiliency-in-a-post-pandemic-apec-approaches-to-driving-growth-in-digital-services/222_psu_resiliency-in-a-post-pandemic-apec.pdf)

<sup>7</sup> James Manyika et al., "Independent Work: Choice, Necessity, and the Gig Economy," McKinsey Global Institute, 10 October 2016, <https://www.mckinsey.com/featured-insights/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy>

economy<sup>8</sup> itemises assets, and the gig economy itemises labour. This conceptual distinction is relevant for policymakers in specific cases, such as when discussing tax matters. In the context of women, this can spell the difference between a working mother's eligibility to benefit from targeted income tax reliefs or not. To illustrate further, policymakers in Belgium saw it fit to exempt earnings from gig work of up to EUR 6,000 per year but not for earnings coming from home-sharing since asset owners are likely to be high income earners.<sup>9</sup>

While these conceptual distinctions are useful and intuitive, lines are normally blurred, and terms are used interchangeably in practice. For example, delivery riders (labour) typically need a vehicle (asset) to efficiently do their work. In such circumstances, it becomes practical to recognise independent work as a spectrum that ranges from highly labour-intensive to highly asset-intensive.<sup>10</sup>

### **Prevalence of gig work in APEC**

The understanding of the gig economy as the itemisation of labour can be further developed. While there is no formal or globally accepted definition, international organisations have attempted to characterise the gig economy. The World Economic Forum (WEF) defined the gig economy to broadly include 'platform-based work and all other forms of contingent work that have limited duration'.<sup>11</sup> The World Bank<sup>12</sup> and the International Labour Organization (ILO)<sup>13</sup> share a similar view. This understanding implies that most gig work is likely to be mediated and/or delivered digitally.

Gig work can be classified further into those that are location-bound (i.e., carried out in person in specified locations) and those that are online, which would naturally have a global reach. Unsurprisingly, the complexity involved in gig work could vary. On the one hand, location-bound gig work could cover straightforward general services (e.g., driving, delivery and caring) but it could also include more complex professional services work. Similarly, online gig work could range from online micro-tasking, such as administrative work and subtasks

<sup>8</sup> The access economy is also known as the sharing economy. One example is when asset owners rent out their home when they are away on vacation. However, asset owners that utilise a house solely like a hotel are not considered part of the access economy since the house is rented out in a permanently temporary manner.

<sup>9</sup> Koen Frenken et al., "Safeguarding Public Interests in the Platform Economy," *Policy and Internet* 12, no. 3 (2020), <https://doi.org/10.1002/poi3.217>

<sup>10</sup> Frenken et al., "Safeguarding Public Interests."

<sup>11</sup> World Economic Forum (WEF), "The Promise of Platform Work: Understanding the Ecosystem" (Geneva: WEF, 2020),

that can be completed by remote workers in a relatively short period of time, to online freelancing involving tasks of higher complexity, such as consulting, legal work and design.

Taking the definitions from various studies, the gig economy could be seen as a non-standard labour market characterised by temporary, short-term or on-demand work arrangements where individuals, often referred to as gig workers, provide services to clients on a project-by-project basis. Hence, gig workers are compensated for completing specific tasks or projects. Regrettably, these gig workers are typically not classified as traditional employees, and do not receive the benefits and job security associated with employer–employee relationships. In this respect, gig workers share some aspects of informality.

Over the years, authors and institutions have estimated the prevalence of gig workers in their economies through surveys. Others have estimated the number of gig workers through existing labour classifications. Within the APEC region, the size of the gig economy varies from 0.7 percent (Chinese Taipei) to 38.1 percent (Viet Nam) of their respective total labour force (Figure 2). It is estimated that gig workers represent less than 10 percent of the total labour force in most APEC economies as of 2023.

### **Women's Participation in the Gig Economy**

On a global level, women are actively involved in online gig work. In 2021, an estimated 42 percent of online gig workers were women, similar to the proportion of women in the global labour market (40 percent).<sup>14</sup> The interest shown by women in the gig economy signals the potential for gig work to support the economic participation of women. In APEC economies, the proportion of women in the gig economy ranges from 18.5 percent (Indonesia) to 55.8 percent (Viet Nam) of their respective total gig workers (Figure 3).

#### **Why do women participate in the gig economy?**

The ILO<sup>15</sup> and the World Bank<sup>16</sup> have observed that the primary factors motivating women's

<https://www.weforum.org/whitepapers/the-promise-of-platform-work-understanding-the-ecosystem/>

<sup>12</sup> Namita Datta et al., "Working Without Borders: The Promise and Peril of Online Gig Work" (Washington, DC: World Bank, 2023), <http://hdl.handle.net/10986/40066>

<sup>13</sup> ILO, "World Employment and Social Outlook 2021: The Role of Digital Labour Platforms in Transforming the World of Work" (Geneva: ILO, 2021),

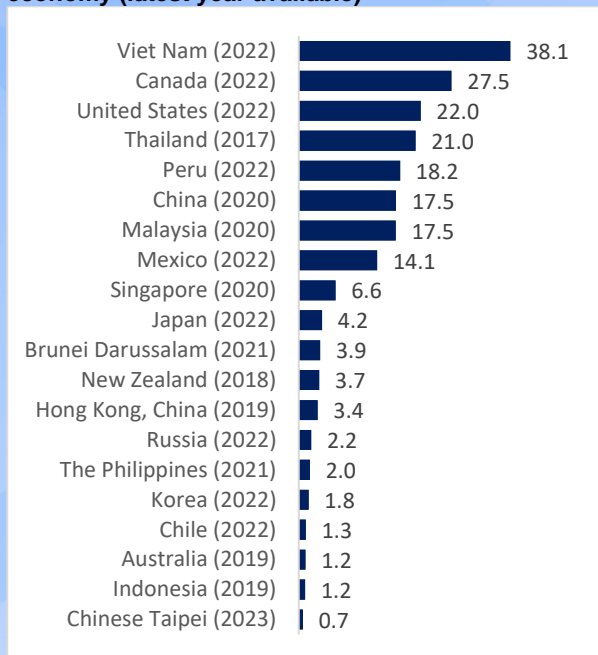
[https://www.ilo.org/global/research/global-reports/weso/2021/WCMS\\_771749/lang--en/index.htm](https://www.ilo.org/global/research/global-reports/weso/2021/WCMS_771749/lang--en/index.htm)

<sup>14</sup> Datta et al., "Working Without Borders."

<sup>15</sup> ILO, "World Employment and Social Outlook 2021."

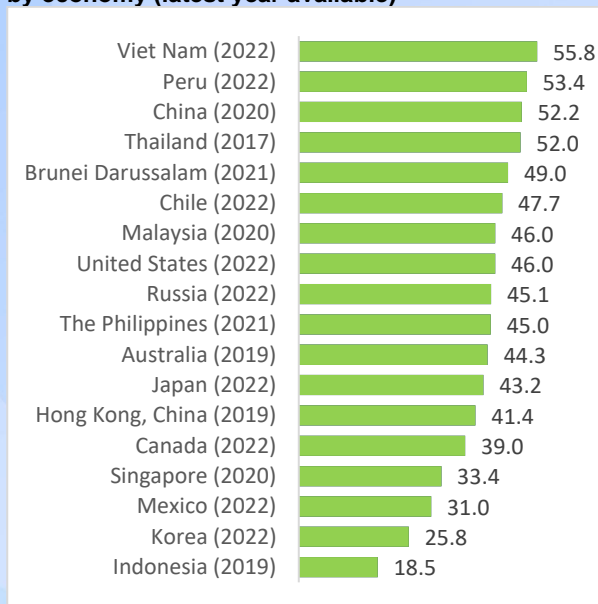
<sup>16</sup> Datta et al., "Working Without Borders."

**Figure 2. Prevalence of gig workers in APEC, by economy (latest year available)**



Note: Percentage share of the total labour force of each economy. Data for Papua New Guinea is unavailable.

**Figure 3. Prevalence of female gig workers in APEC, by economy (latest year available)**



Note: Percentage share of total gig workers for each economy. Data for New Zealand; Papua New Guinea; and Chinese Taipei are unavailable.

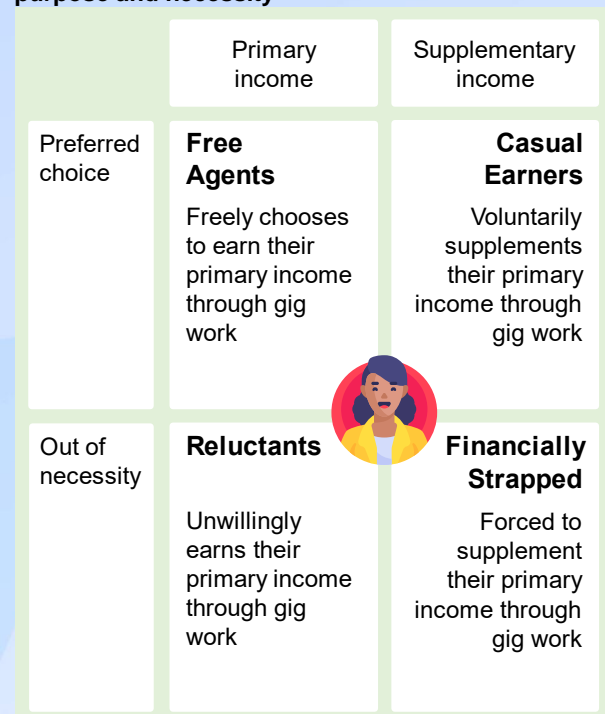
Source (Figures 2 and 3): APEC Policy Support Unit (PSU) calculations based on data from multiple sources, including data from the International Labour Organization (ILO) (accessed 9 October 2023). Appendix A provides the list of sources by economy.

<sup>17</sup> Digital Future Society, "Global Perspectives on Women, Work, and Digital Labour Platforms. A Collection of Articles from Around the World on Women's Experiences of Digital Labour Platforms" (Barcelona: Digital Future Society, 2022), [https://digitalfuturesociety.com/app/uploads/2022/11/Global\\_Pe](https://digitalfuturesociety.com/app/uploads/2022/11/Global_Pe)

participation in the gig economy are the opportunities to earn additional income and the flexibility that it provides. In fact, women place a higher value on these aspects compared to men, and women are also more likely than men to engage in online gig work due to lack of opportunities in the traditional job market. Since approximately a quarter of women engaged in digital platform work have children under the age of 6, the prohibitive cost of childcare and the constrained availability of childcare facilities act as barriers that dissuade them from pursuing jobs in the traditional labour market.<sup>17</sup> In APEC, although childcare fees have gone down from a high of 33–44 percent of net household income in 2004, it still averaged almost 20 percent in 2019.<sup>18</sup>

The motivations for women to participate in the gig economy could be viewed as falling into four categories, depending on whether the purpose is to derive primary income or supplementary income, and whether participation in gig work is from preference or out of necessity (Figure 4).

**Figure 4. Classification of gig workers by income purpose and necessity**



Source: Adapted from James Manyika et al., "Independent Work: Choice, Necessity, and the Gig Economy," McKinsey Global Institute, 10 October 2016, <https://www.mckinsey.com/featured-insights/employment-and-growth/independent-work-choice-necessity-and-the-gig-economy>

pectives\_on\_Women\_Work\_and\_Digital\_Labour\_Platforms.pdf

<sup>18</sup> APEC, "APEC Economic Policy Report 2020: Structural Reform and Women's Empowerment" (Singapore: APEC, 2020), <https://www.apec.org/publications/2020/11/2020-apec-economic-policy-report>

Free agents and casual earners are those with the capacity to choose to do gig work. Examples of free agents are online freelancers with specialised skills, such as lawyers, editors and designers, while examples of casual earners are office workers that monetise their hobby, such as by selling baked goods over the weekend. The capacity to choose gives both free agents and casual earners high levels of satisfaction, sometimes even higher than those in the traditional labour market.<sup>19</sup>

Those that engage in gig work out of necessity are the reluctants and the financially strapped. Examples of the former are those who are unwillingly working in the gig economy due to lack of other opportunities, or due to restrictions caused by geographical barriers, poor local demand or socio-cultural biases. Examples of the financially strapped are those that have primary-income jobs but receive poor compensation thus forcing them to take on extra work.

Classifying gig workers in this manner creates space for targeted policy interventions. Indeed, it is meaningful to recognise that not all gig workers require the same assistance. The reluctants and the financially strapped need the most support and protection since they engage in gig work out of necessity, placing them in a vulnerable position. Likewise, a blanket policy to recognise all gig workers as employees may be advantageous to others but detrimental to some. For instance, while both casual earners and the financially strapped are supplemental income earners, the latter are likely to derive incremental benefit by having the additional option of working part-time in another activity. Ideally, people should be able to earn a living wage from just one job and economies should consider this aspiration when designing interventions. However, it is equally important to acknowledge the diverse circumstances that people face, particularly the challenges they encounter. Supplementary jobs could be critical in enabling the financially strapped to survive.

### **Profiling women in APEC's gig economy**

Globally, women in online gig work are more inclined to participate in historically feminised occupations, such as clerical and data entry, sales and marketing support, writing and translation, and caregiving. In contrast, men are more likely to engage in software development, technology, and skilled trade work.<sup>20</sup> Studies from various APEC economies show similar patterns. In Australia, there is a statistically significant bias toward women performing caring, cleaning, creative (photography and design) and writing, editing and administrative tasks,<sup>21</sup> while women in Canada have a comparably higher presence in areas such as healthcare and social assistance as well as administrative and support tasks.<sup>22</sup> Meanwhile, in Malaysia, women are more involved in data entry and administrative and clerical tasks,<sup>23</sup> whereas women in the United States have a higher presence in clerical and data entry, and writing and translation work.<sup>24</sup>

No matter the task engaged in, gig workers across the world are likely to be young, regardless of sex. In Indonesia; Malaysia; Mexico; and the Philippines, more than 55 percent of gig workers are below 30 years old.<sup>25</sup> This is expected since not only do young people tend to be more digitally literate and active compared to older age groups<sup>26</sup> but also because they are likely to have a less stable footing in terms of income, job security and experience. Young gig workers could also be students during the day.

In terms of location, the World Bank has observed that 9 out of 10 gig workers tend to reside outside of capital cities; the majority are in smaller cities and towns beyond the capital city and the top 10 largest cities in any given economy.<sup>27</sup> This appears to be the case for various APEC economies. A majority of the gig workers in China; Mexico; the Philippines; and Russia live outside the capital.<sup>28</sup> This indicates that the online gig economy can play a part in mitigating regional disparities in work opportunities. While data on sex-ratio-by-city are unavailable, it is likely that no gender disparity for location exists for APEC if the respective sex ratios for urban and rural areas in 2022 hold true.<sup>29</sup>

<sup>19</sup> James Manyika et al., "Independent Work."

<sup>20</sup> Digital Future Society, "Global Perspectives on Women."

<sup>21</sup> Brendan Churchill and Lyn Craig, "Gender in the Gig Economy: Men and Women Using Digital Platforms to Secure Work in Australia," *Journal of Sociology* 55, no. 4 (2019), <https://doi.org/10.1177/1440783319894060>

<sup>22</sup> Sung-Hee Jeon, Huju Liu, and Yuri Ostrovsky, "Measuring the Gig Economy in Canada using Administrative Data," *Canadian Journal of Economics* 54, no. 4 (2021), <https://doi.org/10.1111/caje.12558>

<sup>23</sup> Datta et al., "Working Without Borders."

<sup>24</sup> ILO, "World Employment and Social Outlook 2021."

<sup>25</sup> Datta et al., "Working Without Borders."

<sup>26</sup> Cyn-Young Park, James Villafuerte, and Josef T. Yap, eds, "Managing the Development of Digital Marketplaces in Asia" (Manila: Asian Development Bank (ADB), 2021), <https://www.adb.org/publications/development-digital-marketplaces-asia>

<sup>27</sup> Datta et al., "Working Without Borders."

<sup>28</sup> Datta et al., "Working Without Borders."

<sup>29</sup> APEC PSU calculations using data from the United Nations Statistics Division Demographic Statistics Database (accessed 15 October 2023). Data for Papua New Guinea and Chinese Taipei are unavailable. Data for Brunei Darussalam; New Zealand; and Russia are based on 2021 data.

Further disaggregating by age does not show any significant gender gap either.<sup>30</sup>

While there appears to be no gender disparity for both age and location, there seems to be one for educational attainment. Much of the literature<sup>31</sup> suggests that gig workers have a high level of education, with over 60 percent holding undergraduate or postgraduate degrees; additionally, a larger percentage of women possess postgraduate degrees compared to men.<sup>32</sup>

Interestingly, gender disparities are seen when examined by economic grouping. Women in developing economies tend to have a higher educational attainment (80 percent) compared to women in advanced economies (61 percent).<sup>33</sup> Disparities can be seen even within developing economies. In Latin America, for example, more than 80 percent of women possess at least an undergraduate degree, surpassing the 60 percent reported for men.<sup>34</sup>

The significant number of highly educated women engaged in gig work could be due to lack of opportunities and/or biases in the traditional job market, compounded by the disproportionate burden of household and caregiving duties that they carry.<sup>35</sup> It is worth noting that gig workers with tertiary education are more likely to be free agents.

### Issues Faced by Women in the Gig Economy

Gig work provides women with an opportunity to level the gender gap in labour participation, which in turn can lead to better empowerment and inclusion for women. However, benefiting from the gig economy is steeped in challenges. Some of these issues affect men and women similarly (e.g., no minimum pay or lack of collective representation) while others may be more nuanced. This section focuses on the latter. It is worth recognising that the shift from traditional work to gig

<sup>30</sup> While location-, sex- and age-disaggregated data are limited, cumulative data for 10 APEC economies show that there is only a small gender gap of 2–4 percentage points for residents below 30 years old in both urban and rural areas. APEC PSU calculations using data from the United Nations Statistics Division Demographic Statistics Database (accessed 15 October 2023). Data for Brunei Darussalam; China; Hong Kong, China; Indonesia; Papua New Guinea; Peru; Russia; Singapore; Chinese Taipei; Thailand; and the United States are unavailable. Data based on latest year available for each economy.

<sup>31</sup> Much of the literature is based on surveys administered in English, but according to a 2023 World Bank multilingual survey, around 70 percent of online gig workers do not have a tertiary education degree. This may suggest that the true profile for gig workers' educational attainment is inconclusive. See Datta et al., "Working Without Borders."

<sup>32</sup> ILO, "World Employment and Social Outlook 2021."

<sup>33</sup> Digital Future Society, "Global Perspectives on Women."

work does not guarantee a parallel shift in policies, mindsets and gender biases.

### Socio-cultural gender biases

Gender biases and stereotyping stem from age-old socio-cultural norms that assign specific roles to young girls and boys that then influence their interests and add pressure to their choices. Such biases can start at home when girls are expected to do more household chores than boys. To illustrate, an ILO survey in 2012 found that 10 percent of girls aged 5–17 carried out domestic work, higher compared to just 4 percent of boys.<sup>36</sup> These gender roles are often carried forward into adulthood and are embraced by society. In fact, a survey of Philippine gig workers in 2020 showed that female primary income earners rendered two more hours of unpaid care work compared to their male counterparts.<sup>37</sup>

Without proper intervention, gender roles can manifest as occupational segregation whereby men predominate in roles that typically command a higher pay as they require advanced technological skills, such as information technology (IT) and software development. For instance, in Workana, the largest remote work platform hiring talent in Latin America, the proportion of men engaged in IT-related tasks (44 percent) is notably higher compared to women (5 percent).<sup>38</sup> This problem arises from how deeply ingrained societal norms colour science, technology, engineering and mathematics (STEM) as the domain of men,<sup>39</sup> which skews women's occupational and academic choices (recall female gig workers' predominant tasks). The scarcity of female STEM instructors in higher education coupled with women's low participation in STEM-focused sectors can also create a vicious cycle – one that results in increasingly fewer female role models.

Unfair filial expectations can also add pressure on women. The latest World Values Survey found an

<sup>34</sup> Digital Future Society, "Global Perspectives on Women."

<sup>35</sup> Digital Future Society, "Global Perspectives on Women."

<sup>36</sup> ILO, "Child Domestic Work: Global Estimates 2012," Fact Sheet, 2013,

[https://www.ilo.org/ipecc/Informationresources/WCMS\\_IPEC\\_PUB\\_23235/lang--en/index.htm](https://www.ilo.org/ipecc/Informationresources/WCMS_IPEC_PUB_23235/lang--en/index.htm)

<sup>37</sup> Connie Bayudan-Dacuycuy and Lora Kryz Baje, "Decent Work in Crowdfund: Gendered Takeaways from an Online Survey in the Philippines," Discussion Paper 2021-11, Philippine Institute for Development Studies (PIDS), 2021, <https://www.pids.gov.ph/publication/discussion-papers/decent-work-in-crowdfund-gendered-takeaways-from-an-online-survey-in-the-philippines>

<sup>38</sup> Datta et al., "Working Without Borders."

<sup>39</sup> Organisation for Economic Co-operation and Development (OECD), "SIGI 2021 Regional Report for Southeast Asia, Social Institutions and Gender Index" (Paris: OECD Publishing, 2021), <https://doi.org/10.1787/236f41d0-en>

increasing percentage of the global population exhibiting harmful gender biases and stereotypes.<sup>40</sup> For example, 51 percent of the global population think that women who work cause their children to suffer, while 67 percent perceive being a housewife to be as fulfilling as being a career woman. Moreover, 41 percent agree that when jobs are scarce, men should have more right to a job than women and that a woman earning more than her husband causes problems (32 percent). Similar views are seen in the APEC region. For example, 41 percent of the region's population concur that men have more right to a job than women when jobs are scarce, although there is wide variation across individual economies. These views could plant seeds of guilt that can emotionally harm working women.

These harmful gender biases and socio-cultural norms are also of concern because they could be picked up by artificial intelligence (AI) algorithms throughout their development and use by gig work platforms. For example, when development teams lack diversity or use biased historical data for AI training, it can reinforce sexism.<sup>41</sup>

Left unattended, these biases can be detrimental to women in many ways. Algorithms could incorporate biases against women that may amplify them over time. Recommendation algorithms in gig platforms may favour certain workers based on historical patterns, thus creating a cycle where men could receive more opportunities and visibility than women. Rating and review systems can be susceptible to biases as well since clients may provide sexist feedback. Finally, algorithms that determine pricing and pay rates based on demand and supply can inadvertently lead to pay disparities if certain sexes are consistently assigned to lower-paying tasks or receive lower ratings due to sexism.

### ***Unequal pay and difficult access to finance***

Gig work does not guarantee financial security since an oversupply of gig workers across the world not only makes gig work competitive but also exerts

downward pressure on compensation.<sup>42</sup> Over time, some gig workers can find themselves financially strained. In Singapore, for instance, many gig workers have reportedly drawn from their personal reserves since their expenses exceeded their income.<sup>43</sup>

Poor compensation can be exacerbated by gender pay gaps arising from occupational segregation. On average, female gig workers globally earn USD 10.50 per hour, 11 percent less than men (USD 11.80 per hour).<sup>44</sup> Various APEC economies mirror this pay gap. In Mexico, women receive only 71 percent of male earnings,<sup>45</sup> whereas in the United States, women earn 32 percent less than their male counterparts.<sup>46</sup> Lower pay limits women's financial resources, thereby restricting their ability to invest in equipment, education and skills. Feeling undervalued or unfairly treated also lowers morale, which discourages women from setting career and financial goals. This could also adversely impact women's productivity, efficiency and innovation. Persistent gender pay gaps can also reinforce societal stereotypes and norms on the value of work based on gender.

Apart from gender pay gaps, female gig workers can also face challenges in being financially included. Having an account with a bank or an alternative financial institution could open opportunities for female gig workers to access credit and loans. However, in the APEC region, laws that ensure women's full access to credit remain inadequate.<sup>47</sup> Only nine economies have laws that prohibit discrimination in credit access based on sex. Insufficient legislative support could slow down the momentum seen in APEC women's financial account ownership, which has improved from 59 percent in 2011 to 81 percent in 2021.<sup>48</sup> Furthermore, alternatives to conventional loans remain undeveloped. For instance, fintech innovations that offer products specific to women are in their infancy across emerging markets.<sup>49</sup> Notably, 13–18 percent of gig workers in some APEC economies expressed preference for gig work platforms to provide in-house credit lines.<sup>50</sup>

<sup>40</sup> APEC PSU calculations using data from the World Values Survey (accessed 6 October 2023).

<sup>41</sup> Andre Wirjo et al., "Artificial Intelligence in Economic Policymaking," Policy Brief 52, APEC PSU, 2022, [https://www.apec.org/docs/default-source/publications/2022/11/artificial-intelligence-in-economic-policy-making/222\\_psu\\_artificial-intelligence-in-economic-policy-making.pdf?sfvrsn=341777ad\\_2](https://www.apec.org/docs/default-source/publications/2022/11/artificial-intelligence-in-economic-policy-making/222_psu_artificial-intelligence-in-economic-policy-making.pdf?sfvrsn=341777ad_2)

<sup>42</sup> Datta et al., "Working Without Borders."

<sup>43</sup> See Kit Tang, "Gig Workers 'Most Financially Stretched' Group in Singapore; Spending Exceeds Income: DBS Study," CNA, 13 July 2023,

<https://www.channelnewsasia.com/singapore/gig-workers-most-financially-stretched-spending-exceeding-income-dbs-3626161>

<sup>44</sup> Digital Future Society, "Global Perspectives on Women."

<sup>45</sup> Datta et al., "Working Without Borders."

<sup>46</sup> ZenBusiness, "The Freelancer Pay Gap," c2022, <https://www.zenbusiness.com/freelancer-pay-gap/#:~:text=Key%20Findings,discrepancy%20was%20for%20DevOps%20Engineers>

<sup>47</sup> APEC, "The APEC Women and the Economy Dashboard" (Singapore: APEC, 2023), <https://www.apec.org/publications/2023/08/the-apec-women-and-the-economy-dashboard-2023>

<sup>48</sup> Asli Demirgüç-Kunt et al., "The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19" (Washington, DC: World Bank, 2022), <https://doi.org/10.1596/978-1-4648-1897-4>

<sup>49</sup> Nisha Singh and Gayatri Murthy, "On Gig Platforms, Women Workers Face Triple Barriers to Inclusion," 21 June 2023, <https://www.cgap.org/blog/on-gig-platforms-women-workers-face-triple-barriers-to-inclusion>

<sup>50</sup> Datta et al., "Working Without Borders."

### **Insufficient labour regulations and social protection coverage**

For gig workers, social protection is closely linked to how they are legally classified under labour laws. Since most gig workers are considered self-employed, they not only miss out on employer-linked benefits but can also be excluded from non-universal social security programmes just like informal workers. This exclusion can carry gender nuances. For example, even though both men and women in the gig economy do not enjoy maternity, paternity and parental leave, expecting mothers are at a greater disadvantage since paid maternity benefits are normally offered in traditional employment and are provided at a longer duration than paternity leave. Even among supplementary income earners that are possibly covered through their primary employer, women remain at a disadvantage since a lower proportion of females are employed in the traditional labour market to begin with. In 2022, APEC had an employment-to-population gender gap of 14.1 percentage points in favour of men.<sup>51</sup>

Apart from being excluded from social protection, female gig workers also face heightened exposure to sexual harassment and discrimination. This happens because most of the tasks done by female gig workers take place in intimate and vulnerable personal spaces, such as homes.<sup>52</sup> These spaces may be operationally outside the purview of regulators. Even ride-hailing cars could become vulnerable personal spaces, such as in China where female gig drivers experience gender discrimination from passengers.<sup>53</sup> Sadly, even those remotely performing tasks in their own home can be victims.<sup>54</sup>

Despite women's higher vulnerability, they remain largely left to fend for themselves since institutionalised support from either the platform or the government is generally absent or ineffective. In fact, female gig workers have often felt powerless and have been apprehensive to call out harassers since they fear retaliation through low ratings or complaints.<sup>55</sup> And those who do speak up

can find themselves experiencing a long and frightening ordeal, like in the case of Susan Fowler who bravely spoke about sexual misconduct in Uber.<sup>56</sup> It is unsurprising then that female-oriented gig platforms have joined the market.<sup>57</sup>

### **Policy Approaches to Empower Women in the Gig Economy**

Even though gig work attracts many people, the challenges outlined in the previous section can also drive them away. In fact, a survey of gig workers in the United States showed that 52 percent dropped out within a year and more women (62 percent) dropped out than men (54 percent).<sup>58</sup> This section provides a set of policy approaches that policymakers and other stakeholders can consider in order to address the challenges faced by female gig workers.

Indeed, the role of policy should be to reduce the precarity of women working in the gig economy by addressing discriminatory policies and attitudes, ensuring fair compensation and social protection, and providing training and upskilling, among others. It is equally vital to recognise that the classification and treatment of gig work continually evolves largely because of digitalisation, hence labour laws and regulations need to catch up and adapt to the changing nature of work arrangements. This evolution may require economies to re-examine the broader issues contributed by the rigidity of labour markets, such as the impact of hiring and firing practices on job opportunities.

Taking into account these factors, policymakers need to create an environment that embraces the flexibility inherent in the gig economy while, at the same time, safeguarding the well-being and rights of workers. Specifically, policy should gear toward providing social protection, either through the legal recognition of gig workers or alternative mechanisms. This approach requires labour markets to adapt to the distinctive characteristics of gig work, all while ensuring equitable treatment and

<sup>51</sup> APEC, "Enhanced APEC Agenda for Structural Reform (EAASR) Mid-Term Review Report" (Singapore: APEC 2023), [https://www.apec.org/publications/2023/10/enhanced-apec-agenda-for-structural-reform-\(eaasr\)-mid-term-review-report](https://www.apec.org/publications/2023/10/enhanced-apec-agenda-for-structural-reform-(eaasr)-mid-term-review-report)

<sup>52</sup> Naomi Schoenbaum, "Gender and the Sharing Economy," *Fordham Urban Law Journal* 43, no. 4 (2016), <https://ir.lawnet.fordham.edu/ulj/vol43/iss4/4>

<sup>53</sup> Haley Kwan, "Gendered Precarious Employment in China's Gig Economy: Exploring Women Gig Drivers' Intersectional Vulnerabilities and Resistances," *Gender & Development* 30, no. 3 (2022), <https://doi.org/10.1080/13552074.2022.2118464>

<sup>54</sup> Megan Carnegie, "The Gig Economy Is Much Worse for Women," *Wired*, 8 May 2023, <https://www.wired.co.uk/article/the-gig-economy-is-much-worse-for-women>

<sup>55</sup> Ning Ma and Dongwook Yoon, "Delay and Deflect: How Women Gig Workers Respond to Sexual Harassment," *Beyond*, c2022, <https://beyond.ubc.ca/how-women-gig-workers-respond-to-sexual-harassment/>

<sup>56</sup> Susan Fowler, "I Spoke Out against Sexual Harassment at Uber. The Aftermath Was More Terrifying than Anything I Faced Before," *Time*, 17 February 2022, <https://time.com/5784464/susan-fowler-book-uber-sexual-harassment/>

<sup>57</sup> Schoenbaum, "Gender and the Sharing Economy."

<sup>58</sup> Diana Farrell and Fiona Greig, "The Online Platform Economy: Has Growth Peaked?" SSRN, 15 November 2017, <http://dx.doi.org/10.2139/ssrn.2911194>



robust protection for gig workers, particularly women.

### **Support behaviour modification to overcome socio-cultural gender biases**

Countering gender biases at home and in the workplace, regardless of the setting, is an ongoing process that requires commitment and effort from individuals, communities and institutions. Recognising that gender biases start at home and are amplified by society is the necessary first step.

Education, in tandem with media attitudes and public information campaigns, can play a critical role in promoting awareness about gender biases and its harmful and perpetuating impacts on individuals and societies. The education curriculum could integrate gender equality perspectives to guide mindsets and behaviours, especially among young people. Campaigns that use statistics and real-life everyday stories and examples could illustrate gender biases and stereotypes prevailing in households and communities.

In parallel, workplace policies should be supportive, with paid maternity, paternity and parental leave as well as flexible work arrangements to recognise that raising a family is a shared responsibility.<sup>59</sup> Local communities and authorities can further encourage women's greater participation in economic activity through the establishment of affordable, safe and decent childcare facilities.

### **Play an active role in regulating gig work**

Gig platforms remain largely unchecked to the detriment of gig workers' welfare. Regulators could play a more proactive role here.

One area that needs attention is algorithmic bias and opacity in gig platforms. To address this, platforms would need to develop algorithms responsibly, collect diverse and inclusive data, and monitor the system to rectify gender biases and algorithmic mismanagement that could take away gig workers' flexibility, autonomy and opportunities.

Another area is sexual harassment and discrimination. On security for female gig workers within intimate and vulnerable spaces, for instance, platforms can begin by adopting well-crafted occupational safety and health protocols. On

discrimination issues, platforms can reconfigure performance rating systems by adjusting how performance ratings affect job assignments and continuity, or by giving gig workers the opportunity to dispute or explain themselves to a real person rather than a chatbot.<sup>60</sup>

Regulators can serve as a watchdog to ensure that platforms comply with these changes and implement proper safeguards. In addition, regulators can be avenues for gig workers' grievances, acting as arbiters in lieu of (or together with) gig workers' collective representation. Regulators can also require gig work platforms to establish an effective system for female gig workers to safely voice their concerns.

### **Improve access to financial resources**

Access to financial resources allows women to actively participate in the gig economy by enabling them to purchase digital devices and internet connections and to upgrade their skills or undergo training. Behind women's access to finance and credit is a gamut of discriminatory laws and attitudes that would need to be addressed.

At the same time, having laws mandating equal rights to property and inheritance, equal pay for women and men doing similar work, as well as non-discrimination in credit access based on gender, are not sufficient in themselves. These laws need to be accompanied by a change in attitude to widen women's access to financial resources. For example, in Indonesia, men are three times more likely than women to own immovable property that they can use as collateral; and even where a woman owns land or a house, the title deed is not in the woman's name.<sup>61</sup>

Having laws in place also does not guarantee greater access to credit. Financial institutions evaluate the creditworthiness of potential borrowers using various criteria other than having collateral, such as familiarity with the customer based on previous interactions, the quality of the business plan and the borrower's history of loan repayments. Policymakers can help women build their credit history by supporting platforms that generate and use alternative data (e.g., app interactions, smartphone model, mobile bill

<sup>59</sup> APEC, "The APEC Women and the Economy Dashboard" (Singapore: APEC, 2023), <https://www.apec.org/publications/2023/08/the-apec-women-and-the-economy-dashboard-2023>

<sup>60</sup> Ngai Keung Chan, "Algorithmic Precarity and Metric Power: Managing the Affective Measures and Customers in the Gig Economy," *Big Data & Society* 9, no. 2 (2022), <https://doi.org/10.1177/20539517221133779>

<sup>61</sup> APEC, "Structural Reform Measures to Improve Women's Access to Labor Market, Finance and Capital" (Singapore: APEC, 2019), <https://www.apec.org/publications/2019/10/structural-reform-measures-to-improve-womens-access-to-labor-markets-finance-and-capital>

payment history) to evaluate the creditworthiness of a person.<sup>62</sup>

### **Consider accessible social protection for female gig workers**

Regardless of whether economies define gig workers as employees or recognise them as intermediate categories or an entirely new segment altogether, the legal ambiguity of gig workers should not deprive them of basic labour rights, such as social protection coverage.

However, unilaterally providing social protection and health coverage would be a cost burden on gig work platforms. Recognising this, policymakers may consider alternative social protection mechanisms. For example, a voluntary matching contribution system that governments can co-fund may be beneficial for gig workers engaged solely in platform work. In cases where individuals are financially strapped, governments may choose to fully subsidise contributions.<sup>63</sup>

Perhaps, more creatively, economies can consider establishing a dedicated provident fund (co-funded by the government, the gig platform and/or the gig worker) to ensure that expecting mothers have access to maternity and/or parental leave benefits. Likewise, providing access to healthcare services through public or private insurance systems or government-funded healthcare programmes is a critical component of social protection systems to ensure the well-being of women and their households.

Policymakers can also consider extending social assistance in the form of free or subsidised use of decent childcare facilities or equipment needed for gig work. Economies with enough fiscal space may even consider income tax reliefs of a certain threshold specifically catered to female gig workers. This not only recognises that female gig workers experience gender pay gaps amid lower-paying tasks but may also encourage them to register under social registries without fear of incurring liabilities.

### **Provide targeted learning opportunities and skills development training**

Skills development training remains important and includes both reskilling and upskilling. In fact, 21–37 percent of gig workers in various APEC economies want gig platforms to provide access to training, more than any other benefit.<sup>64</sup>

<sup>62</sup> Andre Wirjo, Sylwyn Calizo Jr and Rodrigo Balbontín, “Stepping Outside the Shadows: Informality and Digitalisation,” Policy Brief 44, APEC PSU, 2022, <https://www.apec.org/docs/default-source/publications/2022/4/stepping-outside-the-shadows->

Educators can start by targeting certain skills. For example, female gig workers in Workana identified price negotiation, proficiency in local language, client management, self-confidence and communication skills as what they need most to succeed in their work.<sup>65</sup> Better access to learning opportunities can benefit female gig workers, particularly training in advanced technology skills, which would enable them to take higher paying tasks.

Furthermore, gig workers normally do not have access to mentors who can impart experience and guidance. Policymakers can help gig workers connect with mentors by organising networking events or community forums. Moreover, since men and women face different realities, it may be relevant to form support communities that consider the conditions faced by women, including the unequal share of caregiving and domestic responsibilities.

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[informality-and-digitalisation/222\\_psu\\_informality-and-digitalisation.pdf?sfvrsn=80c289d1\\_2](https://www.apec.org/docs/default-source/informality-and-digitalisation/222_psu_informality-and-digitalisation.pdf?sfvrsn=80c289d1_2)

<sup>63</sup> Datta et al., “Working Without Borders.”

<sup>64</sup> Datta et al., “Working Without Borders.”

<sup>65</sup> Datta et al., “Working Without Borders.”

## Appendix A. Sources by Economy

Economy	Prevalence of gig work	Prevalence of female gig work
<b>Australia</b>	Actuaries Institute, "The Rise of the Gig Economy and Its Impact on the Australian Workforce," Green Paper, 2020, <a href="https://actuaries.asn.au/Library/Opinion/2020/GPGIGEC_ONOMYWEBtest.pdf">https://actuaries.asn.au/Library/Opinion/2020/GPGIGEC_ONOMYWEBtest.pdf</a>	APEC Policy Support Unit (PSU) calculations using data from the International Labour Organization (ILO).
<b>Brunei Darussalam</b>	APEC PSU calculations using data from the ILO.	APEC PSU calculations using data from the ILO.
<b>Canada</b>	H&R Block Canada, "Nearly Half (44%) of Canadian Gig Workers Are Willing to Risk Not Declaring Income in the Battle against Cost-of-living Increases; 51% Say Their Primary Employer Is Unaware of Their Side Hustle," Cision, 2 March 2023, <a href="https://www.newswire.ca/news-releases/nearly-half-44-of-canadian-gig-workers-are-willing-to-risk-not-declaring-income-in-the-battle-against-cost-of-living-increases-51-say-their-primary-employer-is-unaware-of-their-side-hustle-851122246.html">https://www.newswire.ca/news-releases/nearly-half-44-of-canadian-gig-workers-are-willing-to-risk-not-declaring-income-in-the-battle-against-cost-of-living-increases-51-say-their-primary-employer-is-unaware-of-their-side-hustle-851122246.html</a>	Payments Canada, "Online Platforms and Mobile Apps Frustrate Canadian Gig Workers when It Comes to Pay Day, Reveals New Payments Canada Study," 3 May 2023, <a href="https://www.payments.ca/online-platforms-and-mobile-apps-frustrate-canadian-gig-workers-when-it-comes-pay-day-reveals-new">https://www.payments.ca/online-platforms-and-mobile-apps-frustrate-canadian-gig-workers-when-it-comes-pay-day-reveals-new</a>
<b>Chile</b>	LEAS, "Radiografía a los trabajadores de plataformas digitales [X-Rays for Digital Platform Workers]," Policy Brief, 2022, <a href="https://leas.uai.cl/2022/09/21/radiografia-a-los-trabajadores-de-plataformas-digitales/">https://leas.uai.cl/2022/09/21/radiografia-a-los-trabajadores-de-plataformas-digitales/</a>	APEC PSU calculations using data from the ILO.
<b>China</b>	Kelsey Cheng, Ruiyang Yuan and Cong Guan, "China's Gig Workers Give Policymakers a Dilemma," <i>Nikkei Asia/Caixin</i> , 28 August 2021, <a href="https://asia.nikkei.com/Spotlight/Caixin/In-depth-China-s-gig-workers-give-policymakers-a-dilemma">https://asia.nikkei.com/Spotlight/Caixin/In-depth-China-s-gig-workers-give-policymakers-a-dilemma</a>	China Labor Watch, "Women Workers in China during the Covid-19 Pandemic" (China Labor Watch, 2022), <a href="https://chinalaborwatch.org/women-workers-in-china-during-the-covid-19-pandemic/">https://chinalaborwatch.org/women-workers-in-china-during-the-covid-19-pandemic/</a>
<b>Hong Kong, China</b>	Legislative Council, "Protection of Labor Rights of 'Gig Workers' in Selected Places," Information Note, 2020, <a href="https://www.legco.gov.hk/research-publications/english/1920in10-protection-of-labour-rights-of-gig-workers-in-selected-places-20200526-e.pdf">https://www.legco.gov.hk/research-publications/english/1920in10-protection-of-labour-rights-of-gig-workers-in-selected-places-20200526-e.pdf</a>	APEC PSU calculations using data from the ILO.
<b>Indonesia</b>	Muhammad Yorga Permana and Nabiyla Risfa Izzati, and Media Wahyudin Askar, "Measuring the Gig Economy in Indonesia: Typology, Characteristics, and Distribution," SSRN, 6 February 2023, <a href="https://ssrn.com/abstract=4349942">https://ssrn.com/abstract=4349942</a>	Muhammad Yorga Permana and Nabiyla Risfa Izzati, and Media Wahyudin Askar, "Measuring the Gig Economy in Indonesia: Typology, Characteristics, and Distribution," SSRN, 6 February 2023, <a href="https://ssrn.com/abstract=4349942">https://ssrn.com/abstract=4349942</a>
<b>Japan</b>	Lyra Clavecilla, "How Gig Economy Is Changing the Traditional Work Setup in Japan: The Impact and Opportunities of the Gig Economy in Japan," SME Japan, 2023, <a href="https://www.smejapan.com/business-news/how-gig-economy-is-changing-the-traditional-work-setup-in-japan/">https://www.smejapan.com/business-news/how-gig-economy-is-changing-the-traditional-work-setup-in-japan/</a>	APEC PSU calculations using data from the ILO.
<b>Korea</b>	L. Yoon, "Number of Gig Economy Workers South Korea 2022, by Gender," Statista, 19 June 2023, <a href="https://www.statista.com/statistics/1334051/south-korea-number-of-gig-workers-by-gender/">https://www.statista.com/statistics/1334051/south-korea-number-of-gig-workers-by-gender/</a>	L. Yoon, "Number of Gig Economy Workers South Korea 2022, by Gender," Statista, 19 June 2023, <a href="https://www.statista.com/statistics/1334051/south-korea-number-of-gig-workers-by-gender/">https://www.statista.com/statistics/1334051/south-korea-number-of-gig-workers-by-gender/</a>
<b>Malaysia</b>	Joelle Pang, "In Support for Better Protection for Gig Workers," <i>New Straits Times</i> , 22 June 2023, <a href="https://www.nst.com.my/opinion/letters/2023/06/922968/support-better-protection-gig-workers#:~:text=According%20to%20a%20study%20conducted,engaged%20in%20the%20gig%20economy">https://www.nst.com.my/opinion/letters/2023/06/922968/support-better-protection-gig-workers#:~:text=According%20to%20a%20study%20conducted,engaged%20in%20the%20gig%20economy</a>	Nurfarahin Harun, Noraliza Mohamad Ali, and Nur Layali Mohd Ali Khan, "An Experimental Measure of Malaysia's Gig Workers Using Labour Force Survey" (2020 <i>Asia-Pacific Statistics Week</i> , Bangkok, 15–19 June 2020), <a href="https://www.unescap.org/sites/default/files/APS2020/64_An_Experimental_Measure_of_Malaysia_Gig_Workers_Using_Labour_Force_Survey.pdf">https://www.unescap.org/sites/default/files/APS2020/64_An_Experimental_Measure_of_Malaysia_Gig_Workers_Using_Labour_Force_Survey.pdf</a>
<b>Mexico</b>	Melina Cruz Villafaña, "The Future of the Gig Economy," <i>Mexico Business</i> , 6 May 2022, <a href="https://mexicobusiness.news/professional-services/news/future-gig-economy#:~:text=In%20Mexico%2C%20according%20to%20Forbes,US%24335%20billion%20in%202025">https://mexicobusiness.news/professional-services/news/future-gig-economy#:~:text=In%20Mexico%2C%20according%20to%20Forbes,US%24335%20billion%20in%202025</a>	Namita Datta et al., "Working Without Borders: The Promise and Peril of Online Gig Work" (Washington, DC: World Bank, 2023), <a href="http://hdl.handle.net/10986/40066">http://hdl.handle.net/10986/40066</a>
<b>New Zealand</b>	Stats NZ Tatauranga Aotearoa, "One in 20 Employed New Zealanders Are Contractors," 1 July 2019, <a href="https://www.stats.govt.nz/news/one-in-20-employed-new-zealanders-are-contractors">https://www.stats.govt.nz/news/one-in-20-employed-new-zealanders-are-contractors</a>	...
<b>Papua New Guinea</b>	...	...
<b>Peru</b>	APEC PSU calculations using data from the ILO.	APEC PSU calculations using data from the ILO.
<b>The Philippines</b>	GCash and Payoneer, "The Philippines Freelance Market 2022 Report" (Payoneer, 2022), <a href="https://pubs.payoneer.com/docs/payoneer-gcash-philippines-freelance-report-2022.pdf?utm_source=media&amp;utm_medium=community">https://pubs.payoneer.com/docs/payoneer-gcash-philippines-freelance-report-2022.pdf?utm_source=media&amp;utm_medium=community</a>	Namita Datta et al., "Working Without Borders: The Promise and Peril of Online Gig Work" (Washington, DC: World Bank, 2023), <a href="http://hdl.handle.net/10986/40066">http://hdl.handle.net/10986/40066</a>
<b>Russia</b>	APEC PSU calculations using data from the ILO.	APEC PSU calculations using data from the ILO.

Economy	Prevalence of gig work	Prevalence of female gig work
<b>Singapore</b>	Blackbox, "Inside the Singapore Gig Economy: Exploring Delivery Riders' Perspectives" (Singapore: Blackbox, 2022), <a href="https://blackbox.com.sg/wp-content/uploads/2022/04/Blackbox-Research-Whitepaper-Inside-the-Singapore-Gig-Economy.pdf">https://blackbox.com.sg/wp-content/uploads/2022/04/Blackbox-Research-Whitepaper-Inside-the-Singapore-Gig-Economy.pdf</a>	APEC PSU calculations using data from the ILO.
<b>Chinese Taipei</b>	APEC PSU calculations using food delivery riders data from Chinese Taipei's Ministry of Labor (accessed 25 January 2024)	...
<b>Thailand</b>	Kunyaruk Naiyaraksaree, "The Perks of Being a Gig Worker," SCB Economic Intelligence Center, 7 November 2017, <a href="https://www.scbeic.com/en/detail/product/4137">https://www.scbeic.com/en/detail/product/4137</a>	APEC PSU calculations using data from the ILO.
<b>United States</b>	McKinsey & Company, "Freelance, Side Hustles, and Gigs: Many More Americans Have Become Independent Workers," 23 August 2022, <a href="https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/future-of-america/freelance-side-hustles-and-gigs-many-more-americans-have-become-independent-workers">https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/future-of-america/freelance-side-hustles-and-gigs-many-more-americans-have-become-independent-workers</a>	Isabel Soto and Isabella Hindley, "Women in the Gig Economy," American Action Forum, 21 April 2021, <a href="https://www.americanactionforum.org/insight/women-in-the-gig-economy/">https://www.americanactionforum.org/insight/women-in-the-gig-economy/</a>
<b>Viet Nam</b>	Quynh Nguyen, "Freelancing Becomes Increasingly Popular among Professionals," <i>VnExpress</i> , 6 December 2022, <a href="https://e.vnexpress.net/news/trend/freelancing-becomes-increasingly-popular-among-professionals-4544186.html#:~:text=It%20found%20that%2014%25%20work,of%20VnExpress%20showed%20similar%20results">https://e.vnexpress.net/news/trend/freelancing-becomes-increasingly-popular-among-professionals-4544186.html#:~:text=It%20found%20that%2014%25%20work,of%20VnExpress%20showed%20similar%20results</a>	APEC PSU calculations using data from the ILO.