GIG ECONOMY WORK: MIND THE PROTECTION GAPS

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1. EXECUTIVE SUMMARY

Today's workers increasingly offer their services through gig economy platforms, i.e. digital platforms that match workers to customers on a per-service ("gig") and on demand basis. Even though rapidly growing, the share of primary work (accounting for the main source of workers' income) intermediated through digital platforms is still relatively small, accounting for about 3 percent (8 million people)[1] and 1.5 percent (7 million people)[2] of the adult population in the US and EU, respectively. In the US and the EU, digital labor platforms generate total revenues of an estimated US$ 35 billion and US$ 15 billion, respectively.[3] Assuming an average commission rate of 20 percent, gig platform worker income in the US and the EU would amount to about US$ 200 billion after commissions.

It is undisputed that work intermediated through digital labour platforms offers major benefits to both workers and their customers. However, social protection coverage of gig economy platform workers is low. Coverage shortfalls are even more serious in developing economies, where gig workers frequently do not meet eligibility requirements for statutory access to benefits schemes for available to salaried workers, due to insufficient contribution periods. In most developing countries, self-employed workers are also not covered at all by social insurance systems, and may only be covered voluntarily and partially.

From a gig worker's perspective, protection gaps in case of a calamity present themselves as the difference between needed resources (covering unexpected additional expenses or foregone income, for example) and available resources (e.g. savings and insurance coverage). There is a broad consensus in the relevant literature that income replacement in the event of illness and disability is the most acute protection gap facing platform workers. With relatively low and irregular income, they are also

[1] *Pew Research Center 2021*
[2] *PPMI 2021*
[3] *ILO 2021a and PPMI 2021*

exposed to financial stress arising from (unexpected) medical expenses. This problem is particularly serious in countries where access to health insurance is tied to salaried employment.

Most relevant for this book, low and irregular levels of income make it challenging for gig workers to accumulate retirement savings, be it through statutory contributions or individual savings plans. In many countries, current pension systems are based on formal, regular employment structures and do not adequately capture the increasingly large numbers of those who fall outside these arrangements. A global survey (encompassing both advanced and emerging economies) conducted by the International Labour Organization (ILO) found that only 35 percent of all gig economy platform workers had a (private or public) pension or retirement plan. Again, the problem is most acute in developing countries, both as a result of institutional shortcomings and affordability issues.

In Africa, nearly 85 percent of employment is informal.[4] Only around 18% of the population has access to any form of social security.[5] As a result, there is a huge pension protection gap, too, in Africa. The prevalence of the informal economy hinders the development of private pension funds and in 2017, only 3 countries in the continent offered savings-led pension schemes based on privately managed funds.[6] Furthermore, excluding South Africa, life insurance penetration in Africa remains one of the lowest in the world.[7]

African countries currently experience a lower participation in digital work compared to other emerging countries,[8] but an estimated 4.8 million workers have already performed various types of gig economy tasks in just seven countries in Africa.[9] Some estimates project that by 2030 the number of platform workers in Africa could reach 80 million.[10] In South Africa, for example, platform work already involves at least one percent of the workforce.[11] Overall, in Africa as well, there is a general lack

[4] *ILO 2022a*
[5] *ISSA 2021*
[6] *Sy 2017*
[7] *AIO & Faber Consulting 2021*
[8] *IOE-WEC 2021*
[9] *Anwar and Graham 2022*
[10] *Mastercard Foundation 2019*
[11] *FairWork 2022a*

of legislation concerning gig laborers, thus leaving them less protected than their formal counterparts. Most of the relevant initiatives are left in the hands of private actors.

In light of these massive coverage gaps, global society is faced with the challenge of how to ‘organize’ protection for gig economy platform workers. Options include general taxation, social insurance and private insurance. Non-contributory, tax-financed social protection mechanisms are considered essential to providing at least a basic level of protection for all residents of a country, including those who are not (sufficiently) covered by contributory social insurance schemes. Social protection is extended independent of employment status. Enlarging risk pools through social insurance is another way for governments to protect their citizens from hazards that can prove financially ruinous. However, social insurance coverage of platform workers who are classified as self-employed is limited or even non-existent in most developing countries. Therefore, private (pension) insurance has an important role to play in complementing or even replacing public schemes.

Meeting gig worker needs requires traditional insurers to adopt innovation across key links of their value chain, such as embedding marketing activities into platform apps, designing flexible on-demand coverage that can be activated and deactivated, automating the process through which insurance policies are sold online or via mobile through platform apps, harnessing the ubiquity of smart-phone based real-time data to address specific underwriting challenges presented by the risk profile of many gig workers, and automating straight-through mobile processing for basic claims.

Against this backdrop, this chapter offers specific recommendations for governments, regulators, gig platforms, pension providers and insurers.

2. INTRODUCTION

Today's workers increasingly offer their services through gig economy platforms. They are defined as two-sided digital platforms that match workers to customers on a per-service ("gig") and on demand basis.[12]

For the US, a recent estimate puts the size of the total independent workforce (including non-platform-based work) at 57 million workers over age 18, compared with 155 million Americans who work exclusively in more traditional (salaried) jobs.[13] Whereas the total number of freelancers grew only modestly (from 54 million in 2014) the share of full time freelancers increased more markedly from 10 million to 16 million in 2019.[14]

Focusing on the share of work intermediated through gig economy platforms, i.e. the segment which dominates the public debate on working conditions and protection gaps, yields considerably smaller numbers, with those platforms estimated to host about 8 million workers across the US and 7 million in the European Union, corresponding to 3 percent and 1.5 percent, respectively, of the adult population. These numbers capture only those gig workers who derive their primary income from gig platform work.[15]

The perception of the gig economy is mixed. Freelancing workers can no longer rely on an employer to contribute to their pension and health care, for example. From this perspective, the gig economy and the associated fragmentation of employment promotes insecurity and the erosion of workers' rights, for instance due to a lack of transparency and predictability in working conditions, health and safety challenges as well as social protection gaps. Independent workers often struggle to earn a decent income, exposing them to precarity of work or even poverty.[16]

[12]OECD 2019a

[13]Upwork 2019. Note that for 60% of US freelancers independent work is the sole source of income. 40% retain one or more traditional salaried jobs while freelancing to earn supplemental income. In the EU, according to Huws et al 2017, platform work was the sole source of income for only about 10% of platform workers. This suggests that platform work is more ‚occasional' in nature than freelance work more generally.

[14]Ibid. However, the global share of 'own-account' work in total employment is eroding, especially in high-income countries (ILO 2020). See section 3.2 of this report.

[15]Pew Research Center 2021 and PPMI 2021

[16]European Parliament 2017, Behrendt et al 2019 and Bieber and Moggia 2021

On the other hand, there are compelling benefits that (platform-based) gig work brings to the economy. The algorithms that underpin gig work platforms improve the "matching" between giggers and jobs. Workers also benefit from improved scheduling flexibility and convenience. Also, gig platforms allow individuals to top up income or smoothen earnings. By lowering entry barriers they can also create additional jobs and income for people who may find it difficult to access the traditional labour market.[17]

On the other hand, the pandemic has also highlighted the vulnerability of gig workers which might dampen the future growth of platform work.[18]

From a social protection point of view, the rise of the gig economy presents serious challenges that require and are increasingly getting the attention of gig economy platform workers, policymakers, platforms, pension funds and insurers alike.[19] Gig workers assume multiple types or levels of personal risk generally unseen in more traditional labour markets. With little personal savings and access to traditional employee benefits like disability protection, paid sick leave, worker's compensation or pension contributions, giggers are particularly vulnerable to loss of income due to sickness, accidents or disability.[20]

Against this backdrop, this chapter explores key drivers of independent work, covering demographic, economic, technological and legal/regulatory changes. Second, our research offers an examination and classification of (new) protection gaps exposed by gig economy platform work, from rising income volatility to insufficient pension savings. Third, we explore insurers' potential contribution to mitigating those emerging risk exposures, primarily through innovation across the entire insurance value chain. Finally, we put forward recommendations for governments, pension funds, insurers and platforms which could form the basis for a new social contract for gig economy platform workers and new future forms of work more generally.

[17]Bieber and Moggia 2021

[18]Lazard 2019

[19]Behrendt et al 2019

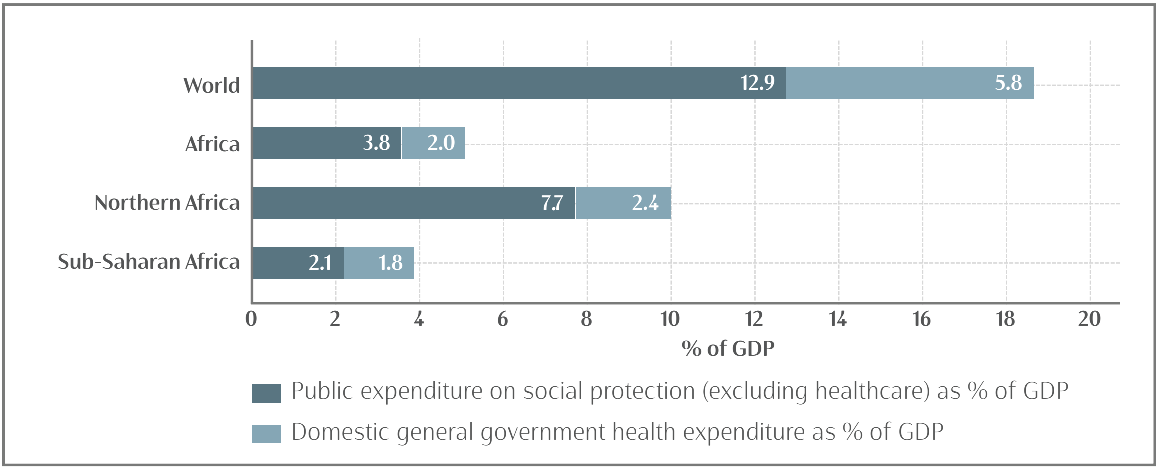
[20]However, alternatives such as unemployment may be associated with even higher degrees of vulnerability. In addition, gig platform workers have the option of working for several platforms which reduces the risk of unemployment due to redundancy or company failure.

3. RELEVANCE FOR THE AFRICAN CONTINENT

Nearly 85 percent of employment in Africa is informal,[21] while almost 90 percent of the continent's social security systems are contributory schemes.[22] Therefore, with private sector solutions largely absent, only around 18 percent of the population has access to any form of social security.

In Africa, public expenditure on social protection is less than 6%, or just a third of the global average (Figure 1)[23] As a result, there is a huge pension protection gap in Africa. The safety nets of African countries only cover a very small share of the vulnerable population (i.e., those living in extreme and chronical poverty), and existing public programs are often non-targeted, adding further strain to public budgets.[24]

Figure 1: Public social protection expenditure (excluding health) as a % of GDP



Source: ILO 2022b

The prevalence of the informal economy hinders the development of private pension funds and in 2017, only 3 countries on the continent offered savings-based pension schemes based on privately managed funds.[25] Furthermore, excluding South Africa, life insurance penetration in Africa remains one of the lowest in

[21] ILO 2022a
[22] ISSA2021
[23] ILO 2022b
[24] Monchuk, 2013
[25] Sy 2017

the world,[26] thus excluding people from the utilization of these instruments for their savings and pensions.

African countries currently experience a lower participation in digital work compared to other emerging countries,[27] but an estimated 4.8 million workers have already performed various types of gig economy tasks in just seven countries in Africa.[28]

A great obstacle to the expansion of platform work is the low internet penetration in the continent that, although constantly rising,[29] is still the lowest in the world. Despite these challenges, some estimates project that by 2030, the number of platform workers could reach 80 million,[30] highlighting how gig-working could be one of the best opportunities to lift people from destitute poverty. This is especially true in the wake of the global pandemic, the negative effects of which on employment have been much more severe in sub-Saharan Africa than the rest of the world.[31]

For example, in South Africa, where more data is available, platform work already involves at least one percent of the workforce. Similarly, in Egypt, with this number growing by more than 10 percent annually; there are estimated to be almost 200,000 Uber drivers in Egypt alone.[33] Furthermore, the 35,000 workers in the Kenyan gig economy in 2019 are expected to grow to almost 100,000 by 2023[34] Also, platform work has generated livelihoods for an estimated 60,000 to 100,000 Ghanaians.[35]

While gig work is not at the top of policymakers' and regulators' agenda in Africa,[36] there have been calls to action to protect African platform workers. In Ghana, pensions for informal workers are gaining traction,[37] and some platform companies in Tanzania provide employment benefits or social security protection to its workers.[38] However, there is a general lack of legislation concerning gig laborers thus leaving them less protected than

[26]AIO & Faber Consulting 2021
[27]IOE-WEC 2021
[28]Anwar and Graham 2022
[29]World Bank 2022
[30]Mastercard Foundation 2019
[31]Contreras-Gonzalez, 2022
[32]FairWork 2022
[33]FairWork 2021a
[34]FairWork 2021b
[35]FairWork 2021c
[36]Ro 2022
[37]BII 2017
[38]Mercy Corps 2020

their formal counterparts, and most of the relevant initiatives are left in the hands of private actors.

In addition to this, gig-workers in many African states have become part of the tax-base, with digital and sales taxes under discussion, thus impacting their earnings while still being short of social protection.[39] Despite this, there are some signs of litigation on the continent, and the worldwide push towards recognizing platform workers as full employees may well impact the African market as well.

Finally, on a broader note, the theme of platform work raises the issue of labour conditions and the right to decent work in Africa: in fact, some have expressed worries that the gig-economy, while increasing job opportunities, may just be "more of the same", meaning that without universal improvements in workers' rights the gig-economy system may remain prone to abuse and unfair conditions for its participants.[40]

4. THE CHANGING NATURE OF WORK

4.1. Global employment at a glance

According to the International Labour Organization (ILO) 53 percent of people in employment globally are salaried workers, 34 percent self-employed (own-account) workers, 11 percent contributing family members[41] and 3 percent employers (see figure 1). Eighty-five percent (85%) of own-account workers belong to the informal sector,[42] with no access to social protection whatsoever. As figure 1 demonstrates, there is a clear correlation between an economy's stage of development and its share of salaried workers. By the same token, the lower the income per capita, the higher the share of own-account workers.

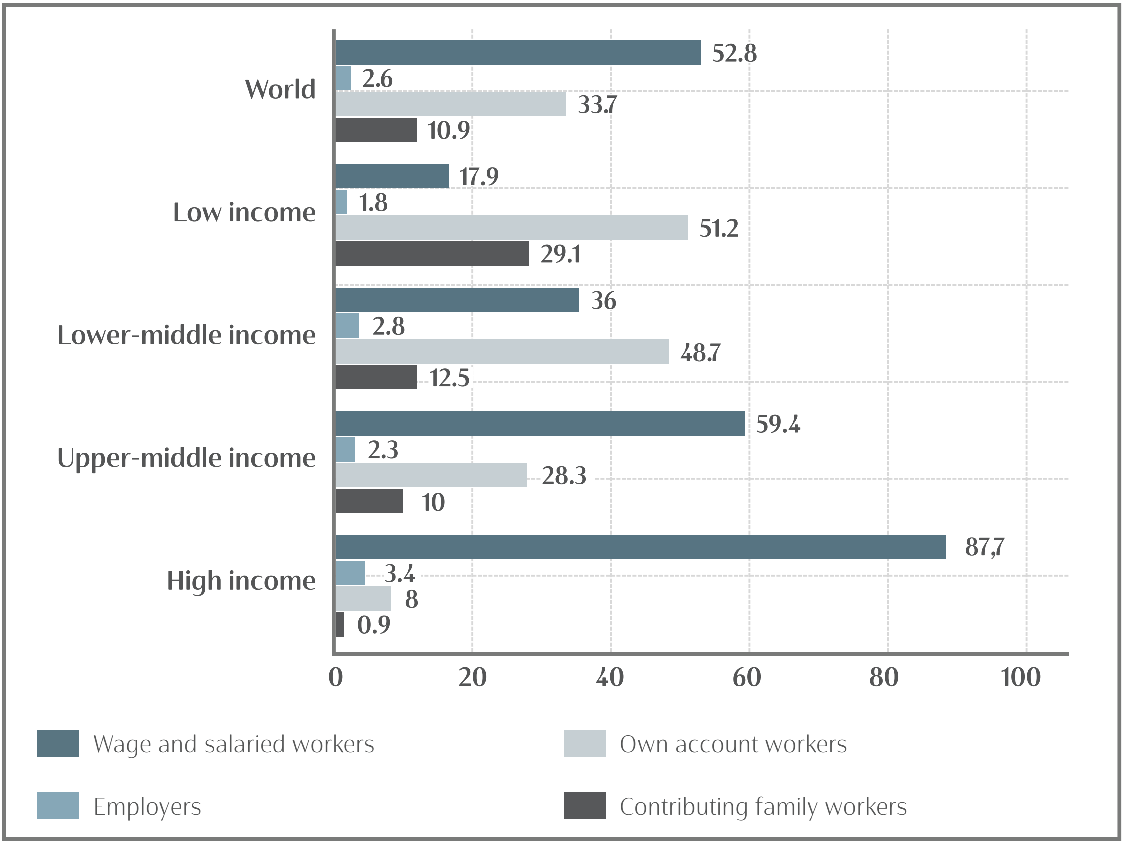
[39] Mercy Corps 2020

[40] Hunt & Samman, 2020

[41] Contributing family workers are considered informal workers by definition, lacking effective access to social protection and income security

[42] ILO 2018a

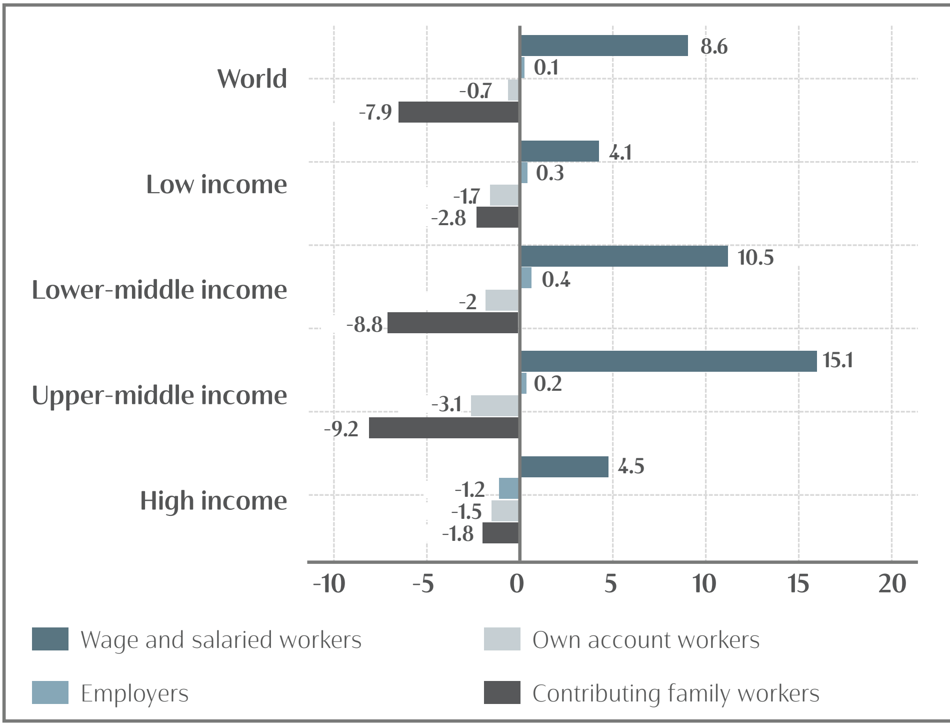
Figure 2: Employment status (2019, percentages of total labour force)



Source: ILO 2020

Figure 2 reveals that over the past three decades, the world has witnessed a significant increase in salaried work, the share of which in global employment has expanded by almost 9 percentage points. Upper-middle income countries stand out with a gain of 15 percentage points, testifying to the rapid formalisation of labour markets. The share of own-account workers has eroded slightly, shedding one percentage point, whereas the share of contributing family members has declined sharply by eight percentage points, largely driven by massive welfare gains in upper-middle income countries and a corresponding lower need for family member contributions.

Figure 3: Employment status (change from 1994 to 2019, percentages of total labour force)



Source: ILO 2020

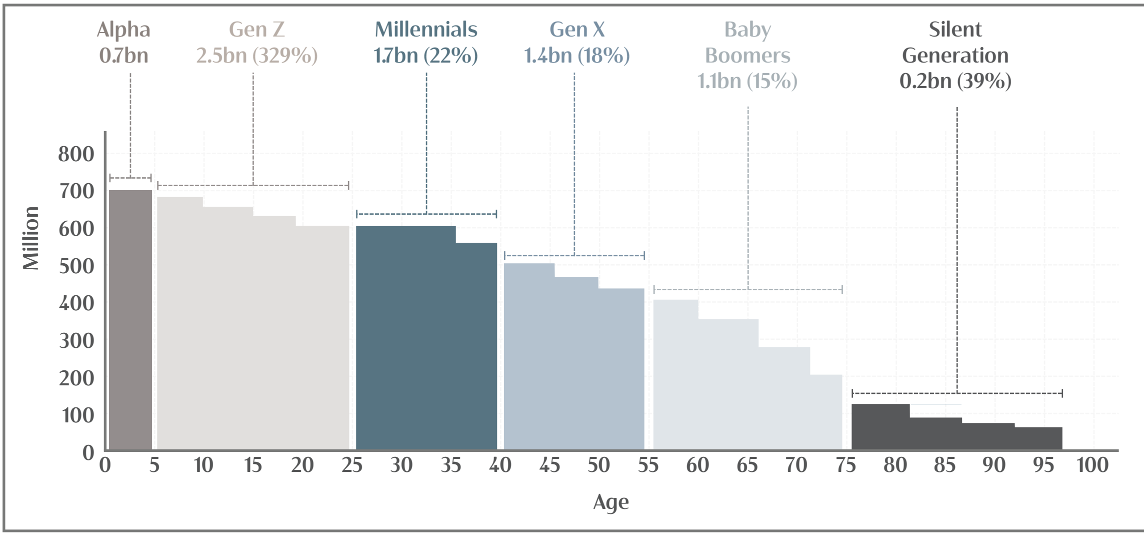
4.2. The determinants of current working patterns and preferences – A generational perspective

In addition to a country's economic stage of development, a host of more granular trends determine its nature of work. Those have an effect on what kind of work is done, who does it, and where and how it is carried out. In the following, we will focus on demographic, economic, technological and legal/regulatory forces which shape the world of work, and are closely intertwined.

One of the most momentous recent developments is a major global demographic shift: The Millennial Generation (born between 1981 and 1996) and Generation Z (born after 1997) now account for the majority of the global population (see figure 3).[43]

[43] *Schroders 2021*

Figure 4: The global population by generation (2019)



Source: Schroders 2021, based on UN 2019

For Generation Z, technology is arguably the most relevant determinant of work preferences. They have grown up with the internet and interacting online comes naturally to them.[44]

4.3. Gig economy platform work – The evidence so far

Against this backdrop of political, economic, societal and technological forces, independent work via gig economy platforms is a phenomenon that attracts increasing attention. It has become common in several sectors, including transportation and delivery (e.g. a Lyft or Deliveroo driver) and many forms of digital work (e.g. a computer programmer or translator offering her services through Upwork). Such work typically exhibits the following four broad organisational features:

- Work is carried out on an on-demand or as-needed basis;
- Workers are paid for each discrete task or unit of output, not for their time;

[44] *Hays 2021*

- Workers have to supply their own capital equipment (e.g. their home or car); and
- The entity organising the work is distinct from the end-user or final consumer of the product or service. This creates a triangular relationship between the producer, the end-user and the intermediating platform.[45]

Traditional statistical methods used in labour market surveys do not fully capture gig economy platform work. Statistical offices typically do not use specifically-designed surveys. Therefore, existing estimates are generally based on ad-hoc surveys conducted by researchers or private businesses. Such ad-hoc surveys need to be viewed with caution as they raise a number of representativeness, reliability and comparability issues.[46] According to some of the more reliable research-based surveys, gig economy platforms host a total of 15 million workers in the US and the EU, slightly more than 2% of those countries' adult population.[47]

An analysis of US data from bank accounts suggests that gig economy platform work has been growing fast since 2012: The number of households who received income from gig economy platforms increased from virtually none to more than one million (more than 1%) over the 2012-2018 period.[48]

Figure 4 shows that, based on data from the five largest English-language online web-based platforms (freelancer.com, guru.com, mturk.com, peopleperhour.com, upwork.com), labour supply, measured as the number of registered workers (covering 105 countries) on these platforms had tripled from 2017 to early 2020. Supply fell sharply during the first few months of the pandemic (primarily reflecting the collapse in demand for transportation services) and has now returned to a path of (moderate) growth.[49] Labour demand, on the other hand, described through the number of public projects and tasks that are posted by clients, is much

[45] Stanford 2017

[46] Abraham et al 2018

[47] Pew Research Center 2021 and PPMI 2021. Note that these numbers capture only those gig workers who derive their primary income from gig platform work.

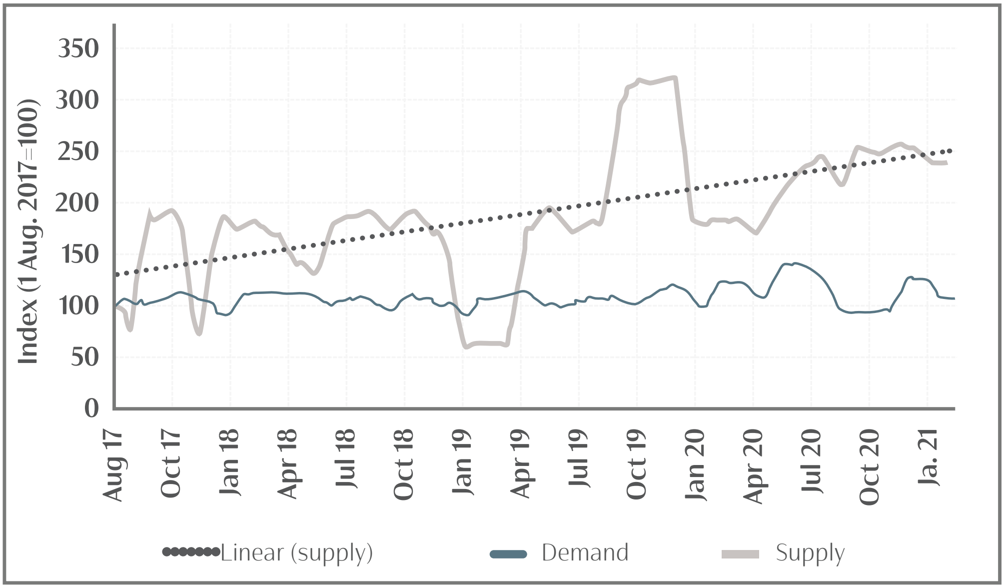
[48] Farrell et al 2018

[49] Kässi and Lehdonvirta 2018

more stable than, and generally falls short of labour supply. In fact, labour demand has been flat since 2017, whereas labour supply has more than doubled over the same period.

This pattern of excess supply of labour suggests that it is easier to register as a worker on a platform than receive work and earn a decent amount of income, not least because some workers offering remote services have to compete globally to secure tasks posted on platforms. This imbalance results in the vast majority of gig workers being unable to make a living from their assignments. Other factors that put pressure on platform-based incomes may include a lack of bargaining power among gig workers, and platforms' use of Artificial Intelligence for differentiatial pricing.[50]

Figure 5: Global labour supply and demand on major online web-based platforms, 2017–21



Source: http://onlinelabourobservatory.org/, ILO 2021a

[50] *Dube et al 2020*

5. PROTECTION GAPS ASSOCIATED WITH PLATFORM WORK

5.1. Another 'Great Risk Shift'?

The social protection coverage of gig economy platform workers is low.[51] Platform workers frequently do not meet eligibility requirements for statutory access to benefits schemes for salaried workers due to low earnings, hours or insufficient contribution periods. In many countries, self-employed workers are not covered at all by social insurance systems or only on a voluntary basis.[52] Even if covered, in the absence of employer contributions, effective burdens may be higher for the self-employed, especially for those with lower earnings (minimum wages typically do not apply to them) or due to a lack of bargaining power to shift any contribution-related costs onto their clients by charging higher prices. Also, the volatility of earnings from gig work renders the calculation of contributions and entitlements difficult. Another obstacle to social protection, especially unemployment insurance, is moral hazard. For example, it can be difficult to establish whether a gig worker's lower level of activity reflects demand fluctuations or voluntary idleness.[53] Further challenges arise if the work provided on digital platforms involves actors based in different countries and jurisdictions, especially with crowdwork platforms. In order to provide adequate social security coverage for such workers, it is necessary to clarify the applicable legislation and institutional arrangements.[54]

5.2. A simple typology of gig work protection gaps

From a gig worker's perspective, in case of a calamity, protection gaps present themselves as the difference between needed resources (covering unexpected additional expenses or foregone income, for example) and available resources (e.g. savings and insurance coverage).[55] Such gaps are especially acute for young gig workers with little savings and a high exposure to irregular income streams.[56]

[51] See following sections

[52] Voluntary access to social protection partly reflects the assumption that entrepreneurs are less risk averse, and therefore may not require insurance to the same extent as employees (OECD 2019b)

[53] Ibid

[54] ILO 2018b

[55] In addition to this very broad definition there are more granular approaches to specific protection gaps. For example, the mortality protection gap can be defined as the difference between the amount needed to substitute a household's future income in the event of the main breadwinner's death, and the existing resources available to repay outstanding debts and maintain the living standards of surviving household members. Resources available include the household's existing financial assets, benefits from life insurance policies and social security payments. The mortality protection gap describes the portion of the deceased's regular income that cannot be replaced by these existing resources (Swiss Re 2020b)

[56] It has be noted that income volatility can also be the result of deliberate individual choices, e.g. regarding lifestyle

As far as income, health and retirement protection are concerned, social security systems are the key factors when assessing gig worker exposures. Existing legal safeguards and social protection provisions were designed around traditional forms of employment and more often than not no longer apply to workers with "non-standard" contracts, or not to the same extent.

In the following, we suggest a four-pronged typology of gig worker protection gaps pertaining to income, health, retirement and assets (see table 1).

Table 1 A simple typology of gig worker protection gaps[57]

INCOME	HEALTH	RETIREMENT	ASSETS
• Sickness • Disability • Work Accident • Premature death • Underemployment	• Medical Expenses	• Accumulation of savings (investment risks) • Decumulation of savings (longevity rsiks)	• 'Means of Production' (home, car, equipment) • General liability • Professional liability

Source: The Geneva Association

5.2.1. Income

There is a broad consensus in the relevant literature, as well as among the experts interviewed for this chapter, that income replacement is the most acute protection gap facing gig economy platform workers. Compared with healthcare expenses, for example, income risk awareness among gig workers tends to be lower, social protection even less available, and private insurance coverage more difficult to obtain. Failure to protect income in the event of illness, disability or premature death of the main breadwinner could have devastating effects on individuals and households.[58] This is particularly true for gig economy workers who are exposed to low and volatile incomes and do not have access to the benefits extended by traditional employers to full-time, permanent workers, for example sick and other paid leave,

[57]Even though, in the context of standard employment, unemployment is a major social concern, we disregard it in the context of non-standard employment. Gig workers will typically not become unemployed, but underemployed (see footnote 48). Existing social insurance, like unemployment coverage, is not designed to cushion short-term income fluctuations.

[58]Underemployment can also be viewed as an income risk. It is, however, very challenging to insure (Bieber / Moggia 2021)

disability, work accident and death-in-service benefits. In addition, government-sponsored social protection systems, especially in the area of income replacement, are generally limited to those with full-time employment contracts.[59] And due to ever rising public budget pressures, rendered more acute by COVID-19, there is significant uncertainty over current and future efforts to extend state-funded income protection benefits to gig workers.[60]

5.2.2. Health

With relatively low and irregular income, gig workers are particularly exposed to financial stress arising from (unexpected) medical expenses. This problem is particularly serious in countries where access to health insurance is tied to salaried employment.[61] Major out-of-pocket expenses can easily prove financially catastrophic, especially if independent gig work comes with a lack of income protection.[62] Access to health insurance through work-related schemes is also crucial in countries where health care is primarily provided by contributory health insurance schemes which are mandatory for everybody. In those countries, the cost of participating in contributory schemes is a major challenge for many platform workers. However, in countries with tax-financed universal health systems, the relevance of work-related access to health insurance is, to some extent, reduced to health and sickness related benefits that may not be covered by the universal health system.[63]

5.2.3. Retirement

Low and irregular levels of income make it challenging for gig workers to accumulate retirement savings, be it through statutory contributions or individual savings plans.[64] In many countries, current pension systems are based on formal, regular employment structures and do not adequately capture the increasingly large numbers of gig workers who fall outside these arrangements. As there is usually no employment relationship between the gig worker and the platform, the worker must bear any contributions

[59] Whiteside et al 2015, OECD 2019b and section 4.3 of this report

[60] Zurich 2016

[61] Berdahl and Moriya 2021

[62] With an out-of-pocket spending share of more than 60% India is the most exposed large economy. Gig workers in China and Italy, with national out-of-pocket spending shares of about one third and one quarter, respectively, are vulnerable, too. The average share for all OECD countries is less than 14% (https://data.worldbank.org/ indicator/ SH.XPD.OOPC.CH.ZS=$

[63] ESIP 2019 and section 4.3. of this report

[64] TIAA 2021

to statutory retirement schemes on their own. In addition, the self-employed have no access to voluntary occupational pension schemes.[65]

A shift to independent employment (i.e. an erosion of contributions), in combination with an ageing population, could exert dual pressure on the sustainability of existing retirement systems. While gig work could provide a coping mechanism for seniors to mitigate the inadequacy of pensions and savings, it is not considered an appropriate solution for tackling old-age poverty.[66]

5.2.4. Assets

Property ('means of production')

Standard home insurance policies may not cover gig work equipment, such as computers or cameras, leaving many workers unknowingly unprotected. An additional endorsement acknowledging the policyholder's gig worker status may be required. Similary, individual motor insurance is not sufficient when policyholders use their vehicles for commercial use as independent contractors. A business endorsement is needed in order to avoid protection gaps (e.g. legal defence costs, medical expenses and property damage to third parties) if the policyholder causes an accident while driving for work purposes.[67]

Liability

Gig economy platform workers face personal asset risks through general liability if they are held responsible for some of the most common accidents that can occur at a business, such as a customer injury or property damage. Platform workers who provide professional services such as accounting, marketing and editing are potentially also exposed to professional liability in the event that they are charged with negligence by a client. If

[65] OECD 2019c. However, platforms such as Uber and Grab have started to voluntarily pay contributions to social security and employee benefit schemes (Freudenberg et al 2019, Mishel 2018 and section 6 of this report)

[66] UNRISD 2017

[67] Ibid and KPMG 2019. Some platforms have started providing commercial motor insurance cover to their drivers, e.g. https://www.uber.com/us/en/drive/insurance/#:~:text=The%20rideshare%20insurance%20provided%20by,does%20not%20cover%20your%20injuries

unaddressed, such exposures could spell financial hardship or even ruin for affected workers.

5.3. A Map Of Gig Work Protection Gaps

National differences in levels of gig worker protection primarily reflect idiosyncratic approaches to social security. These peculiarities also determine the extent to which private pension and insurance markets can play a role in narrowing gig work protection gaps.[68] Most fundamentally, three models of social welfare can be distinguished:

- Liberal regimes, characterized by modest, means-tested assistance targeted at low-income recipients: This approach encourages market solutions to social problems. The state plays a residual role only.
- Conservative regimes, typically shaped by traditional family values: Social insurance in this model benefits families and steps in when the family's capacity to aid its members is exhausted.
- Social democratic regimes, which are universalistic systems that promote an equality of high standards, rather than an equality of minimal needs. This implies socializing the costs of caring for children, the aged, and the helpless.[69]

Overall, there is a positive correlation between levels of economic development and investment in social protection.[70] More interestingly, however, there are significant differences in social protection investment among countries at a similar level of per-capita income, indicating that regardless of the economic capacity of a country, policy choices can differ starkly.[71] Such differences are most pronounced between Northern America and Continental Europe, with a respective dominance of liberal and social democratic welfare regimes (see figure 5).

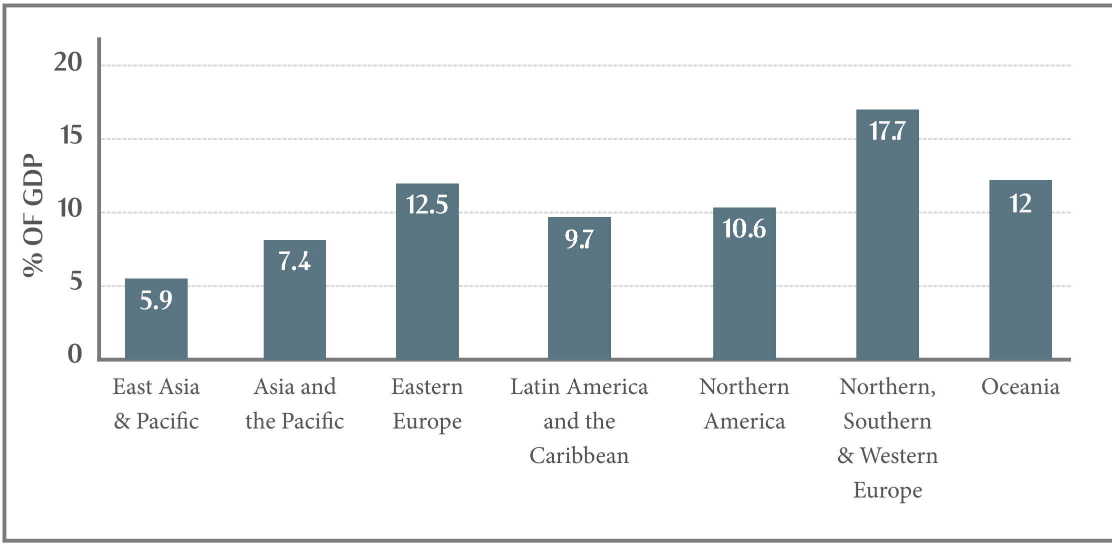
[68] See section 5.1.3

[69] Esping-Andersen 1990

[70] ILO 2021b

[71] Ortiz et al 2019. See section 4.4. for country-specific examples in the context of gig economy work

Figure 6: Public social protection expenditure (excluding health) by world regions, latest available year, in percent of GDP



Source: Ortiz et al 2019, based on ILO data

Figure 6 offers an overview of social protection coverage of gig workers, based on a global ILO survey of 20,000 platform workers in 100 countries. The survey found that only 60 percent of all gig workers are covered by health insurance. The share is obviously much higher in countries with tax-financed universal health systems (e.g. the UK) as well as in countries where health care is basically delivered by contributory and mandatory health insurance schemes (e.g. Germany). The share of health coverage is below average in countries where access to health insurance is tied to a formal employment relationship (e.g. the US).[72]

As few as 35% of all gig workers surveyed had a (private or public) pension or retirement plan.[73] Pension rules often differ between self-employed and salaried workers. In some countries, gig workers can voluntarily join earnings-based schemes that are mandatory for employees (e.g. Germany and Australia). However, gig workers can (partially or fully) opt out of such schemes. In

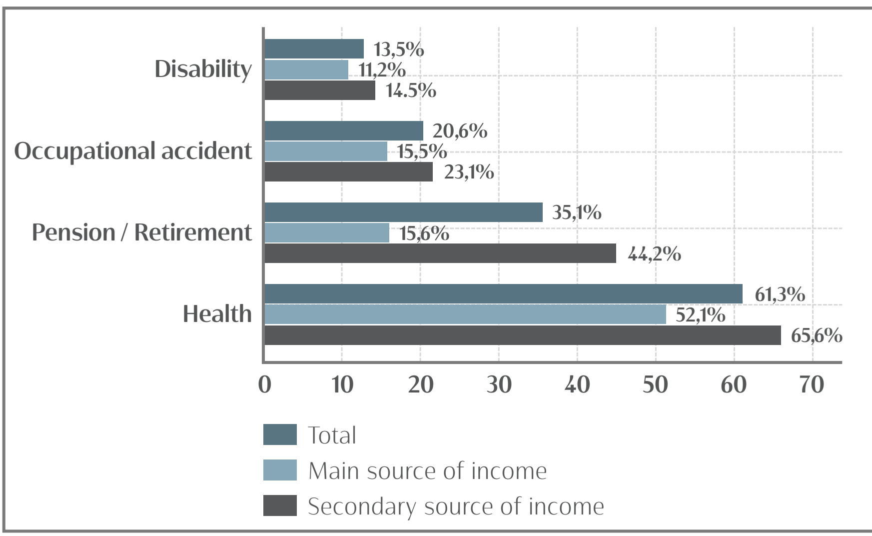
[72] *Berg et al 2018*

[73] *ibid*

other countries, mandatory contributions are lower for gig workers than for employees (e.g. Austria and Portugal). Most of these provisions lead to reduced future pension entitlements, compared with full-time employees.[74]

Even more precarious are protection levels for work injuries and disability, with just 21% and 13%, respectively, of surveyed workers covered.[75] OECD 2019b confirms that incapacity benefits present a particular challenge: Only 14 of the 32 countries included in their study offer access to benefits for self-employed workers that match those for employees. Accidents at work were found to be the most critical area.

Figure 7: Gig economy platform workers' access to various forms of social security benefits, by source (percentage covered; global survey data)



Source: Adapted from Berg et al 2018, based on global ILO survey of crowdworkers, 2017

Table 2 summarises and illustrates the significant differences in social protection available to gig workers across five major economies with similar levels of per-capita income, but different policy choices.[76]

[74] OECD 2019b

[75] Berg et al 2018

[76] See Annex for details

Table 1
Social protection for gig economy platform workers in five major countries

	INCOME	HEALTH	RETIREMENT
Germany	• Sick pay potentially provided through statutory health insurance.	• Broad coverage through mandatory health insuramce scheme	• Compulsory insurance on the current legisilative agenda (with opting-out) • Basic income support as a safety net
Italy	• Sick pay is a statutory benefit for those higher earners who are subject to social security contributions • Occupational accident insurance coverage for employed gig workers and those working as riders.	• Access to tax-funded national health scheme	• Entitlement to statutory benefits depend on amount of social security contributions (which are voluntary for low-earning gig workers)
Japan	• No access to sick pay • No coverage through occupt	• Obligation to join the basic national health insurance scheme	• Obligation to join the basic national pension insurance scheme
UK	• No access to statuory sick pay (any entitlements depend on amount of social security contributions) • No access to industrial injury benefits	• Access to tax-funded national health scheme	• Old age coverage through mandatory social security
US	• Sick pay not available • No coverage through workers compensation insurance	• Need to buy health coverage from private insurers (or face tax penalty)	• Old age coverage through mandatory social security

Moderate Protection gap **Significant protection gap** **Severe protection gap**

Source: Compiled and assessed by The Geneva Association

6. THE ROLE OF INSURANCE AND PENSIONS IN ADDRESSING PROTECTION GAPS

In light of the significant coverage gaps examined in the previous section, the question of how to 'organize' protection for gig economy platform workers is of utmost political, social and commercial importance.

6.1. Three fundamental options for protection

In the following, in addition to private insurance, we explore two fundamental state-driven funding options for addressing protection gaps facing gig economy platform workers: General taxation and social insurance. The configuration of these options and the role assigned to private insurance reflect different policy choices and varying degrees of public versus private sector involvement, mandatory versus voluntary schemes, and platform versus individual responsibility.

6.1.1. General taxation

Non-contributory, tax-financed social protection mechanisms are considered essential to providing at least a basic level of protection for all residents of a country, including those who are not (sufficiently) covered by contributory social insurance schemes. Taxes are the main source of funding for basic social assistance for those vulnerable populations lacking contributory capacity.[77] More recently, some countries have bolstered tax-funded elements of their social protection systems, such as tax-financed social pensions.[78] In the area of health protection, national health services funded from general taxes (for example in Canada, Italy or the UK) are well-established and ensure access to health care for the entire population.[79]

In non-contributory schemes financed from general taxation, there is usually no direct link to employment at the individual level. Social protection is extended independently of employment

[77] ILO 2012. Universal Basic Income is a potential alternative to unconditional tax-financed social protection. See World Bank 2020

[78] ILO 2017

[79] Tandon and Reddy 2021. However, Green and Irvine 2002 argue, on the basis of the UK National Health Service, that tax-funded schemes offer less transparency than payroll-based social security. Also, standards of care are likely to be lower under egalitarian tax-funded systems, compared with "solidarity"-oriented social insurance.

status. This feature makes tax-based schemes particularly relevant for gig economy platform workers.[80] Untying social protection from the employment relationship, and instead offering benefits on a means-tested basis, is often raised as a potential solution to the challenge of closing coverage gaps.[81] However, a strong and sustainable social protection system will not only draw on tax revenues, but also require social insurance contributions from employers and workers, based on the principles of risk-pooling, risk-sharing and solidarity.[82]

6.1.2. Social insurance

Through social insurance, governments intervene in the insurance market to ensure that a group of individuals are insured or protected against risks such as illness, unemployment or longevity. Individuals' claims are usually dependent on their (typically mandatory) insurance contributions which accumulate a common fund out of which future benefits are paid. Maximizing the size of risk pools through social insurance is a way for governments to protect their citizens from hazards that can prove financially ruinous.[83]

As discussed in section 4, the social protection coverage of platform workers who are classified self-employed is often limited; in many countries, such workers are not covered by social insurance systems at all, or only on a voluntary basis, with narrow benefits. In practice, platform workers are usually classified as independent contractors, leaving them solely responsible for the payment of social insurance contributions, if any.[84] In addition, as argued by Behrendt et al 2019, gig workers' non-inclusion in social security schemes raises issues of labour mobility, as workers are not covered by the same schemes throughout their working lives.

One of the policy choices that governments need to make is whether any extension of coverage to gig platform workers should be mandatory or voluntary. There are two main arguments

[80] ILO 2021a, c

[81] Australia's largely general revenue-financed social protection system (supplemented by 'Pay-As-You-Go' financed and income tax subsidised compulsory superannuation) is an example of such a system (OECD 2019b).

[82] ILO 2012 and section 5.1.2

[83] https://www.social-protection.org/gimi/gess/ShowTheme.action?id=8

[84] OECD 2019b

in favour of a mandatory approach: First, adverse selection: Voluntary health insurance schemes, for example, may attract mostly those with pre-existing health conditions. Such adverse selection would translate into a spiral of higher contribution rates due to higher claims costs, undermining the viability of the scheme.[85] Second, small risk pools: Voluntary coverage could result in risk pools that are not large enough to cope with certain types of large risks affecting a large number of pool members, such as an epidemic or natural disaster.[86]

Having said this, forcing workers with low incomes and contributory capacities to pay contributions that they cannot afford may prove counter-productive. Therefore, many governments prefer a voluntary approach even though it rarely leads to significant levels of coverage.[87]

A straightforward approach to including some gig platform workers in mandatory social insurance schemes is to reclassify them as employees. Having said this, the funding implications for governments, workers, platforms and their customers need to be considered carefully.

6.1.3. Private insurance as a complement

As opposed to social insurance schemes, private insurance is not designed to mitigate hardship encounterted by low-income gig workers or other segments of the population through wealth transfers. Having said this, the well-established role of private players in risk and asset management, in combination with the notorious under-funding of pay-as-you go social insurance schemes, strongly suggests the relevance of private insurers and pension funds for addressing protection gaps associated with gig economy platform work.

How can private product providers complement social schemes in a meaningful way? This question is of increasing importance

[85] Arrow 1963

[86] ILO 2021c

[87] Ibid. If insurance premiums are uniform, those with the highest risk have the biggest incentive to join a voluntary scheme. This can result in a vicious circle of rising contributions and low-risk members leaving the pool (OECD 2019b discusses examples such as the Canadian Special Benefits for Self-employed Workers (SBSE) scheme).

as pressure on public finances has been growing for quite some time, further exacerbated by the COVID-19 pandemic.

First, the most frequent specific feature of social insurance is that it is mandatory and universal.[88] As discussed before, self-employed are generally excluded. Fundamentally, the question of whether individuals are to be insured is different from the question of who is to provide the insurance. "The view that society must take measures to ensure that everyone is insured against certain major risks does not, in itself, imply that the government should directly provide that insurance".[89] As a matter of fact, in many countries, car, fire and even health insurance are compulsory but provided by private-sector insurers.

Second, social insurance involves some redistribution and is typically not based on actuarial principles. As discussed before, in the case of voluntary social insurance schemes, uniform premiums inevitably lead to adverse selection. Mandatory social insurance schemes may be effective in addressing this issue which can be avoided by making low-risk individuals pay for high risks. However, as they generally treat participants similarly in terms of pricing and benefits, such schemes do little in terms of promoting incentives for risk prevention – a major and societally highly relevant benefit offered by (risk-based) private insurance mechanisms where premiums reflect individual risks and are not driven by a person's income.[90]

Third, from an individual gig worker's perspective, private insurance may offer personalised insurance packages and generally competitive premiums according to their risk profile. In addition, collecting premiums through innovative ways (e.g. directly via platform apps) can, in principle, expand coverage and include platform workers who would otherwise be left out of social insurance programmes.

[88] Pestieau 1994

[89] Stiglitz 1983

[90] Feldstein 2005. However, with regards to gig platform workers there are specific obstacles to surmount such as the high-risk characteristics of some "on-location" activities such as ride-hailing, delivery of goods, cleaning or care services (see section 5.2). In addition, the regulatory and commercial scope for risk-based pricing may be limited in areas such as disability, health and pension insurance.

Fourth, in developing countries, including African nations in particular, standalone public schemes may not be the most effective way of covering individual risks. Weak taxation capacity is a major constraint on social insurance systems. People's ability and willingness to buy protection through competitive insurance premiums may be far greater than their governments' capacity to mobilise tax revenues. Also, there tends to be a lack of trust in government-run programmes, given the deficits in transparency and political stability. Having said all this, for private insurance to make sense, loadings for costs and profits need to remain below the risk premium that risk-averse individuals are willing to pay.[91] Microinsurance offers interesting lessons on how to maximise the cost efficiency of producing and distributing coverage.[92]

In general, it should be noted that every contributory form of social protection, including private insurance and pensions, is dependent on an individual's ability to work and earn a certain level of regular income. Affordability as a barrier to saving for old age or purchasing insurance, therefore, matters most for those with low and irregular incomes. This needs to be kept in mind when discussing a "decoupling" of social protection from employment.

6.2. Private insurance and pension products for gig workers – A value chain perspective on innovation[93]

In responding to gig worker needs, traditional insurers face challenges like policy pricing which is dependent upon years of historical loss information and legacy systems. The nature of gig work, however, requires speed, responsiveness, frictionless online transactions and very flexible, short-term coverage. In the context of income risks in particular, gig workers are typically not willing to pay annual insurance premiums.[94]

Insurtechs and pensionTechs, with simple, digital, on-demand policies and pension products, are currently particularly well-

[91] The Geneva Association 2020

[92] Kousky et al 2021

[93] This section primarily reflects views and insights collected from our panel of interviewees

[94] Exposures to key risks such as mortality, longevity and health, however, do not primarily depend on the workflow

equipped to tap into this growing segment of the market, especially in the area of transportation services. They usually operate from state-of-the-art platforms and leverage artificial intelligence algorithms that make traditional underwriting processes obsolete and allow risk pricing for flexible pay-as-you-go coverage, based on the behaviors and needs of the workers. Against this backdrop, the following sections illustrate the scope for innovation across key links of the insurance and pension value chain, with the aim of developing propositions which meet the needs of both gig workers and digital labour platforms.

6.2.1. Marketing

Gig workers are generally younger and more digitally savvy than the average labour force.[95] At the same time, 89% of those gig workers who have not made any voluntary insurance or pension purchases are unaware of specific insurance policies or pension products that would address their needs. Of this same group, 56% considered (but did not end up) buying insurance, with 43% saying that price was the main obstacle, closely followed – and more interesting in the context of marketing - by those who did not know what kind of insurance to buy (37%).[96]

Against this backdrop, as confirmed by some of the expert interviews conducted for this chapter, insurers and pensionTechs have started digitising, i.e. embedding into platform apps, their gig market and customer research, segmentation strategies, customer retention and engagement strategies as well as branding and advertising activities.

Digital marketing programs, using search engine optimization and marketing, are unlikely to be fit for purpose when targeting the gig working community. Application Programming Interfaces (APIs) which enable companies to open up their applications' data and functionality to third parties provide insurers and pension funds with opportunities to move beyond advertising to cultivate more

[95] *Pew Research Center 2021 (data for the US)*

[96] *Cake & Arrow 2017 (data for the US)*

authentic engagements with consumers by becoming an actual part of a digital labour platform's workflow. Rather than clicking on an ad which then takes the gig worker to a website where she can learn more about an pension or insurance product, and potentially make a purchase, with APIs the gig worker has the ability to flexibly add a pension product or insurance coverage.[97]

6.2.2. Product development

The protection needs of gig platform workers are constantly in a state of shift. Therefore, traditional annual insurance contracts, or regular monthly pension contribuitons, seem too rigid and impractical for this segment of the work force. For personal accident in particular they prefer on-demand coverage, i.e. flexible policies in terms of time constraints. Given the unpredictability of platform work, most workers expect products that allow them to protect themselves for shorter durations, such as day-to-day, month-to-month, or gig-to-gig. They look for insurance that can be activated and deactivated and allows them to pay premiums or pension contributions as they go, as well as to easily adjust limits and coverages.[98]

The heterogenity of the gig work force is another factor that makes maximum product flexibility an imperative. Gig workers perform many different types of work, from driving for a delivery platform to designing websites. The risks and needs of these workers vary widely, and they expect their insurance coverage and retirement contributions to reflect their budget and the unique risks of their particular area of work.[99]

Irrespective of specific product features, a digitally connected experience is crucial to the success of insurance and pension products targeted at gig workers who are used to opening an app and getting where they need to be in a series of automated steps. In order to meet this requirement insurance and pension solutions needs to be embedded in the platform apps, from quoting and buying to claiming.[100]

[97] *Ibid*

[98] *NAIC 2021, Deloitte 2019. For pension and health insurance, gig workers are likely to prefer portable solutions that are available regardless of which platform the workers work on*

[99] *KPMG 2019 and section 5.2.4*

[100] *Cake & Arrow 2017*

6.2.3. Distribution

Gig workers tend to be tech savvy and self-directed consumers whose daily lives are primarily conducted through apps or over the Internet. Therefore, they expect that buying an insurance or pension product is as simple as booking another gig.

By automating the process through which insurance policies and pension products are sold online or via mobile, insurers and pension funds could more effectively tap into the potential offered by the gig worker community and, at the same time, respond to changing buying preferences of non-gig workers. Against this backdrop, platform apps are considered the most straightforward and fertile ground for insurers and pension providers to sell coverage. APIs allow to power on-demand insurance and pension programs which integrate the product into the signup process for taskers, drivers and other contractors or service providers, and offer tailored coverage based on straight-through processing.[101]

Distribution by embedding insurance and pensions in platform apps does not only reflect the buying habits and preferences of gig workers. It is also an imperative given that many of them generate low and irregular incomes. This requires distribution cost to be reduced to the absolute minimum.[102]

6.2.4. Underwriting

From an underwriting perspective, many gig workers, especially physical labourers, exhibit a challenging risk profile. In the absence of regulatory frameworks found in traditional employment, there are major concerns about worker health, safety and well-being. Health risks may arise from little workplace support for physical and mental health. Safety hazards may result from a lack of training and unregulated physical work environments. Negative mental health outcomes could be

[101] RGA 2021, Zurich 2020, Huckstep 2019

[102] Some of the lessons from microinsurance might be drawn upon to design and distribute low-cost insurance to low-income segments of the gig economy (RGA 2021).

triggered by permanent income insecurity, tight deadlines, time pressures and the lack of sick pay protection.[103]

As an example, in the US, according to the Bureau of Labor Statistics (BLS), gig workers reported a wide range of negative experiences while on the job through platforms. Eleven percent (11%) reported having had their personal property damaged, and 7% reported having personal property stolen while on the job. Six percent of respondents reported suffering an injury, twice as many as suffered by full-time employed workers.[104]

Another risk factor is that the gig economy tends to attract younger workers, with litte work history and experience with occupational safety hazards. This inexperience, in combination with high-risk gigs such as passenger transportation and freight delivery services, makes these workers more prone to on-the-job injuries.[105] Last but not least, income from gig work is neither stable nor reliable, defying key assumptions behind traditional underwriting and replacement outcomes.[106]

An offsetting factor, however, is the ubiquity of smart phone-based and real-time data from both platforms and individual gig workers.[107] The wealth of data, in combination with online transacting, should facilitate risk assessment and pricing and can be used to generate highly accurate custom quotes.[108]

Having said this, insurers‘ appetite for individual gig worker risks still tends to be limited. Typically, given the key importance of mutualisation in the context of ‘sub-standard risks‘, carriers prefer to provide group coverage to platforms and worker associations, avoiding any individual underwriting.[109] This approach, however, raises challenges as far as the portability of benefits – a key prerequisite to a sustainable gig worker insurance market – is concerned.[110]

[103] Kaldahl 2020

[104] BLS 2016 (comparable more recent data is unavailable)

[105] OHS 2019

[106] The difficulty to prove their regular current and future income makes it challenging for gig workers to access traditional income protection products which provide coverage against a financial loss if a person finds herself unable to work for health or disability reasons (CII 2021)

[107] AIG 2017

[108] Swiss Re 2020a

[109] QBE 2021, RGA 2019

[110] See section 6 for recommendations

6.2.5. Claims management

Claims management is typically the most visible, customer-facing element of the insurance value chain. Therefore, and this is particularly true for tech-savvy gig workers, it will be measured against other customer-centric sectors and companies such as digital labour platforms.

Therefore, insurers serving the gig worker community have started streamlining, or even fully automating, straight-through mobile processing for many basic claims. For example, telematics data (including video imagery) can be instantaneously captured during a vehicle accident and downloaded from the cloud to automatically trigger a first notification of loss entry, following which, via intuitive apps, insureds can submit photos of damage to initiate the claims process. The analysis of social media data can help detect fraudulent claims. Artificial Intelligence embedded in the mobile experience can be equally harnessed to spot fraudulent behavior. And Robotic Process Automation, based on software robots that emulate humans actions interacting with digital systems and software, can provide real-time updates to the gig worker on her claim status and automatically pay claims within certain parameters.[111] A seamless end-to-end experience accelerates time-to-resolution, which is particularly important to gig workers who live ‘paycheck to paycheck‘. Figure 7 summarises key elements of insurance innovation designed to make the industry fit for gig-based work patterns.

[111] *EY 2017, McKinsey 2019*

Figure 8: Insurance value chain innovation for gig-based work

Marketing	Product Development	Distribution	Underwriting	Claims Management
• Embed customer research, segmentation, engagement and advertising into platform apps • Leverage APIs	• On demand, pay as you go • Flexible activation and deactivation • Customised to heterogeneous risk profiles • Digital connectivity throughout product experience	• Automate sales process (online, mobile) • Sell through platform apps • Integrate insurance into the sign-up process for workers	• Maximise risk pools • Special focus on younger, unexperienced workers • Take into account increasing experience and risk awareness of gig workers • Leverage ubiquity of smart phone-based real-time data	• Straight-through mobile processing for basic claims • Accelerate time-to-resolution through AI and Robotic Process Automation • Harness AI and social media for fraud detection

Source: The Geneva Association

7. CONCLUSIONS AND RECOMMENDATIONS

The COVID-19 pandemic has further accelerated the triumphant march of digitisation, on the back of customer habits and preferences, that have changed for good. This shift, in combination with pre-pandemic drivers such as advances in Artificial Intelligence and the ubiquity of connectivity, suggest a continued growth of gig platform work. However, for traditional employees, the pandemic has been a catalyst towards flexible and remote working, which is rapidly becoming mainstream. Salaried employees increasingly enjoy some of the flexibility of gig workers without having to forego the benefits and security associated with their status. This speaks in favour of a slowing rise of gig platform working going forward.

The pandemic presents a powerful case for striking a new social contract that includes gig workers. Governments, platforms, private insurers and pension funds, in collaboration with giggers and their professional associations, need to redesign protection frameworks to ensure that all forms of modern work are secure and sustainable.[112] The potential role of private insurers will

[112] *Adecco 2019*

be determined by existing jurisdiction-specific social security systems and policy reforms driven by COVID-19. Against this backdrop, we offer the following recommendations for:

7.1 Governments and policymakers

i. Remove disincentives for platforms to offer group benefits to gig workers: If platforms were to provide certain benefits, this may require them to reclassify gig workers as employees – which would entail high costs as reclassification would oblige platforms to provide workers with the whole spectrum of benefits for which traditional employees are eligible. Many platforms live on thin margins and employee reclassification and other measures could jeopardize their business models and adversely affect job options for gig workers. Platforms should be able to offer group insurance benefits and retirement savings options without recognizing gig workers as employees.

ii. Encourage the portability of benefits: Workers, whether employed or self-employed, should be able to carry insurance benefits and pension accounts from job to job without losing coverage. Policy makers could consider implementing a system of portable benefits which covers independent workers and allows businesses to support their labour force and allow platform workers to choose the flexibility and autonomy of the gig economy without having to sacrifice benefits. In order to promote portable benefits and make insurance and pensions for gig workers truly sustainable, governments could, for example, disconnect the provision of benefits from the employment status of the worker.

iii. Offer gig workers tax deductions, especially to those workers with no or only little platform contributions. This proven approach could be particularly useful in the context of health insurance and pension plans as gig workers do not (fully) benefit from statutory and voluntary occupational schemes.

7.2. Insurers and Pension Funds

i. Harness heightened post-pandemic risk awareness: Gig workers may emerge from the COVID-19 crisis far more aware of their own risk and less confident in their ability to manage and mitigate this risk on their own. In addition to considering more individual insurance and pension coverage, they may also be looking for ways to collectively join forces with other gig workers to mitigate risk for everyone.

ii. Innovate across the entire value chain:

   a. Offer on-demand, usage-based ‘pay-as-you-go‘ products;

   b. Embed insurance and micro-pensions in platform apps, for both utmost convenience, and distribution cost-efficiency. Leverage platform data to quantify gig worker exposure and address issues such fluctuating income from multiple sources;

   c. Offer group products which do not require underwriting at the individual level; and

   d. Automate straight-through processing for basic claims.

iii. Make commercial insurance available to individuals: For gig workers, the lines between commercial and personal insurance are blurry. Such grey zones may give rise to serious protection gaps.

iv. Find ways to hold onto gig workers as policyholders as they move in and out of the gig economy: For example, if a gig policyholder joins a traditional employer with group benefits, they could put their gig benefit plan on hold (for a fee) for a specified maximum period. If the worker returns to the gig economy during this period, benefits could be reinstated.

7.3. Platforms

i. Leverage group benefit programmes (e.g. covering sickness, injury and maternity and paternity payments) for staff retention and meeting societal expectations: Platform workers typically have multiple jobs as they are keen to 'diversify their bets'. This accelerating trend heats up competition for workers among platforms. At the same time, as gig work increasingly challenges the traditional relationship between employer and employee (and the 'duty of care' associated with it), platforms come under public pressure to take better care of their workers.

ii. Integrate mental health coverage in group schemes, responding to platform workers' higher levels of anxiety and stress associated with working for oneself.

iii. Promote auto-enrollment of workers into protection plans, with the opportunity to opt out.

In summary, COVID-19 has added further importance and urgency to the case for a new social contract that reflects the changing nature of work. Due to rising levels of public debt, governments are increasingly unlikely to be the insurer or pension provider of last resort in the future. At the same time, the pandemic has made the work force (both employed and self-employed) more risk-averse, with a greater need of, and appetite for, insurance protection and savings. Both public and private solutions are required to ensure that the future of social protection is more flexible, agile and secure to meet people's needs throughout their working lives, and during retirement, regardless of how they choose to work.

REFERENCES AND SUGGESTED READING

Abraham, K. et al. 2018. Measuring the Gig Economy: Current Knowledge and Open Issues, NBER Working Paper, No. 24950, http://dx.doi.org/10.3386/w24950

Adecco. 2019. Time to act. gig-economy-report.pdf (was-eur-ww-prd-amz930-cm.azurewebsites.net)

AIG. 2017. Insuring the sharing economy. https://www.aig.com/content/dam/aig/america-canada/us/documents/insights/aig-insuring-the-sharing-economy.pdf

African Insurance Organisation (AIO). 2021. Annual Report 2021. Faber Consulting. https://faberconsulting.ch/files/faber/pdf-pulse-reports/2021_AIO_Annual_Report_EN_web.pdf

Anwar, M. A., Graham, M. 2022. The digital continent – placing Africa in Planetary Networks of Work. Oxford University Press.

Arrow, K.J. 1963. Uncertainty and the welfare economics of medical care. American Economic Review 53 (5): 941–973.

Bank of America. 2020. OK Zoomer: Gen Z Primer https://www.bofaml.com/content/dam/boamlimages/documents/articles/ID21_0026/GenZ_redacted.pdf

Behrendt, C., Nguyen Q.A. and U. Rani. 2019. Social Protection Systems and the Future of Work. https://onlinelibrary.wiley.com/doi/pdf/10.1111/issr.12212

Berdahl, T.A. and A.S. Moriya. 2021. Insurance Coverage for Non-standard Workers: Experiences of Temporary Workers, Freelancers, and Part-time Workers in the USA, 2010-2017. https://link.springer.com/content/pdf/10.1007/s11606-021-06700-0.pdf

Berg, J., Furrer, M., Harmon, E., Rani, U. and M. Six Silberman. 2018. Digital labour platforms and the future of work. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_645337.pdf

Bieber, F. and J. Moggia. 2021. Risk shifts in the gig economy. University of Zurich. Open repository and archive.

British International Investment. 2017. Can the gig economy help to create jobs in Africa? https://www.bii.co.uk/en/labour-standards/can-the-gig-economy-help-to-create-jobs-in-africa/

Boeri, T., Giupponi, G., Krueger, A.B. and S. Machin. 2018. Social Protection for Independent Workers in the Digital Age. https://www.frdb.org/wp-content/uploads/2018/05/01_Stephen_Machin.pdf

Bureau of Labor Statistics (BLS). 2016. https://www.bls.gov/news.release/archives/osh_10272016.htm

Cake & Arrow. 2017. Insurance in the age of the gig economy. https://static1.squarespace.com/static/58977cded1758e28994f1c31/t/5a767b0b085229a61651c1ba/1517714189681/Insurance-in-the-age-of-the-gig-economy-white-paper-cake-and-arrow.pdf

Cake & Arrow. 2020. COVID-19 and the gig economy – A reckoning for the insurance industry. https://go.cakeandarrow.com/hubfs/White%20papers/Covid19_and-the-Gig_Economy.pdf?utm_campaign=Covid-19%20%26%20the%20Gig%20Economy&utm_medium=email&_hsmi=87032818&_hsenc=p2ANqtz-9-uo0nxK4nI4N6czHlfVjqnz0c3NK5KDAscgrxCgiVOwLEope5D_pojuA28A1P7KNRbejg2QZfwLZogWpAgHnGXNGRiE9VkGtfpA6XW9Q5pzWKGVk&utm_content=87032818&utm_source=hs_automation

CII. 2021. Building a safety net – A guide to income protection. https://www.cii.co.uk/media/10127108/building-a-safety-net-cii-guide-to-income-protection.pdf)

Contreras-Gonzalez, I., Oseni, G., Palacios-Lopez, A., Pieters, J., & Weber, M. 2022. Inequalities in job loss and income loss in sub-Saharan Africa during the COVID-19 crisis. IZA Discussion Paper.

Credit Suisse. 2020. What will last? The long-term impact of COVID-19. https://www.credit-suisse.com/about-us-news/en/articles/media-releases/covid-19---accelerating-existing-socio-economic-trends-202012.html

Deakin, S. 2000. "Legal Origins of Wage Labour: The Evolution of the Contract of Employment from Industrialisation to the Welfare State," in Linda Clarke, Peter de Gijsel and Jörn Janssen (eds.), The Dynamics of Wage Relations in the New Europe

De Groen, W., Kilhoffer, Z., Westhoff, L., Postica D. and F. Shamsfakhr. 2021. Digital labour platforms in the EU. https://www.ceps.eu/wp-content/uploads/2021/06/KE-02-21-572-EN-N.pdf

Deloitte. 2019. Modernizing insurance product development. https://www2.deloitte.com/us/en/insights/industry/financial-services/insurance-product-development-capabilities-modernization.html

Dube, A., Jacobs, J., Naidu, S. and S. Suri. 2020. "Monopsony in Online Labor Markets". American Economic Review: Insights 2 (1): 33–46. https://www.aeaweb.org/articles?id=10.1257/aeri.20180150

Esping-Andersen, G. 1990. Three Worlds of Welfare Capitalism. Princeton, NJ: Princeton University Press.

European Social Insurance Platform (ESIP). 2019. Are social security systems adapted to new forms of work created by digital platforms? https://esip.eu/images/pdf_docs/ESIP_Study_Platform_Work.pdf

European Commission. 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6605

European Parliament. 2017. The Social Protection of Workers in the Platform Economy. https://www.europarl.europa.eu/RegData/etudes/STUD/2017/614184/IPOL_STU(2017)614184_EN.pdf

EY. 2017. Claims in a digital era. https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/insurance/insurance-pdfs/EY-claims-in-a-digital-era.pdf

Fairwork. 2022. South Africa Ratings. https://fair.work/wp-content/uploads/sites/131/2022/09/Fairwork-SA-Ratings-2022-EN.pdf

Fairwork. 2021a. Egypt Ratings. https://fair.work/wp-content/uploads/sites/131/2022/02/Fairwork-Report-Egypt-2021-revised.pdf

Fairwork. 2021b. Kenya Ratings. https://fair.work/wp-content/uploads/sites/131/2021/12/Fairwork-Kenya-2021-Report.pdf

Fairwork. 2021c. Gahna ratings. https://fair.work/wp-content/uploads/sites/131/2021/11/Fairwork_Report_Ghana_2021.pdf

Farrell, D., Greig, F. and A. Hamoudi. 2018. The Online Platform Economy in 2018: Drivers, Workers, Sellers, and Lessors, JP Morgan Chase & Co. Institute, https://www.jpmorganchase.com/corporate/institute/document/institute-ope-2018.pdf.

Feldstein, M. 2005. Rethinking Social Insurance. American Economic Review 95: 1–24.

Freudenberg, C., Schulz-Weidner, W. and I. Wölfle. 2019. Soziale Sicherung von Plattformarbeit im internationalen Vergleich – Gute Praxis und Handlungsoptionen für Deutschland. Deutsche Rentenversicherung 04/2019.

Gibson, J.W., Greenwood, R.A. and E.F. Murphy. 2009. Generational Differences In The Workplace: Personal Values, Behaviors, And Popular Beliefs. Journal of Diversity Management Vo. 4 No. 3. https://www.researchgate.net/publication/262725755_Generational_Differences_In_The_Workplace_Personal_Values_Behaviors_And_Popular_Beliefs

Green, D. and B. Irvine. 2002. “Social insurance—the right way forward for health care in the United Kingdom?.” BMJ : British Medical Journal vol. 325,7362 (2002): 488–490.

Hacker, Jacob. 2019. The Great Risk Shift. 2nd edition. New York: Oxford University Press.

Harvard Business Review (HBR). 2021. Who is driving the great resignation? https://hbr.org/2021/09/who-is-driving-the-great-resignation

Hays. 2021. What employers need to know about Gen Z. https://www.hays.co.uk/blog/insights/what-employers-need-to-know-about-gen-z.

Huckstep, R. 2019. Insurtech's approach to the gig economy. https://www.insurancethoughtleadership.com/the-insurtech-approach-to-the-gig-economy/.

Hunt, A., & Samman, E. 2020. Domestic Work and the Gig Economy in South Africa: Old wine in new bottles?. Anti-trafficking review, (15), 102-121.

Huws, U., Spencer, N., Dag Sverre, S. and K. Holts. 2017. Work in the European Gig Economy : Research Results from the UK, Sweden, Germany, Austria, The Netherlands, Switzerland and Italy. Foundation for European Progressive Studies.

International Labour Organization (ILO). 2012. Social protection floors recommendation (no. 202). https://www.ilo.org/secsoc/areas-of-work/legal-advice/WCMS_205341/lang--en/index.htm.

International Labour Organization (ILO). 2017. World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals. Flagship Report: World Social Protection Report 2017-19: Universal social protection to achieve the Sustainable Development Goals (ilo.org).

International Labour Organization (ILO). 2018a. Avoiding unemployment is not enough: An analysis of other forms of labour underutilization, ILOSTAT Spotlight on Work Statistics No. 4. https://www.ilo.org/stat/Publications/WCMS_644467/lang--en/index.htm

International Labour Organization (ILO). 2018b. Innovative approaches for ensuring universal social protection for the future of work. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_629864.pdf

International Labour Organization (ILO). 2019. Defining and regulating work relations for the future of work. https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/documents/publication/wcms_677999.pdf

International Labour Organization (ILO). 2020. World Employment and Social Outlook: Trends 2020. https://www.ilo.org/global/research/global-reports/weso/2020/WCMS_734455/lang--en/index.htm

International Labour Organization (ILO). 2021a. World Employment and Social Outlook 2021: The role of digital labour platforms in transforming the world of work. https://www.ilo.org/global/research/global-reports/weso/2021/WCMS_771749/lang--en/index.htm.

International Labour Organization (ILO). 2021b. World Social Protection Report 2020–22: Social Protection at the Crossroads – in Pursuit of a Better Future. https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_817572.pdf.

International Labour Organization (ILO). 2021c. Extending social security to workers in the informal economy. https://www.social-protection.org/gimi/RessourcePDF.action?id=55728.

International Labour Organization (ILO). 2022a. Informal Economy in Africa: Which Way Forward? Making Policy Responsive, Inclusive and Sustainable. https://www.ilo.org/africa/events-and-meetings/WCMS_842674/lang--en/index.htm#:~:text=Nearly%2083%25%20of%20employment%20in,the%20continent's%20young%20employment%20seekers.

International Labour Organization (ILO). 2022b. World Social Protection Report 2020-2022 – Regional companion report for Africa. https://www.ilo.org/wcmsp5/groups/public/---ed_protect/---soc_sec/documents/publication/wcms_849597.pdf

International Monetary Fund (IMF). 2022. Financial Development Index Database. https://data.imf.org/?sk=F8032E80-B36C-43B1-AC26-493C5B1CD33B&sId=1485894037365

International Organisation of Employers (IOE) – World Employment Confederation (WEC). 2021. Africa: gig economy can create new jobs? https://ioewec.newsletter.ioe-emp.org/industrial-relations-and-labour-law-november-2021/news/article/africa-gig-economy-can-create-new-jobs?tx_news_erwriteDemand%5D%5Bcategories%5D=57&cHash=b93c45fae37994410442540ca621bade

ISSA. 2021. Extending and maintaining social security coverage – Africa. https://ww1.issa.int/analysis/extending-and-maintaining-social-security-coverage-africa

Kaldahl, K. 2020. Health and safety in the gig economy. https://mountainscholar.org/bitstream/handle/10217/219530/Kaldahl_colostate_0053N_16321.pdf?sequence=1.

Kässi, O. and V. Lehdonvirta. 2018. Online Labour Index: Measuring the Online Gig Economy for Policy and Research". Technological Forecasting and Social Change 137 (December): 241–248. https://ideas.repec.org/a/eee/tefoso/v137y2018icp241-248.html.

KPMG. 2019. Insuring the gig economy. https://home.kpmg/xx/en/home/insights/2019/05/insuring-the-gig-economy.html.

Kousky, C., Wiley, H. and L. Shabman, L. 2021. Can Parametric Microinsurance Improve the Financial Resilience of Low-Income Households in the United States?. EconDisCliCha 5, 301–327 (2021). https://doi.org/10.1007/s41885-021-00088-1

Kurz, C., Geng L. and D. J. Vine. 2018. "Are Millennials Different?," Finance and Economics Discussion Series 2018-080. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2018.080.

Lane, M. 2020. "Regulating platform work in the digital age", Going Digital Toolkit Policy Note, No. 1, https://goingdigital.oecd.org/toolkitnotes/regulating-platform-work-in-the-digital-age.pdf. OECD Going Digital Policy Note.

Lazard. 2019. Understanding the investment implications of the gig economy. https://www.lazardassetmanagement.com/uk/en_uk/research-insights/investment-research/gig-economy.

Mastercard Foundation & BFA. 2019. Digital Commerce and Youth Employment in Africa. https://mastercardfdn.org/wp-content/uploads/2019/03/BFA_Digital-Commerce-White-Paper_FINAL_Feb-2019-aoda.pdf

Maxis. 2021. COVID-19 makes workers more likely to consider the gig economy. https://maxis-gbn.com/news-events/latest-news/covid-19-makes-workers-more-likely-to-consider-the-gig-economy.

MBO Partners. 2018. The state of independence in America. State_of_Independence_2018.pdf (mbopartners.com)

McKinsey. 2016. Independent work: Choice, necessity and the gig economy. https://www.mckinsey.com/~/media/mckinsey/featured%20insights/employment%20and%20growth/independent%20work%20choice%20necessity%20and%20the%20gig%20economy/independent-work-choice-necessity-and-the-gig-economy-executive-summary.pdf.

McKinsey. 2019. The power and potential of AI in insurance claims. https://www.mckinsey.com/industries/financial-services/our-insights/the-power-and-potential-of-ai-in-insurance-claims

McKinsey. 2021. Unequal America: Ten insights on the state of economic opportunity. https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/unequal-america-ten-insights-on-the-state-of-economic-opportunity.

Mercy Corps. 2020. Operating digital gig platforms in different regulatory environments – a comparative assessment of Kenya, Tanzania, and Ethiopia. https://www.mercycorps.org/sites/default/files/2020-09/Youth-Impact-Labs-report-operating-digital_gig-platforms-different-regulatory-environments.pdf

Mishel, L. 2018. Uber and the labour market. Economic Policy Institute. https://files.epi.org/pdf/145552.pdf.

Monchuk, V. 2013. Reducing poverty and investing in people: The new role of safety nets in Africa. World Bank Publications.

NAIC. 2021. On-demand insurance. https://content.naic.org/cipr_topics/topic_ondemand_insurance.htm.

New America. 2019. The emerging millenial wealth gap. https://www.newamerica.org/millennials/reports/emerging-millennial-wealth-gap/.

New America. 2021. California's landmark gig work policies. https://www.newamerica.org/ca/reports/california-landmark-gig-proposals/.

OECD. 2019a. Gig economy platforms: Boon or bane. https://www.oecd-ilibrary.org/economics/gig-economy-platforms-boon-or-bane_fdb0570b-en

OECD. 2019b. The future of work: OECD Employment Outlook 2019. Paris, Organisation for Economic Co-operation and Development. OECD Employment Outlook 2019: The Future of Work | OECD iLibrary (oecd-ilibrary.org)

OECD. 2019c. Pensions at a glance 2019. www.oecd-ilibrary.org/docserver/1231a36d-en. ires=1641892255&id=id&accname=guest&checksum=C642B14774566C47D620EAA4C7F40935

OHS. 2019. Workplace safety in the gig economy https://ohsonline.com/articles/2019/12/16/workplace-safety-in-the-gig-economy-is-anyone-actually-paying-attention.aspx

Ortiz, I., Anis Chowdhury, F., Valverde, D., Muzaffar, T. and S. Urban. 2019. Fiscal Space for Social Protection: A Handbook for Assessing Financing Options. ILO and UN Women. https://www.social-protection.org/gimi/RessourcePDF.action?id=55694

Pestieau, P. 1994. Social protection and private insurance: Reassessing the role of public sector versus private sector in insurance. The Geneva Papers on Risk and Insurance Theory 19 (2): 81–92.

Pew Research Center. 2021. The state of gig work in 2021. https://www.pewresearch.org/internet/2021/12/08/the-state-of-gig-work-in-2021/

PPMI. 2021. Study to support the impact assessment of an EU initiative on improving working conditions in platform work. https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8428&furtherPubs=yes

QBE. 2021. Risky business – Insuring the gig economy. https://www.qbe.com/au/news/gig-economy-insurance-cover

RGA. 2019. The gig economy, its workers and group benefits. https://www.rgare.com/knowledge-center/media/articles/the-gig-economy-its-workers-and-group-benefits

RGA. 2019. The gig economy, its workers and group benefits. https://www.rgare.com/knowledge-center/media/articles/the-gig-economy-its-workers-and-group-benefits

Robert Half. 2018. Changing jobs – Is it good for your career to do it often? https://www.roberthalf.com/blog/job-market/job-hopping-smart-career-path-or-big-red-flag

Schroders. 2021. What investors need to know about Gen Z. https://www.schroders.com/de/ch/wealth-management/insights/markte/what-investors-need-to-know-about-gen-z/

Smith, T.J. and T. Nichols. 2015. „Understanding the Millennial Generation". Journal of Business Diversity Vol. 15 No. 1. https://www.researchgate.net/publication/324922926_Understanding_the_Millennial_Generation

Stanford, J. 2017. "The resurgence of gig work: historical and theoretical perspectives", The Economic and Labour Relations Review, Vol. 28 No. 3, pp. 382-401. https://journals.sagepub.com/doi/abs/10.1177/1035304617724303

Stiglitz, J. 1983. On the social insurance: Comments on 'The state and the demand for security in contemporary societies'. The Geneva Papers on Risk and Insurance—Issues and Practice 8: 105–110.

Swiss Re. 2020a. Data-driven insurance – Ready for the next frontier? https://www.swissre.com/dam/jcr:430c9b00-09ee-448f-8307-0ca484a2ad96/sigma1_2020_en.pdf

Swiss Re. 2020b. Closing Asia's mortality protection gap. https://mortalityprotectiongap.swissre.com/#/home

Sy, A. N. R. 2017. Leveraging african pension funds for financing infrastructure development. Brookings – Africa Growth Initiative.

Tandon A. and K.S. Reddy. 2021. Redistribution and the health financing transition. J Glob Health 2021;11:1600. https://jogh.org/wp-content/uploads/2021/11/jogh-11-16001.pdf

The Geneva Association. 2020. The role of insurance in mitigating social inequality. Author: Kai-Uwe Schanz

Teachers Insurance and Annuity Association of America (TIAA). 2021. Shoring up shortfalls: Women, retirement and the growing GigSupp economy https://www.tiaainstitute.org/sites/default/files/presentations/2021- 03/TIAA%20Institute_

Shoring%20up%20shortfalls_RD%20177_Bruckner%20Forman_March%20 2021_1.pdf

United Nations (UN). 2019. World Population Prospects 2019: Online edition. Rev. 1. https://population.un.org/wpp/

United Nations Research Institute for Social Development. UNRISD. 2017. https://www.unrisd.org/unrisd/website/newsviewnsf/ (httpNews)/ A355870DBFC23891C125814F002EDA58?Open Document&newstype=viewpoint&cntxt=FAC4D&cookielang=es#top

Upwork. 2019. Freelancing in America 2019. https://www.upwork.com/i/ freelancing-in-america/2019/

Whiteside, N., McGill, S., Fernandez-Urbano, R. and P. Deng. 2015. Mapping Income Protection Gaps. https://www.smithschool.ox.ac.uk/research/ behaviour-finance/publications/zurich-report.pdf

Workforce Institute. 2019. Generation Z in the workplace. https:// workforceinstitute.org/wp-content/uploads/2019/11/Full-Report-Generation-Z-in-the-Workplace.pdf

World Bank. 2019. World Development Report 2019: The Changing Nature of Work. https://elibrary.worldbank.org/doi/abs/10.1596/978-1-4648-1328-3

World Bank. 2020. Exploring Universal Basic Income: A Guide to Navigating Concepts, Evidence, and Practices.

World Bank. 2022. Individuals using the Internet (% of population) - Sub-Saharan Africa. https://data.worldbank.org/indicator/IT.NET.USER. ZS?locations=ZG

World Economic Forum (WEF). 2021. Home or office? Survey shows opinions about work after COVID-19. https://www.weforum.org/agenda/2021/07/back-to-office-or-work-from-home-survey/

Zurich. 2016. Understanding income protection gaps: awareness, behavior, choices. https://www.zurich.com/en/knowledge/topics/risk-management-in-focus/understanding-ipgaps-report

Zurich. 2020. The rise of mobile solutions. https://www.zurich.com/en/media/ magazine/2020/pandemic-boosts-customer-demand-for-mobile-apps;