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COVERING RISKS FOR PLATFORM WORKERS IN THE DIGITAL AGE

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ABSTRACT

This paper is aimed at analyzing the new world of work that emerges from the platform economy, and specifically to analyze the kinds of social risks associated with working for platforms. It underlines that there are many kinds of jobs and activities associated with platforms, and that the social risks for platform workers are not fundamentally different than those in the off-line world. There are differences, though, which we map out thanks to a new tool designed to analyze risks, which we call a “cushion”. The text goes on to underline the paradigmatic shift in workers’ mindsets, entrepreneurs’ views and states’ responsibilities in a world where mobility is becoming key. It then analyzes the various venues for developing social protection mechanisms in the digital age.

The text first investigates the various dynamics behind the development of platform work. Then it scrutinizes the various kinds of risks that platforms workers are confronted with, as compared to off-line workers. A third section analyzes the role of and need for social protection in such context, and the role and interest platforms themselves could play in developing such protections. What is at stake here is a paradigmatic shift from favoring settling to supporting mobility. The last section focuses more on the role of the State, and analyses the various scenarios that can be developed for public authorities to address the new situations and risks created by the development of platform work.

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1- WHY PLATFORM WORK?

1.1- SELF-EMPLOYED WORK AS THE COMPLEMENT OF SALARIED WORK

In the beginning, all workers were self-employed (Marchand and Thélot, 1997; Marchand, 1998). When the old *Ancien régime* corporations were abolished in 1791 by the Le Chapelier Act, the French economy settled on the principle of *laissez-faire*. Individuals were expected to freely bargain and form contracts on the market instead of being tied to corporatist rules. Self-employment became the implicit norm for all workers. The idea of distinguishing between salaried work and self-employment did not make much sense in an economy where legal formalities were few and the worker's condition was always precarious.

Self-employment as an explicit category emerged later, in parallel with the rise of the employment contract. From the second half of the 19th century, firms began entering long-term contractual relationships with workers in nascent industries such as steel and, later, car manufacturing. Yet while more and more workers were unoccupied and in search of such a salaried job, others actually kept working without being tied to a firm by an employment contract (Salais et al., 1986). As the employment contract gradually became the preferred form of agreement, a label had to be attached to occupied workers who remained outside the realm of industrial firms.

In economics, the rise of salaried work has been widely explained by Coase's theory of the firm (Coase, 1937). In the aftermath of the Industrial Revolution, the firm as a price-setting mechanism emerged as a substitute for the market. It was correlated with a managerial revolution that aimed at delivering higher performance in the presence of more complex operations (Chandler, 1977). From the 1860s onward, the emergence of scientific management and the increased need for a managerial hierarchy rendered contracting forms such as the "*contrat de louage*" obsolete (Didry, 2012, 2016; Lefebvre, 2009). In their search for productivity, industrial firms now invited workers into a longer-term relationship that provided additional benefits and the guarantee of a stable, recurring income in exchange for worker loyalty and subordination (Deakin, 2002; Simon, 1951; Supiot, 1999, 2000).

These new "rules of the game" (North, 1991) in turn led to the affirmation of a new business common sense (Favereau and Lazega, 2002). Now business leaders prized stable relationships and commitment over the long term rather than precariousness and labor for hire. In this context, it became necessary to give meaning to the emergent categories of "*employees*" and "*employers*" (Didry, 2012, 2016). The idea of the employee's legal subordination became the cornerstone of French labor law starting in 1886. Employers were now legally bound to assume greater responsibilities in areas such as insurance against work accidents or various health and safety conditions (Castel, 1995, 2017)—a trend that led to the rise of social insurance and thereafter what is known as the welfare state.

During the following decades, the employment contract went from being an emergent phenomenon to the norm. In France, the share of salaried workers in the workforce kept growing up to its peak of 91.2% in 2002 (Insee, 2016). It has receded a bit in recent years, but without

anything signaling a sharp reversal. This sustained marginalization of self-employed work can be explained by various factors: the accelerating decrease of the self-employed farming population, which went from 85% in 1980 to 63% of the overall agricultural workforce in 2015 (Insee, 2017a); independent retail stores being gradually replaced by large chain stores employing salaried workers; the higher concentration of most markets and the sustained preference of large firms for employing salaried workers, either directly or indirectly via contracting with smaller firms.

The world of self-employed work is heterogeneous. Traditional self-employed workers still fit in the familiar categories of farming (15% of self-employed workers), craftsmanship (21%) (Insee, 2015), so-called “*professions libérales*” (31%) (Insee, 2014), and other sectors with occupational licensing (including taxi drivers). The most recent period, however, has also seen the rise of new categories. There are the high-skilled freelance workers, notably in fields such as software engineering, graphic design, copywriting, and photography. And then there are all **the platform workers, defined as those who interact with their counterparty through technology-driven, networked intermediaries**. Platforms go from simple marketplaces that are merely about matching supply and demand to more elaborate infrastructures that also provide tools to both workers (to improve their performance and secure payment) and customers (to express their needs as well as easily provide feedback), thus influencing various parameters such as scheduling, prices, quality standards, and condition of payments.

We acknowledge that the term “platform worker” is imperfect because it covers heterogeneous types of activities and situations. A graphic designer or a driver-for-hire may use platforms, as well as their own networks, to find clients. We bear in mind that a given classification is always the result of history, scientific debates and political struggles. In fact, classifications are often legally fragile and analytically impure, as the long history of national Socio-professional Classification in France shows (Amossé, 2013). Later in the paper (in part 2.3 - Assessing the Vulnerability of Platform Workers), we split this umbrella term into 7 subcategories.

Moreover, **platform workers are not particularly homogeneous in terms of legal status**. While many are *micro-entrepreneurs* (a simpler version of self-employed work that exists in various sectors, sometimes conflicting with more regulated professions), others embrace other legal options: a single-person corporation (*société par actions simplifiée unipersonnelle*, or SASU); a single-person limited company (*entreprise unipersonnelle à responsabilité limitée*, or EURL); or the quasi-salaried status known as *portage salarial*.

Measuring the gains of platform workers is rather difficult. It is difficult to know how many persons are making the bulk of their income through their platform activities. Many people earn a supplementary income thanks to platform work. The French National Institute for Statistics (Insee) has only recently started surveying households on secondary revenues gained by practicing extra activities (Amar and Viossat, 2016). What's more, statistical surveys as well as platform data are confronted with the difficult-to-track multi-activities of platform workers. Some of them use several platforms concurrently, while others allocate part of their time to working for clients without platform intermediation (Smith and Leberstein, 2015).

In this section we very much insist on the idea that platform workers' experiences may vary widely depending on the type of platforms through which they perform a task and on individual strategies they adopt once connected online.

1.2 - WHY DO PLATFORMS EXIST?

The discussion of platform work should start with a simple question: Why do platforms exist?

For one, in quite a few sectors such as taxi driving, dock working or various segments of the personal care market, self-employed work remained the norm even before the rise of platforms (Baudry and Chassagnon, 2016). In theory, even in those sectors the overall conversion to mass production should have led to a near-universal integration of resources (Penrose, 1959; Chandler, 1992; Lazonick, 2002) rather than transacting with self-employed workers on the market. In practice, however, various factors seem to have contributed to sectoral preferences for self-employed work that endured over decades prior to the emergence of today's platforms.

One relevant angle is that of corporate performance. Market dynamics lead to powerful incentives to defeat competitors by maximizing performance on costs, efficiency, and effectiveness. The history of the employment contract suggests that the preference for salaried work was once motivated by the search for higher productivity (Simon, 1951, 1991; Leibenstein, 1966; Demsetz, 1988). In some cases, however, performance was assumed to be correlated with precariousness and variable earnings instead of the relative security and stable earnings that come with an employment contract (Berger and Piore, 1980; Lazonick, 2009). This proved especially true for businesses relying on workers with diffuse skills who could easily be found on the market and did not need additional training before performing the required tasks (Shapiro, 2009).

Another factor that explains the resilience of self-employed work in certain sectors is the difficulty in standardizing tasks and the related impossibility of generating significant productivity gains. In such cases, the firm's interest is to outsource such tasks to independent agents while retaining only the assets, functions and risks subject to economies of scale, network effects and other contributors to increasing returns to scale (Brynjolfsson and McAfee, 2017). The entire franchising industry is based on the proven assumption that it is optimal from the firm's capitalist point of view to rely on arm's length smaller businesses run by entrepreneurial agents rather than integrating most activities in the corporate perimeter of the parent firm. The franchise model dominates in food, retail, and hospitality—three sectors that represented almost 88% of the total revenues of the French franchising industry in 2017 (Fédération française de la franchise, 2018). Interestingly, those same sectors have long relied on a workforce that, even under the formal rules of the employment contract, has had to cope with precarious working conditions, odd hours, and variable earnings (including tips).

Outsourcing tasks to independent agents exists notably in proximity services (Stanworth et al., 2004). Most sectors relying on self-employed work are those whose core business consists in directly interacting with customers, which demands greater autonomy in one's work organization and in some cases tends to reward the self-employed form (personal care, construction craftsmanship, cleaning services, and home tutoring come to mind as relevant examples). Moreover, many such sectors are confronted with the challenges of peak consumption, which are best tackled by relying on self-employed workers. Even for salaried workers, working conditions in these sectors in terms of wages, hours, earning structure, and management style are closer to the self-employed than their salaried equivalent with a 9-to-5 job in other sectors. This can be seen in the following charts, which display the five most-requested jobs for freelancers, new craftspeople, traditional self-employed and occasional workers in the Paris area in 2018 (based on data from the French employment agency in the Paris region in 2018). The three charts show the high degree of variability in the demand for labor in the proximity services sector. Charts 1 and 3 are especially interesting. The category of

freelancers and new craftspeople groups together a growing number of solo self-employed workers and the category of occasional workers corresponding to temporary salaried workers. The latter may share fewer similarities with traditional permanent workers in a 9-to-5 job than with freelancers responding to 'on-demand' tasks (Jolly and Flamand, 2017).¹

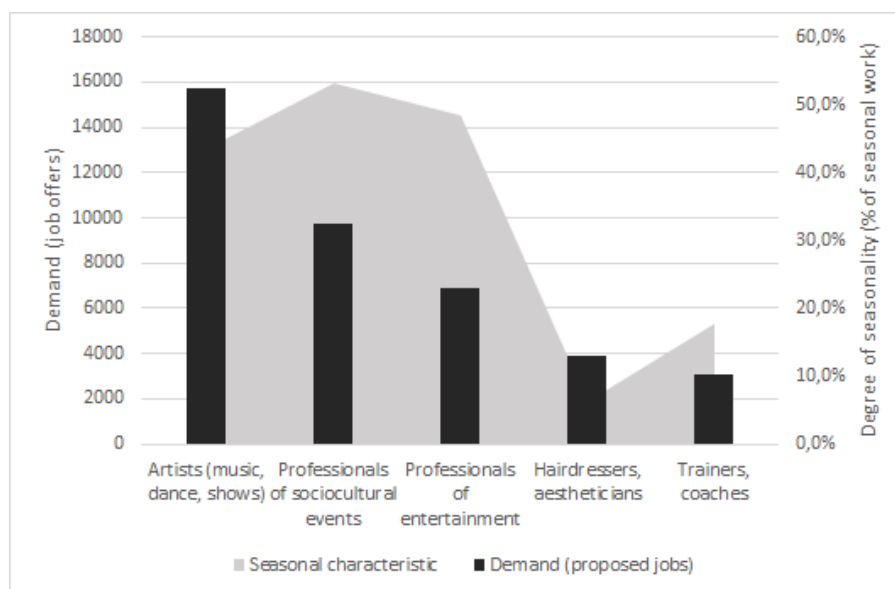


Chart 1: Five most-requested freelancer and new craftspeople jobs in the Paris region in 2018.

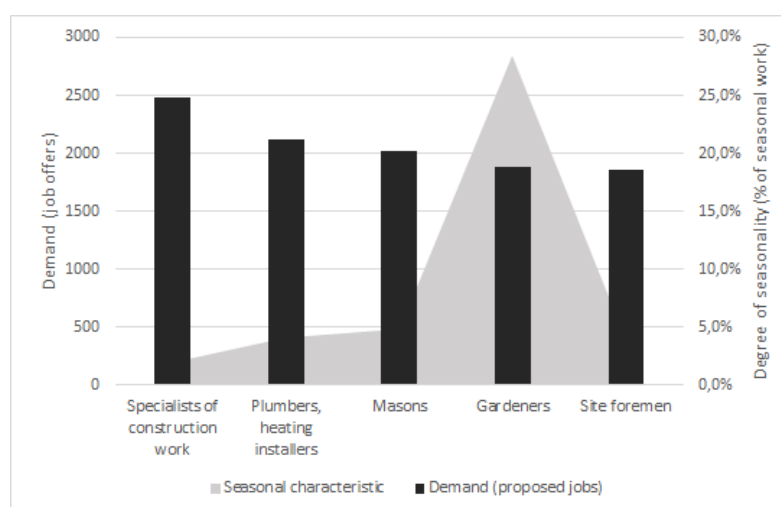


Chart 2: Five most-requested traditional self-employment jobs in the Paris region in 2018².

¹ For the 3 charts, the left axis represents the number of job offers published by Pôle Emploi and on the right, in %, the degree of seasonality, according to Pôle Emploi criteria. The degree of seasonality measures the peaks of demand for those jobs, not the variability from employment to unemployment.

² Note on the computation for charts 2 and 3: The collection of data into groups of traditional self-employed work by sector and emerging new self-employed work has been done through a reconciliation of the BMO 2018 data from Pôle Emploi and the data used by Jolly and Flamand for their France Stratégie study (2017). They proposed a new way of looking at occupational categories ('catégories socio-professionnelles') of the French National Institute of Statistics (Insee): by gathering data based on occupations rather than simply on the status of workers in the labor market, they were able to differentiate between traditional self-employed

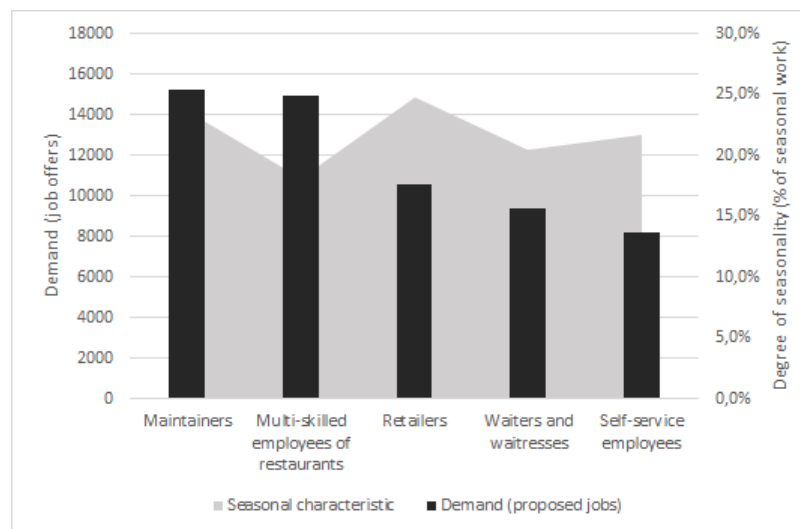


Chart 3: Five most-requested occasional worker jobs in the Paris region in 2018.

Source: Authors' calculations based on 'Enquête Besoin de Main d'Oeuvre 2018: Île-de-France', Pôle Emploi

As for the rise of platforms themselves, it is not exactly a recent phenomenon (Rochet and Tirole, 2003). Craigslist and eBay were early precursors in the 1990s. As early as 1998, Carl Shapiro and Hal Varian made the point that two-sided business models were rendered easier to design and operate by the rise of computing and networks (Shapiro and Varian, 1998). Then Amazon Marketplace made it possible for third-party sellers to rely on Amazon's large-scale distribution firepower. Around the same time, Wikipedia made it clear that a large community of contributing peers could deliver a higher performance (in terms of both volume and quality) than most integrated approaches relying on salaried workers. Finally, the eruption of the smartphone rendered new fields accessible for such models. In fact, as labor historian Hyman (2018) emphasizes, "Uber is a symptom, not a cause", as platforms were created to take advantage of an already independent workforce. Their organizations and technology are conceived and deployed to thrive in the current frame — an already insecure world of work.

Yet platforms relying on self-employed workers are still very far from dominating the entire economy (Amar and Viossat, 2016; Thiéry, 2017). There are mostly three cases. In one, platforms have grown in sectors in which self-employed work was already prevalent, like urban transportation (ADEME and 6t-bureau de recherche, 2016). Another case is that in which platforms started operating on a market segment traditionally dominated by self-employed workers or very small business entities (like Airbnb, which began by targeting the traditional B&B market). Here, though, the power of technology has also contributed to weakening the competitive advantage of larger players (in Airbnb's case, hotels), thus redistributing market shares in favor of platforms and platform workers (Coyle and Yeung, 2018). The third case is that in which the burst of platforms has simply accelerated an older tendency to outsource more business to self-employed workers, as is the case

workers, new self-employed workers (freelancers, workers, artists, etc.) and more stable workers (Pôle Emploi, 2018).

in performing arts and related professions (*intermittents du spectacle*), journalism (*pigistes*) or photography, for instance. Here there is a double dynamic at work: firms are eager to outsource to reduce their fixed costs, but it is also easier for workers to be on their own due to decreasing transaction costs and the lowered importance of fixed assets.

1.3 - PLATFORMS AND WORKERS: IS THERE SUCH A THING AS A SELF-EMPLOYED MINDSET?

Another perspective on the rise of platforms is that certain professions attract workers with a more independent mindset. Thus there are in fact two factors driving the rise of platforms on the job market. There's an overall supply-side effect with platforms growing and prospering in industries where they fit for microeconomic reasons, such as urban transportation or last-mile delivery. But there's also a demand-side effect that sees some workers embracing a way of working that promotes self-determination, hourly flexibility, and freedom from direct managerial hierarchies (Huws, 2016).

Indeed there's more at play than simply matching supply and demand on the labor market. So far most attention has been focused on skills and tasks. Self-employed work may appear to be an optimum in the presence of tasks that require diffuse skills, are difficult to standardize, demand greater autonomy from the worker's part, and do not compound into in-house experience. Meanwhile, salaried work is the preferred option for tasks that require more specific skills and are more easily standardized, thus being more easily subject to scientific management and generating supply-side economies of scale as well as a learning and experience curve that the firm is incentivized to secure through long-term employment contracts (Argyris and Schön, 1978, Doeringer, 1986; Lazonick, 2009).

The worker's point of view, however, tells a different story. It starts with a simple question: What do workers expect and what are their professional outlooks over the longer term? Certain self-employed occupations are stable but with incomes and reputation that may increase to account for greater experience and higher output, as with doctors or lawyers (Rosen, 1981). In other cases, self-employed workers eventually found their own firm and hire employees (as with traditional craftsmanship); in these cases, self-employment is a path to becoming a business owner or to being rewarded as a recognized, sought-after professional. In other areas, however, there are professions in which self-employed workers are simply passing through without much room for improving their earnings or their social status over time.

Besides protecting consumers and incumbents, occupational licensing contributes to making self-employment more attractive. In certain sectors, businesses have long relied on a reserve army of self-employed workers, which contributed to lower earnings, thus harming the standard of living of even those who were lucky enough to find work. In such cases, the barrier to entry that is occupational licensing eventually imposed a certain level of scarcity and brought earnings higher, all while providing workers with an asset (the license itself) whose actual value accrued over time (Gittleman et al., 2018). Thus the rise of occupational licensing triggered a positive feedback loop in favor of self-employed work in sectors that would otherwise have embraced salaried work under the influence of larger firms. Indeed a pro-self-employment culture is found where strong corporatist traditions and customs, often backed by an occupational licensing mechanism, lead to delivering performance even in the absence of large firms employing salaried workers. This is true in craftsmanship, dock working, taxi driving, as well as in various legal and medical professions.

Finally, a key factor is that there are fewer and fewer differences between self-employed work and salaried work in terms of purchasing power and economic security (Jolly and Flamand, 2017). There have long been many lousy jobs in the realm of salaried work, with notable cases of seasonal work, odd hours, low pay, and various other difficulties in industries as diverse as agriculture, restaurants, and trucking. This trend is accelerating as traditional businesses become more fragile, which increases the frequency of switching from employment to unemployment and back again, as even salaried workers switch jobs, industries, and geographies more frequently. It also leads to increasing pressure on existing employees and to outsourcing a higher proportion of operations to contractors and other specialized providers—a phenomenon known as the “*fissured workplace*” (Weil, 2014). Many studies have indeed documented the rise of “*outsiders*”, that is, workers with atypical employment contracts, in various sectors of the economy (Emmenegger et al., 2012).

All in all, the relative advantage to being salaried is shrinking by the day. Yes, employees may receive better benefits in the US and are better protected against losing their job in France (although new rules enacted in 2017 will make it easier to fire workers in case of corporate economic hardship). But for all workers, being on the move may be becoming the new normal for a greater number of individuals and renouncing loyalty to an employer emerges as the typical response (Lobel, 2013; Fleming, 2017; Wartzman, 2017). Indeed, according to the DREES Opinion Barometer of the French Ministry of Social Affairs and Health (Papuchon, 2016), self-employed workers’ assessment of their personal situation is very much in line with that of salaried workers in the private sector. The rise of worker precariousness, greater instability on the job market, and the stagnation of household income is more about a lower quality of salaried work (Jolly and Flamand, 2017) than it is about a greater reliance on self-employed work.

And so it seems that the rise of platform work is explained as much by the profile and expectations of the workers as by the specificities of any particular sector. Self-employed work may be a supply-side optimum on certain markets whose microeconomic characteristics call for workers to have more autonomy. But the worker’s point of view would suggest that it can also be a demand-side optimum, whatever the characteristics of the market, in the presence of individuals who express a preference for self-employed work or who deliver a higher performance under the conditions of self-employed work.

Accordingly, in the latter case the rise of platform work might also be explained by the worsening conditions in the world of salaried work and the resulting fact that some workers have had enough of lousy jobs and/or lousy employers. Those workers may prefer the possibility of ups and downs rather than the stability that comes with a fixed, recurrent income. They may be interested in working flexible rather than fixed hours. They may dread being submitted to a hierarchy (Shapiro, Chandler et Muller, 2013), preferring to work on their own. All in all, they may be attracted to platforms and the opportunities they provide, especially when comparing them with the bleaker perspectives of unemployment (Landier et al., 2016) or ever lousier jobs in the world of salaried work (Parisé, 2016).

2 - PLATFORM WORKERS FROM A RISK PERSPECTIVE

2.1 - PLATFORM WORKERS ARE EXPOSED TO TRADITIONAL RISKS

In France, as in many developed countries, the welfare state has been principally designed to cover five critical risks. Work accidents (being injured, handicapped or killed at work) were historically the first risk to be covered by a social insurance mechanism in nineteenth-century Germany, followed by France and the UK (Mares, 2003; Flora, 2017). Old age is the risk of still being alive at an age when one does not have the strength or the mental stamina to make a living anymore. Illness is the risk of not being able to work for health reasons, thus lacking income while having to pay for adequate care. Having children is also a risk because it imposes additional long-term expenses that many households are unable to cover. Finally, unemployment is the risk of being out of a job, in which case transitional income is needed to help train for another job, take enough time to negotiate with the next employer, and pay the rent in the meantime.

A significant portion of the French social system has been attached to the employment contract, either as a result of a government-sponsored contributive system (otherwise known as “*conservative-corporatist*”, or “*Bismarckian*”) (Palier, 2005, 2010) or because the coverage is willingly provided by the employer itself. What’s more, French self-employed workers have historically been keen to preserve their autonomy through separate schemes with both lower contributions and lower benefits, leading to a different approach to covering risks and reinforcing the tendency to attach broader social coverage to the employment contract.

That being said, there has been a decades-long tendency to switch larger parts of the social safety net towards a more universal approach. In this more “*Beveridgean*” system, risks are not covered in exchange for an ongoing contribution but are covered for every individual regardless of their working status. As a result, every worker, whether salaried, self-employed or unemployed, can rely on a minimal, universal safety net that covers certain risks and delivers significant benefits.

In France, monetary benefits to parents (*allocations familiales*) are part of that universal safety net. And since self-employed workers are as entitled as salaried workers, the main difference between self-employed workers and salaried workers would be that the latter have a higher likelihood of having access to childcare facilities—either because access is provided through the employer (which is relatively rare) or because there are government-sponsored facilities (*crèches*) that come with constraints (notably scheduling) that are adapted to traditional 9-to-5 jobs. On the other hand, the flexibility that some self-employed persons enjoy makes it easier for platform workers to look after their own children (Berg, 2016).

When it comes to healthcare, the French system is also essentially universal (Palier, 2017). Additionally, platform workers tend to be younger, which results in a lower probability for this particular population to need significant healthcare benefits and providers. However, in the case of a health condition that makes it impossible to work, most self-employed workers have no access to substitutional income (sick pay), except if they have subscribed to insurance for that purpose.

Even though many social rights are accessible to platform workers in France, some specific decisions have been taken concerning their access to insurance against work accidents, access to training, and the right to collective organization. The Labor Law on Labor, Collective Bargaining and Career Protection, adopted in France in August 2016, introduces a legal framework under which the relations between digital platforms and workers are regulated by introducing the principle of "social responsibility of the platforms". In article 60, under the condition that platforms determine the features of the service and its price, self-employed workers who are using one or more digital platform for their professional activity, have the right to:

- **receive coverage for work-related accidents**, for which the platforms must organize a collective insurance or pay for the individual workers' insurance, under the condition that workers earn a minimal revenue through the platform.
- **receive professional training**, for which the platform must pay, under the condition that workers earn a minimal revenue through the platform.
- **unionize and organize bargaining actions** to defend their professional demands, without this causing any sanctions or terminations of their relations with the platform.

Today the law places the relationship between workers and digital platforms not under the standpoint of the subordinate relationship which defines the employment contract but under the existence of an economic dependency of self-employed individuals to an online platform.

The decree of May 4, 2017 ³—and the interministerial circular published on July 8, 2017—specifies that the obligations platforms must respect in regards to workers will only take effect if the self-employed worker earns a revenue superior or equal to a threshold set by the decree at 13% of the annual social security threshold (*plafond annuel de sécurité sociale*), i.e. €5,099.64 in 2017. In concrete terms, the decree notably specifies that the platform must reimburse the worker for the payment of their contribution to professional training as well as the additional costs borne through the process of receiving official recognition of their acquired experience—a process set up by the French government and validated by a jury. Furthermore, the platform must compensate for the loss of revenues the worker had to face when going through that validation (within the limit of a threshold that represents 24 times the hourly rate of the minimum wage).

The decree of May 2017 also takes into account the potential multi-activity of platform workers, stating for instance that the reimbursement of costs generated by the contribution to work accidents will be made in proportion to the revenues earned through the platform, in case of pluri-activity. If the worker only works with two platforms and only earns the minimal revenue specified by the decree on one of them, only the platform concerned will have to cover the costs.

Finally, the last obligation which the platforms must respect is the implementation of a free online process through which workers may submit their requests for reimbursement and their proof of annual revenues. The platform must also provide any information on the modalities of this online process and the repayment terms.

For work accidents, the May 2017 decree has enacted the principle that platforms should refund the work accident contribution paid by independent workers' (if they request it) or

³ <https://www.legifrance.gouv.fr/eli/decret/2017/5/4/ETST1710240D/jo/texte>

partner with an insurer to subscribe to a collective contract. This new rule has led several platforms to provide an insurance policy as part of the bundle of resources workers can use while on the platform. Hence the mechanism is specific to platforms, but its impact on workers may be similar to what exists in the world of salaried work.

Old age is a more complicated matter (Palier, 2014). The current coverage relies on strict compliance in contributing to a pension regime. It raises the question of the propensity of self-employed workers to comply with sometimes obscure and demanding bureaucratic rules. Above all, the amount of future pension payments is more or less proportional to the contributing payments during one's career, which creates two problems for platform workers. First, their incomes might be lower on average or more fragmented (derived from multiple sources) than in the world of salaried work. Second, the intermittent nature of self-employed work, however convenient from a worker's point of view, contributes to having entire quarters that might not be considered actual periods of work (Berg, 2016; CIPD, 2017b). Finally, it should be underlined that salaried workers also contribute to additional pension regimes ("retraites complémentaires"), which have no equivalent for self-employed workers (Amar and Viossat, 2016).

This is where old age clearly appears as a risk deeply impacted by the current paradigm shift. In the past, self-employed workers covered that risk by relying on an ownership approach. Entire professions dominated by self-employed work reached a compromise under which lower contributions would find their counterparty in lower pensions. But when the time came to retire, individuals would make up the difference thanks to their own assets (such as a taxi medallion, a shop, a clientele) that they could liquidate so as to access a large amount of money that effectively served as a pension.

Such assets are of less value for today's platform workers, as most of these assets have effectively been commoditized by the platform itself. This does not necessarily go against the worker's interest, as it radically lowers the barrier to entry to joining a profession and performing the related tasks (Maity et al., 2016; Rubin, 2016; Zvakos and Janney, 2017; Broughton et al., 2018). It does, however, create the risk that self-employed workers could fail to save enough during their career due to short-sightedness or lack of information on the levels of pension to which they are entitled within the framework of their retirement schemes.

Finally, the most difficult question is raised by the fourth risk: unemployment. It is a risk that has been historically defined in reference to the world of salaried workers (Salais et al., 1986), which was marked by the principle of continuous employment over the long term. However, this doesn't mean that self-employed workers are not exposed to periods of inactivity that inevitably translate into a loss of income. This is the case for seasonal work, or if workers cannot find enough activity on the platform, or simply because self-employed workers frequently stop working for a while, whether they are seeking new gigs, training to improve their performance, switching to a new career, or simply enjoying the flexibility that platform work provides.

2.2 - PLATFORM WORK ALSO GIVES RISE TO SPECIFIC RISKS

Even more risks appear as we explore the other part of the map: risks to which platform workers are exposed because they are self-employed and that would not be as critical if they were salaried. Those risks were tolerated at a macro level when self-employed work was confined to the margins

of the labor market. But if platform work is bound to rise as a more common form of work (depending on various economic factors, policy decisions, and historical contingencies which we cannot predict), we must deal with these risks.

First, there are essential resources that only salaried workers can easily access because of the structure of their earnings and the risk profile it indicates to other parties. Earning a salary is reassuring to a banker, who may lend money, or to a landlord, who may rent out their house or apartment, especially if one is salaried with a permanent work contract. Conversely, being self-employed, however high one's earnings or available cash, is usually a repellent for both bankers and landlords. This reveals a risk that is specific to the world of the self-employed: not being able to borrow money from a bank or to find affordable housing in the areas where you are in demand. A recent study shows that even if self-employed workers enjoy a higher income than salaried workers on average, the likelihood that they fall into poverty is three times higher (Insee, 2017b; HCFIPS, 2015).

Second, platform work is part of a larger approach to the job market that we define as *mobility*. Mobile workers are people who spend a relatively short amount of time in a particular profession or geographic area. Their complementary category is that of the settlers, those whose situation is more stable because it is attached to a steady job that they can keep for years, even decades (see also the notion of hunting developed in Colin, 2018, Chapter 10).

In the past, the default way of life was that of the settlers. The majority of workers had a job or occupation for the long term. Mobile workers, on the other hand, were the minority. Mobility was tolerated in the first years of one's professional life. Most of those who were mobile over a longer period did so because they did not have a choice. As a result, their condition was precarious: submission to predatory landlords; the impossibility of reassuring an employer or a bank; being constantly away from their family. Due to these adverse consequences of being a mobile worker, most institutions, especially in the realm of the welfare state, were designed to convert mobile workers to the settled way of life.

Today's mobility, however, is different—less marginal and better tolerated, including by the workers themselves. It is an approach to the labor market that corresponds to those who deliberately consider their current occupation as temporary or transient. As a result, they are prepared to switch careers more often, even if it entails more uncertainty and a less steady income.

In that case, our hypothesis is that such workers are attracted to platforms not only because they are attracted to self-employment in general. They also enjoy the fact that platforms make *mobility easier* because of their distinctive features: access to a liquid market with abundant demand; tools to optimize scheduling and performing tasks; a swift and secure process when it comes to setting prices and processing payments; real time feedback regarding the quality of the service and potential room for improvement. A recent survey conducted by TNS Political & Social for the European Commission - Flash Eurobarometer 438 - revealed that 46% of respondents considered that platforms help in exchanging services and goods in a more convenient way than in traditional markets of goods and services (European Commission, 2016: 23).

That being said, mobility comes with distinctive risks, even for those who rely on platforms. One of them is the instability to which workers are exposed while searching for gigs and other opportunities. Another is the risk of being engulfed in an uninterrupted series of gigs that are hardly enough to provide a living wage while also not providing the room to become better at finding gigs

or to switch to another career. Through platform work, individuals can be pushed onto a segment of the job market where incentives for skill-learning are scarce and opportunities to increase income are few (Aloisi, 2017). As it is up to the worker to decide to register for training (Thiéry, 2017) and as demand for skills is low in certain parts of the platformed world, there is a significant risk that platform workers end up in a low-skill trap (OECD, 2015).

These risks that are specific to platform work form a nexus, reinforcing each other and delineating what is effectively a different paradigm than that of traditional salaried work. For instance, there is a close relationship between the difficulty in affording housing and the intermittency of self-employed work. Intermittency makes it more difficult to find housing because it complicates the proof of solvency vis-à-vis landlords and bankers. Conversely, the difficulty in affording housing on tense urban real estate markets aggravates the intermittency of work: Many jobs, located in highly sought-after zones, are not stably filled because those who are attracted to them cannot afford to live nearby. This risk is reinforced by the particularly urban characteristic of proximity services platforms (Estèbe, 2017; OECD, 2016). Moreover, the jobs which are the most difficult to fill are not only jobs that need a particular expertise or diplomas, but also jobs with low barriers to entry and those characterized by seasonality, such as headwaiters (Pôle Emploi, 2018).

This new system of risks is as familiar to most self-employed workers as it is strange to most salaried workers. The five critical risks traditionally covered by welfare state mechanisms are all aligned with an economy dominated by salaried work, corresponding to situations in which a worker cannot work anymore (temporarily or definitely), thus interrupting the steady earnings on which they can rely while they are available for their employer. As for the risks to which self-employed workers are exposed, most of them relate to how those workers effectively make a living: the stake is not to secure and maintain a recurring, stable monthly income, but rather to be able to secure sufficient wealth and income over longer periods of time while always having the possibility to rebound, in the same sector or in another career, following adverse consequences.

All in all, self-employed workers are often covered differently than salaried workers. They may rely on a different (usually weaker) mechanism. The criticality of their risks might also be significantly higher due to their situation as self-employed workers and the imbalance that can exist in their relationship with platforms. In a report for the International Labor Organization (ILO), Choudary (2018) outlines a framework of how limited free agency, reduced bargaining power, domination, dependence and an unfair allocation of risks and rewards may take place through platform work, thus suggesting that platform work can be as synonymous with higher risk exposure as it can be with empowerment.

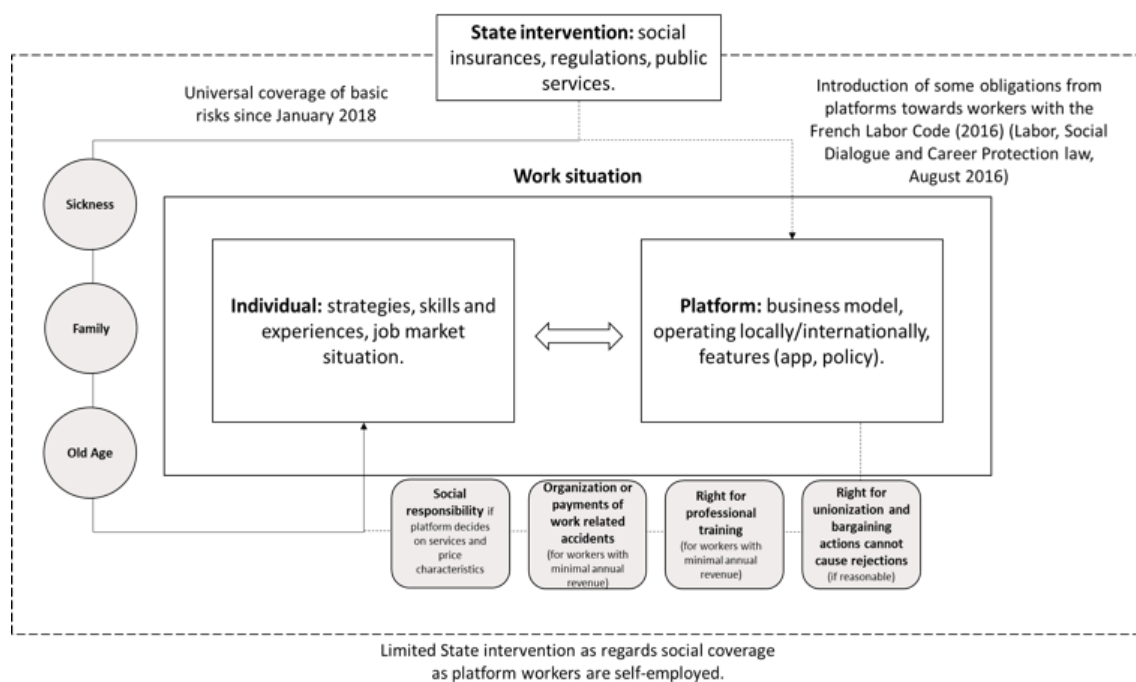
Here, it is useful to underline that just like any “jobs”, salaried or not, there are many different kinds of “gig jobs”. As labor historian Hyman (2018) makes clear we should not sentimentalize a past that never truly was. Moreover, as has been demonstrated by an extensive comparison of retail work across different industries and seven countries (Carré and Tilly, 2017), there is nothing inevitable about low-quality jobs. When it comes to labor dynamics, institutions matter more than “market forces”, “automation” or “globalization”.

All in all, mapping the risks to which platform workers are exposed requires comparing both the criticality of risks (which combines probability and impact) and the broadness of the coverage mechanisms on which these workers rely. Crossing these two dimensions helps reveal an individual's *vulnerability* to a particular risk, a concept that encompasses the likelihood that an

individual will be hit by an adverse event and their ability to cope with it by relying on themselves, their family, and any other mechanism designed to cover that risk.

2.3 - ASSESSING THE VULNERABILITY OF PLATFORM WORKERS

Figure 1: Context in which French digital platform workers operate



Source: authors

Vulnerability is the concept that we use to discuss the diversity and magnitude of risks to which platform workers are exposed. It encompasses both the likelihood that an individual goes through a loss and their relative (in)ability to cope with it. According to Soulet (2005), vulnerability has four main characteristics. First, it potentially concerns all workers. Second, the criticality of the risk depends on the context (both the environment and social coverage to which workers are entitled). Third, the impact of an adverse event will vary from one individual to the other, with some being more affected than others. Finally, vulnerability is reversible: it is possible to minimize it by preventing risks or improving coverage in case of a loss.

Justification and construction of the safety and capacity cushions

To represent the vulnerability of platform workers to various risks (fifteen in total), we use the image of a "safety and capacity cushion". The cushions account for fifteen risks. Each risk is classified according to the three dimensions of what workers might expect from work and social coverage: 1. Safety and security, 2. freedom and flexibility (Chevallier and Milza, 2017), and 3. Self-realization and dignity (Méda, 2016).

Based on a three-part analysis of work relations developed by Supiot (freedom, security, empowerment) in *La fonction anthropologique du Droit* (2005), Chevallier and Milza (2017) go beyond the binary opposition between long-term employment (sometimes understood as a guarantee for a stable and protecting source of income) and the new forms of atypical work contracts (sometimes perceived as the only way to be truly independent while traditional long-term employment is solely a form of disempowering subordination for workers) (Chevallier and Milza, 2017: 55). Taking into account not only the importance of security for workers when they are facing risks they have no control over, but also risks associated with a desire for freedom and dignity, Chevallier and Milza introduce a framework which evaluates work relationships both in terms of individual *needs* and *expectations*.

Recent reports and studies showed just how much work has taken on a growing importance for people's lives as working experiences constitute more and more areas of self-realization (Méda, 2015). Platform work may not fall into the set of expectations workers traditionally nurture with stable, long-term employment, but testimonies of platform workers in the Paris area showed how much work, even on platforms, can constitute the base for building one's self-identity (Parisé, 2016).

If the objective of the welfare state was initially solely to be a “risk reducer” or a “guarantor for the safety of individuals” (Castel, 1995), its role has gradually expanded to ensure the guarantee of “social well-being” which goes beyond the traditional notion of social risk (Ramaux, 2007). Social risk can be defined as an event which threatens the situation of an individual or household for which they cannot be held responsible and whose economic cost calls for a collective (state) intervention (Pollak, 2011). For some individuals, however, complete safety against the risks associated with employment might be less preferable than gaining autonomy and power over one's schedule, if they value independence more than stability. Others, on the contrary, might prefer safe long-term employment.

We use this three-dimensional framework to encompass the variety of work expectations individuals may have and thus the different individual vulnerabilities to risks, depending on the type of relations individuals may have with work.

In order to be as specific as possible, **we have distinguished various types of situations (different types of platform workers) and different dimensions of risks.** In order to assess the variety of vulnerabilities of workers in the digital age, **we have distinguished seven different types of platform workers.** Based on the work of Juliet Schor et al (2017), we first identified five types of platform workers: (1) drivers, such as workers on Uber-like platforms; (2) couriers such as workers on Deliveroo, UberEats or Stuart; (3) micro-task online workers, such as those on Mechanical Turk or Crowdfunder; (4) micro-task physical workers (TaskRabbit, Youpijob) and (5) qualified freelancer platforms. Based on the work of Kenney and Zysman (2018), we have added two types of income-generating activities: “online marketplace sellers” (6) using Ebay or the French *Le bon coin*, and “content creators” (7), for those creating content (on YouTube; for podcasts, etc.). In order to assess the specificity of their vulnerability in the platform age, we compare their situation to an equivalent traditionally self-employed worker performing the same kind of work “offline”.

To depict the particular situations met by these different types of workers, we have identified the various sources of risks workers may face (individual choices or linked to platforms) and the different sources of protection workers may benefit from (by individuals, the platforms or the State). The choice of the key characteristics of the sources of risks and sources of protection and their assessment is grounded in an extended review of the literature – scientific and journalistic

– on platforms (Allaire, 2018). In the cushions, a difference was made visually between factors that do not rely on individual consent or action and factors that rely on individual strategies or decisions. The boxes filled with solid colors represent factors which are imposed on workers or platforms (“exogenous factors”)—like social insurance—while boxes filled with patterns are factors of vulnerability or safety which depend on individual decisions (“individual factors”). The different factors were stacked to represent a cushion of security and its various components. When one factor is identified in the literature as empowering individuals or improving workers’ situations when facing a particular risk, it has been stacked in the “empowering factors” section of the cushions. If one factor is identified as degrading or aggravating the vulnerability to certain risks in the literature, it has been stacked in the “degrading factors” section of the cushions.

The safety cushions encompass 3 broad categories, which describe the context in which French digital platform workers operate (see Figure 1):

- 1) ***The level of risk and protection in performing work on platforms***; based on the intensity of the tasks platform workers carry out and the individual strategies they mobilize when connected to platforms (“Individual”). Qualitative interviews made for sociological studies on platform workers have shown two important axes of differentiation among platform workers (Schor, 2017; European Parliament, 2017). The most economically dependent workers—working full time on a platform—are also the least satisfied with work done through platforms and are more exposed to the risk of being unable to pay daily expenses (European Parliament, 2017).
- 2) ***The features of the platform itself*** (“Platform”). **The type of platform and the operating firm behind it both have an influence on working conditions and worker satisfaction.** Most platforms operate on the basis of an algorithm that sorts and classifies the workers and connects them with potential customers. It may also set prices, as with platforms having prices indexed on demand. The platform might then aggravate the vulnerability of workers to certain risks, especially those associated with personal freedom when the algorithm replaces the rules enacted in a conventional business to provide guidance over how a task should be performed.

The question of workers’ being controlled by an algorithm is, however, complex, as platforms such as Uber or Deliveroo operate with nudges. This consists in setting up a soft-control system by giving individuals information on potential additional income when they are disconnecting from the platform, for instance. Platforms have also changed their strategy in recent years and have proposed applications that allow individuals to improve their working conditions (Bhuyian, 2017). Uber notably published a White Paper for a worker’s safety net in Europe in February 2018 (Uber, 2018). Retention rates of workers is also a critical issue for the platform (Molla, 2018): Uber retention rates in the USA was only 3% in 2017 (Efrati, 2017). The control platforms exercise over workers may also vary widely depending on the type of workers they gather, and on which markets they operate. For instance, when it comes to clientele management, qualified freelancer platforms might intervene less than on-demand service platforms, for which quick responses to consumer demand is key to ensuring client satisfaction.

- 3) ***Social insurances and regulations which diminish workers’ vulnerability to risks*** (“Social State”), as the French labor code evolved recently (Dablanc et al, 2017) to ensure a certain security for platform workers when performing tasks and activities online. The

French social security now covers sickness and old age on a universal basis (Ameli, 2018). For some safety factors – such as social insurance – it was possible to quantify the vulnerability of workers to risks as studies have been done on the topic (Matsaganis et al, 2016). However, we decided against representing such quantification of vulnerability factors on the cushions. Some are purely individual strategies and their impact on the risks are unclear and may simplify complex systems of representation (Brynjarsdottir et al, 2012).

There are 4 benefits of using the image of a “cushion”. First, it highlights the difference a specific operating firm behind a platform can make in alleviating the consequences of a risk. Second, it reveals that when facing a risk, the same factor can be both capability-enhancing and aggravating. This two-edged perspective is strongly asserted in Choudary (2018). We buttress the argument by providing a more comprehensive and nuanced review of the consequences of platform work. As a forward-looking tool, the cushion shows which risks are left on the shoulders of the worker and points at room for improvement. Finally, cushions constitute visual tools which facilitate the understanding of the differences in platform workers’ situations. In addition to that, we propose comparing the different cushions by means of indices measuring the propensity of the identified factors to aggravate or improve an individual’s vulnerability to risks.

To assess the specificities of the situations of platform workers, we compare them with those of their “offline counterparts” (to use the terms of EU-OSHA, 2017). We must, however, acknowledge the fact that **the platform economy creates online markets that may not be comparable to existing offline markets.** The platform economy phenomenon goes far beyond a simple dislocation of the capitalist firm into small enterprises as it allows a crowd of individuals to connect and « perform tasks in the form of an open-call » (Howe, 2006 – cited by Graham, 2018: 1). Some platforms enabled the creation of new markets and institutionalized previously informal economies. If babysitting is traditionally performed in one neighborhood and the clientele found in relatives’ circles, platforms are now capable of extending local economies to an entire city or region and connecting complete strangers. This has especially been made possible by the trust-enhancing technologies and reputation management systems that platforms offer (Dyer and Wujin Chu, 2003; Colin et al, 2015). Finally, platform markets close to existing offline markets might benefit from a wider pool of potential workers, thanks to low entry barriers.

In particular, **platforms may be a source of new job opportunities for people excluded from traditional labor markets.** Workers may find in platforms an attractive way of finding close-to-stable employment opportunities and income. This is especially the case for Uber in France, which has developed its first driver market-base in large urban agglomerations characterized by high disparities in terms of standard of living. The Parisian area is marked by a concentration of pockets of poverty in some districts and peri-urban zones bordering the capital (Bellidenty and Martinez, 2015 ; Caenen et al, 2017) where the rate of unemployment is particularly high compared to other parts of the city. Charles Boissel (2015) has shown a positive correlation between the registrations as a “VTC driver”⁴ in the Paris area and the fact of one’s living in a district with high unemployment rates—all mostly located in the northern Parisian *banlieues*. French Uber drivers, as analyzed by Landier et al (2016), are younger and less educated than their US counterparts (Hall and Krueger, 2016)—a portion of

⁴ A specific status in France for operators who make available to their customers one or more vehicles with a driver (Code des Transports, Article L 3122-1).

the French population especially at risk of exclusion from the labor market (Prouet, 2017)—and they see in Uber a way to gain stable income and employment, more than is seen in their US counterparts (Landier et al, 2016)⁵.

Despite the limits of a comparison between platform labor markets and traditional ones, it appears justified to compare the situation of platform workers to their offline counterparts.

First, because not all workers may see in the platform economy a new way of combining different activities to be fully flexible in their work schedule and in the types of tasks performed, but may instead see in it a path to stable employment. Second, because in the case where platforms are understood by workers as a new way of gaining more flexibility when working and/or as a possible way to earn higher income on a temporary basis, it is important to assess whether platforms may contribute to higher empowerment than traditional employers and satisfy workers' expectations and needs.

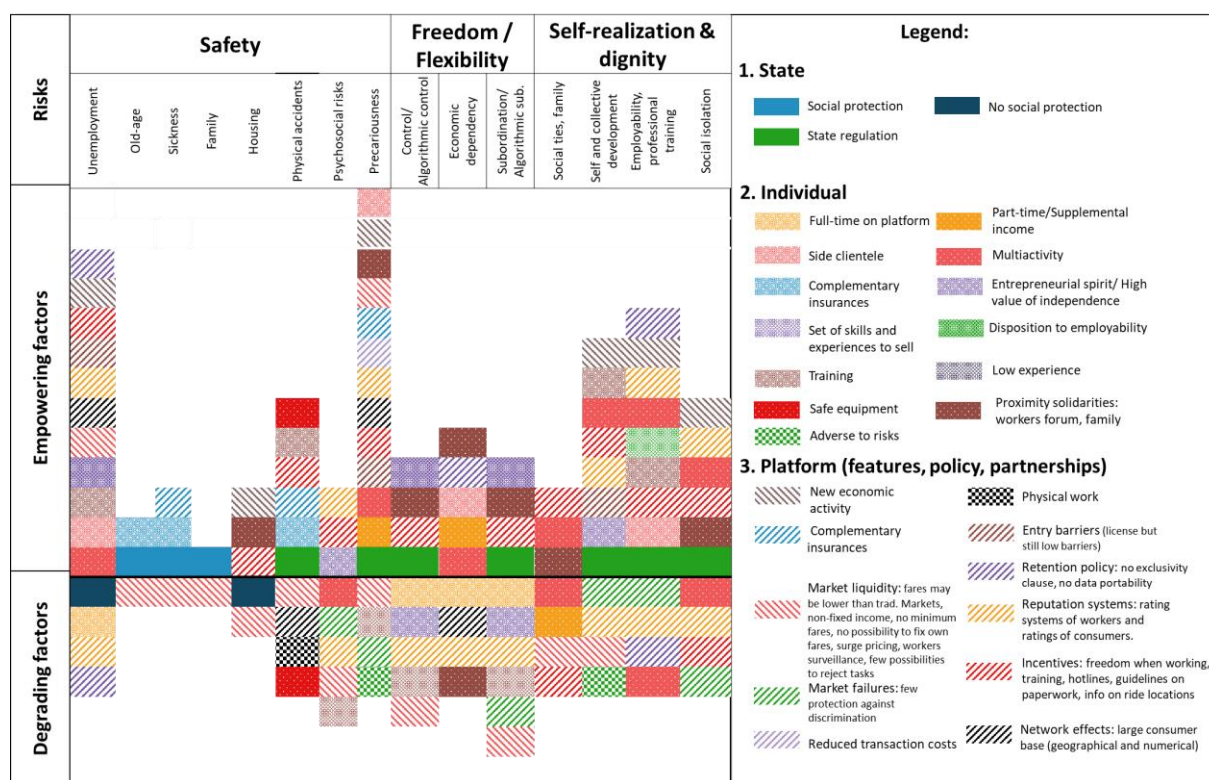
Just like for platforms, offline firms are very diverse. We chose to compare platform workers to offline equivalents based on the type of sector of operations and contract held by workers.

Uber drivers are compared to traditional self-employed taxi drivers (1). Couriers, who tend to be students operating on a seasonal basis (Klak, 2017), are compared to traditional couriers in the food distribution market, which also tends to recruit among that specific cohort of the population for limited part-time duration contract (2). On-demand physical workers are compared to workers with long-term duration contracts working part-time, as is the case for home-care service providers who find work with a specialized agency (3). Online crowdworkers are the most difficult to compare to any existing work situation due to the extreme micro-task nature of their work. We compare them to workers with a long-term duration contract hired by an agency to execute externalized work for private firms, as those tasks might be repetitive and only require limited supervision and apprenticeship (4). We compare high-qualified freelancers registered on platforms to high-qualified freelancers not registered on a platform (5). For sellers on online marketplaces, we compare them to traditional shop owners (6). Finally, we compare content-creators (7) like YouTubers to temporary workers in the cultural and entertainment industry, who operate under the specially designed regime of "*intermittents du spectacle*"⁶.

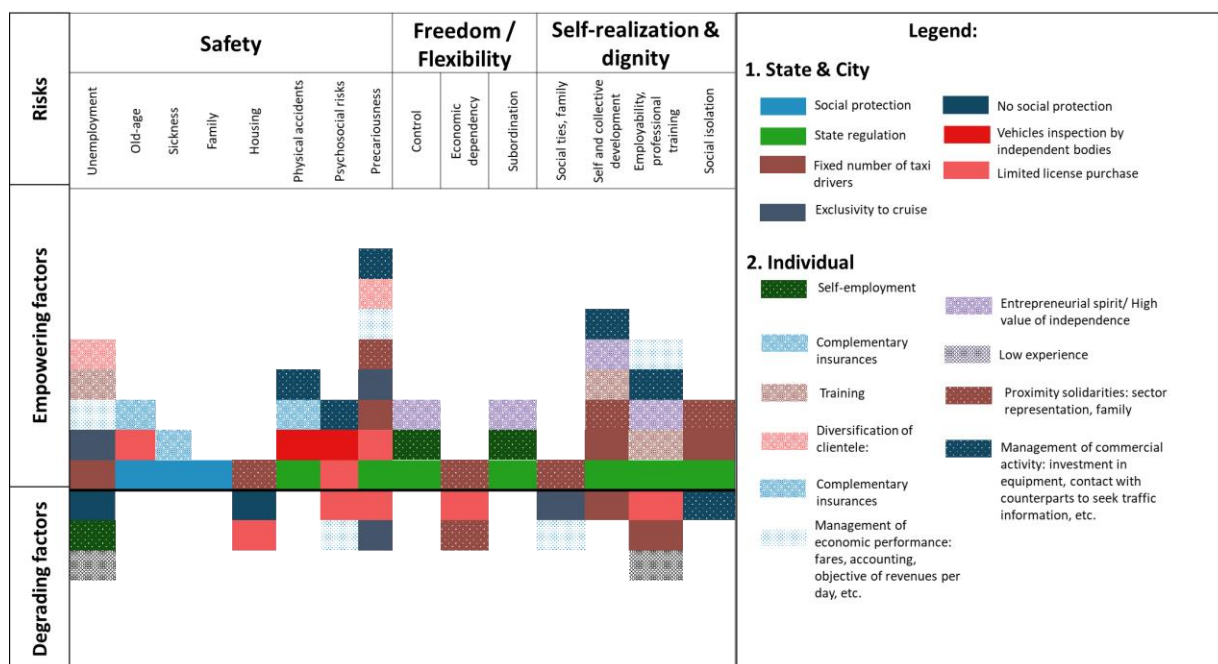
⁵ According to Landier et al (2016), this difference may be explained by the fact that the UberPop app, which allows nonprofessional drivers to be private drivers on a non-regular basis, has been outlawed in France and authorized in the US.

⁶ In France, the *intermittents du spectacle* conduct an activity made of artistic "gigs" or project-based employment contracts. They benefit from a specific unemployment insurance scheme. This regime notably makes it possible to have multiple employers and receive unemployment benefits during periods of inactivity. The development in France of online platforms has led some to defend the extension of the unemployment insurance regime of "*intermittents du spectacle*" to digital workers.

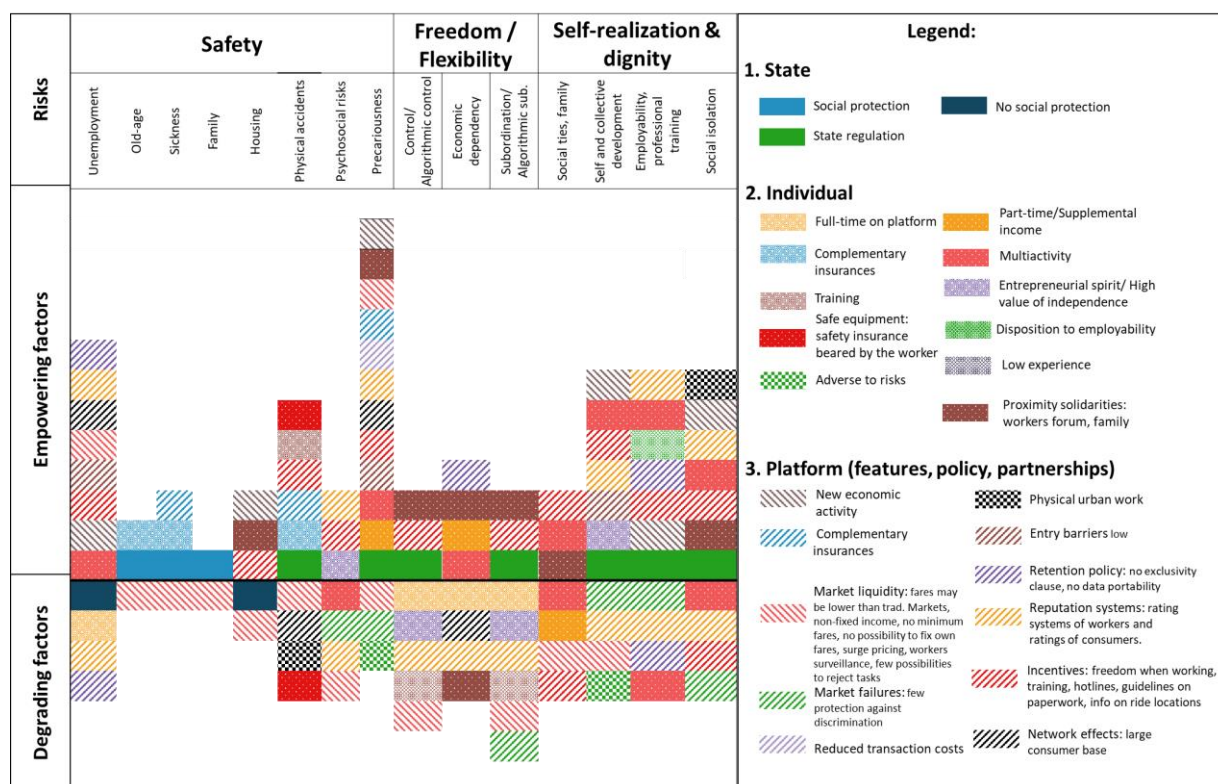
Type 1: Uber-like platforms



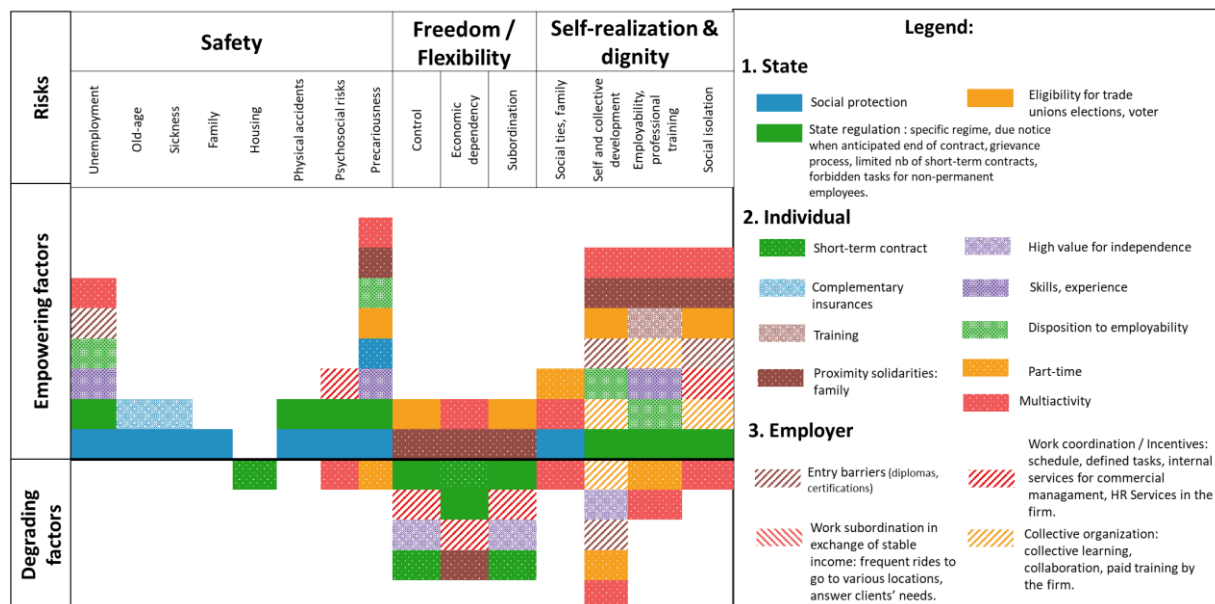
Comparable type 1: traditional self-employed taxi drivers



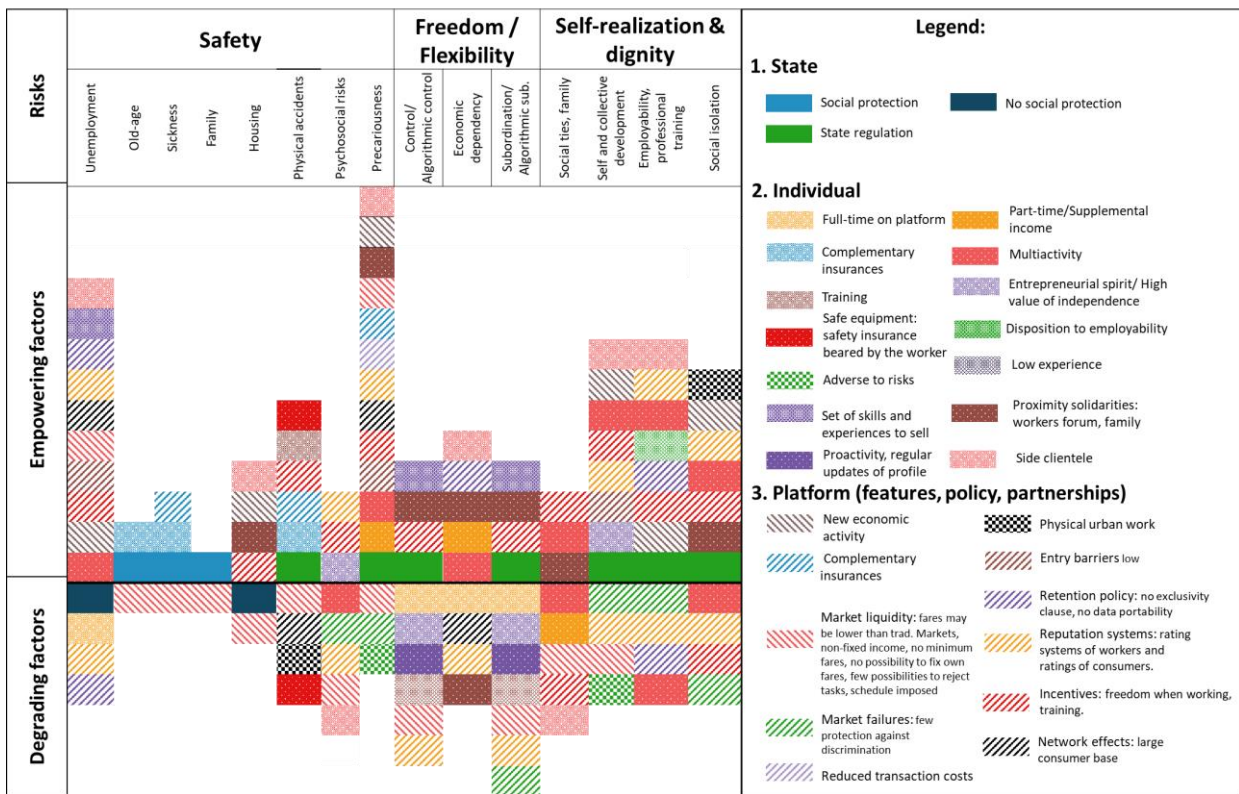
Type 2: Couriers platforms



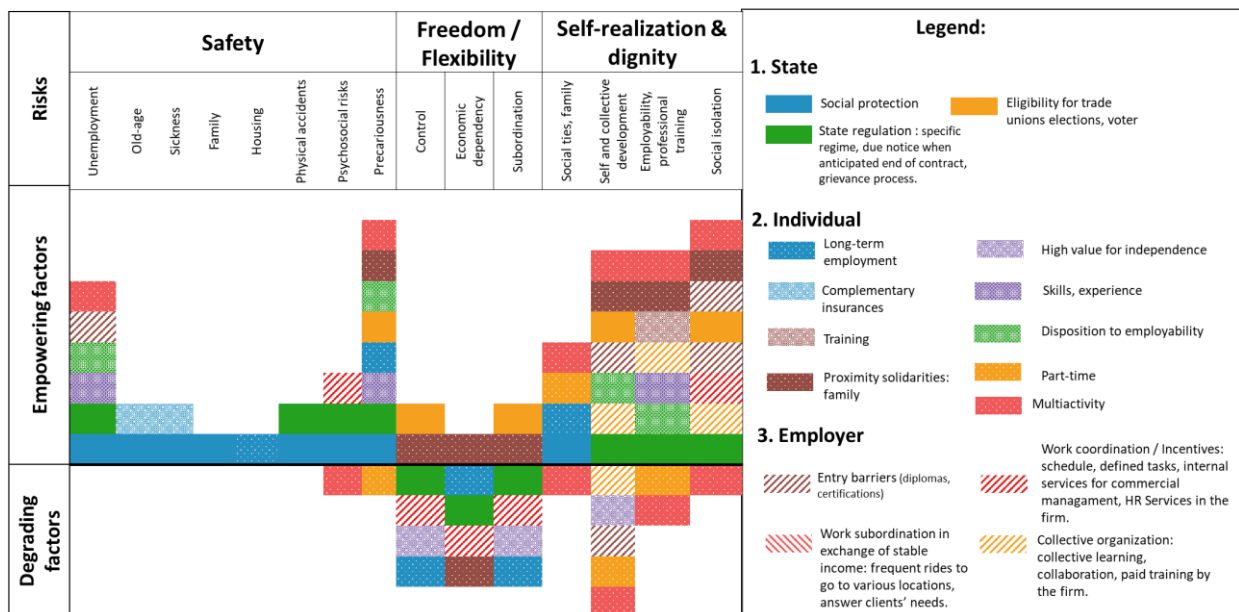
Comparable type 2: traditional couriers



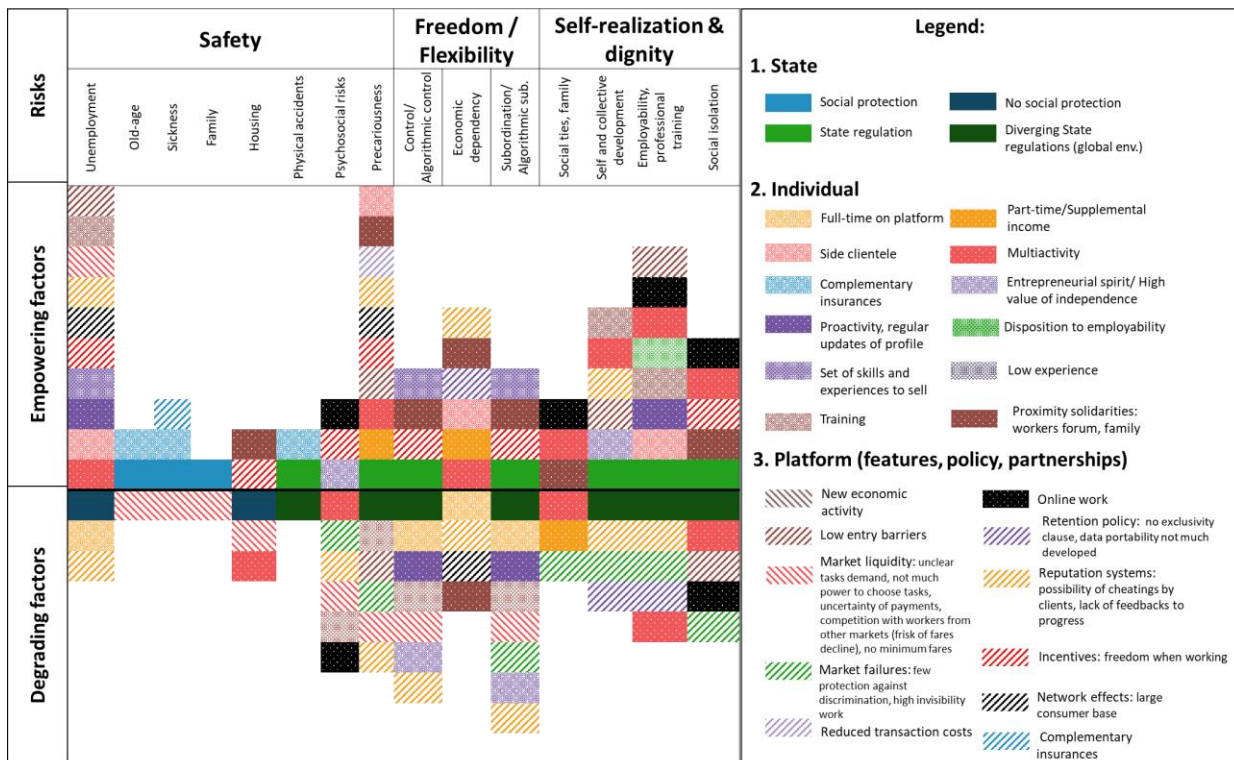
Type 3: Physical crowdwork



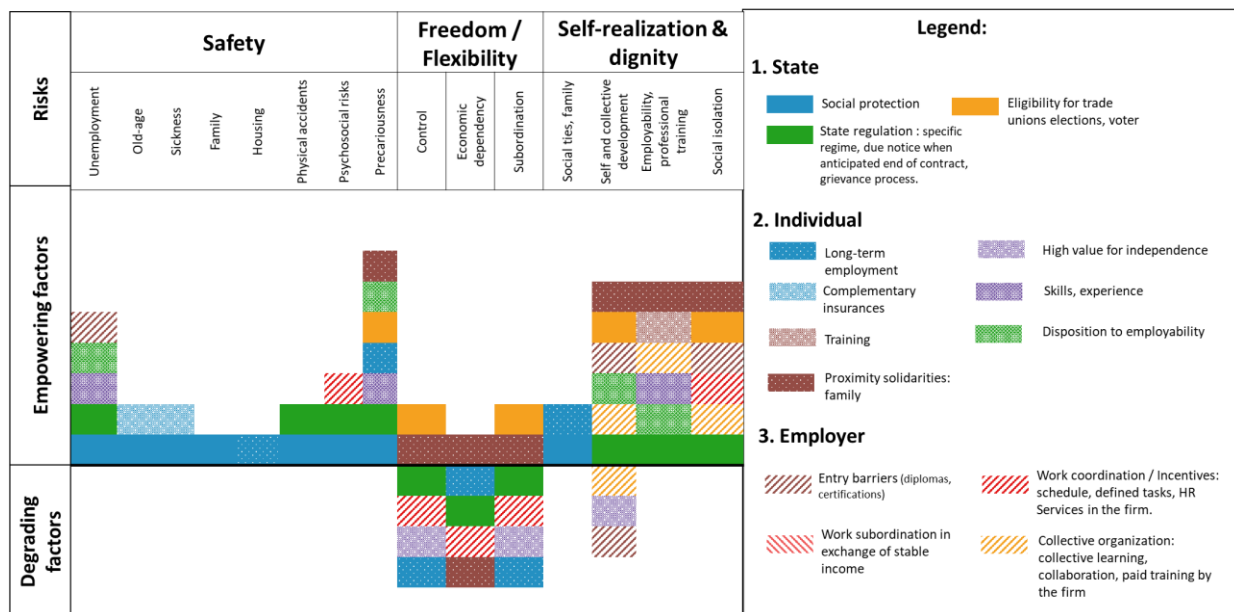
Comparable type 3: Part-time home-care service providers



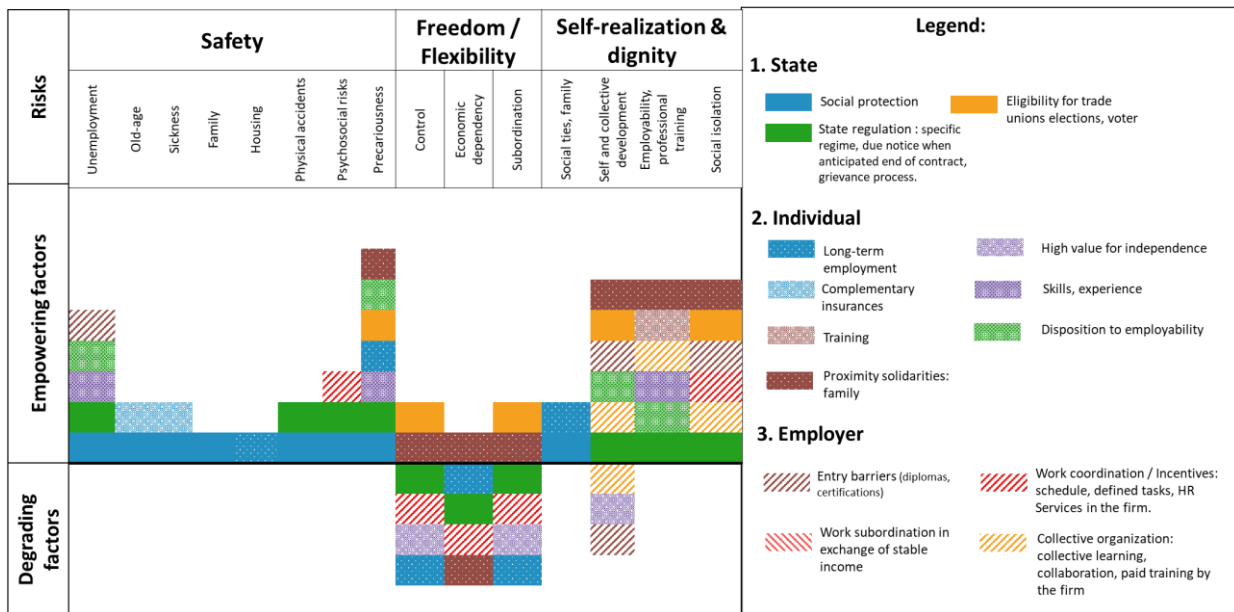
Type 4: Online crowdworkers (low-skilled)



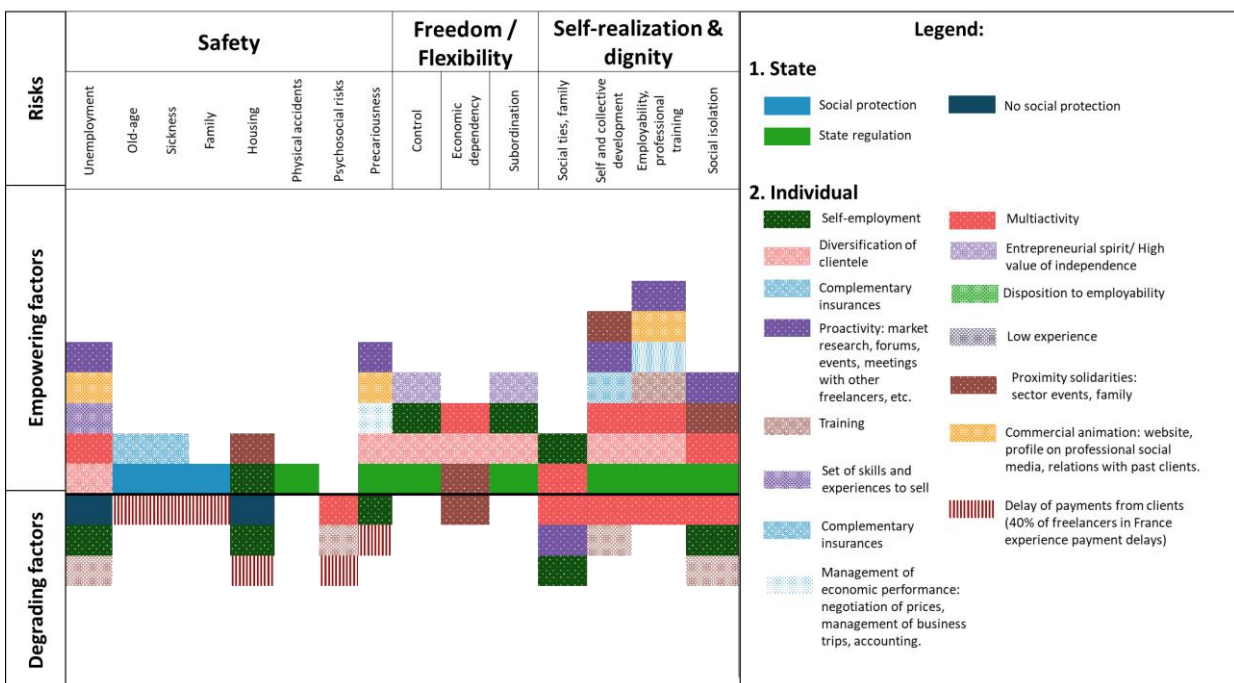
Comparable type 4: Long-term workers for an outsourced agency



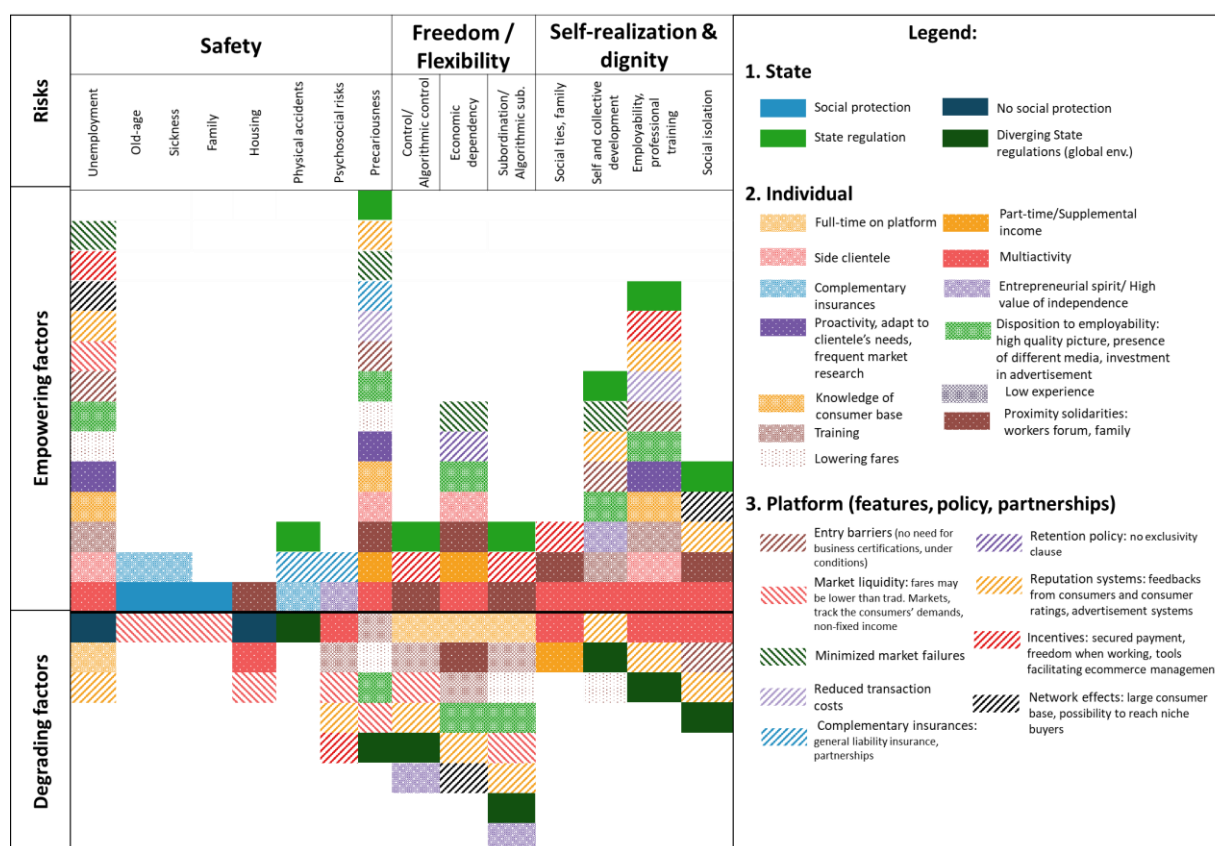
Comparable type 4: Long-term workers for an outsourced agency



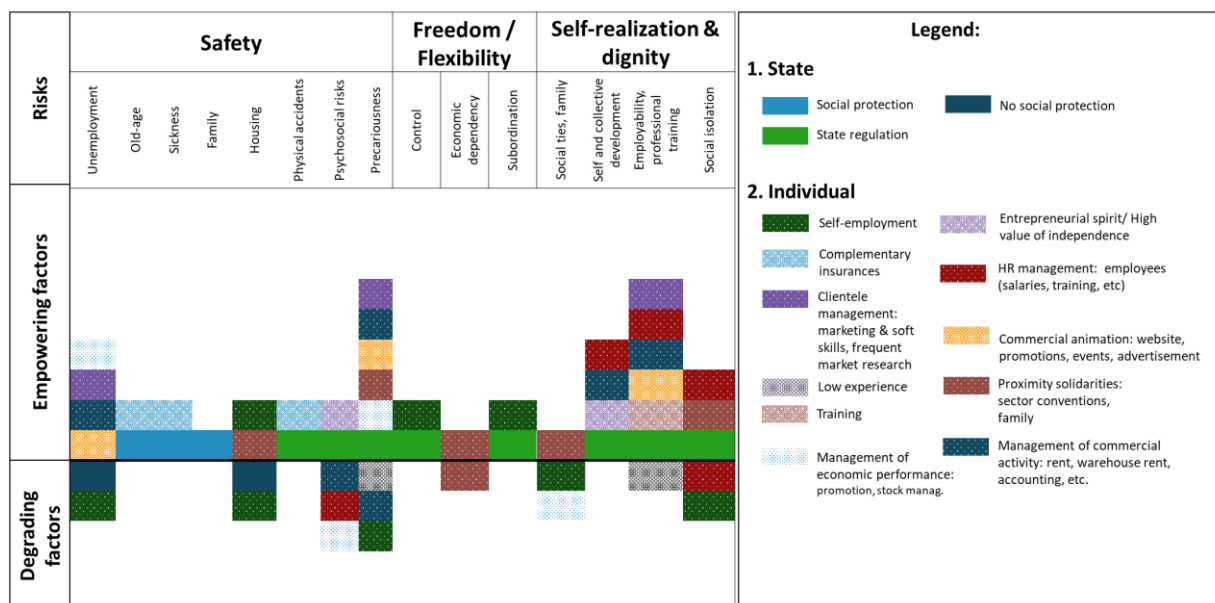
Comparable type 5: High-qualified freelancers (not registered on platforms)



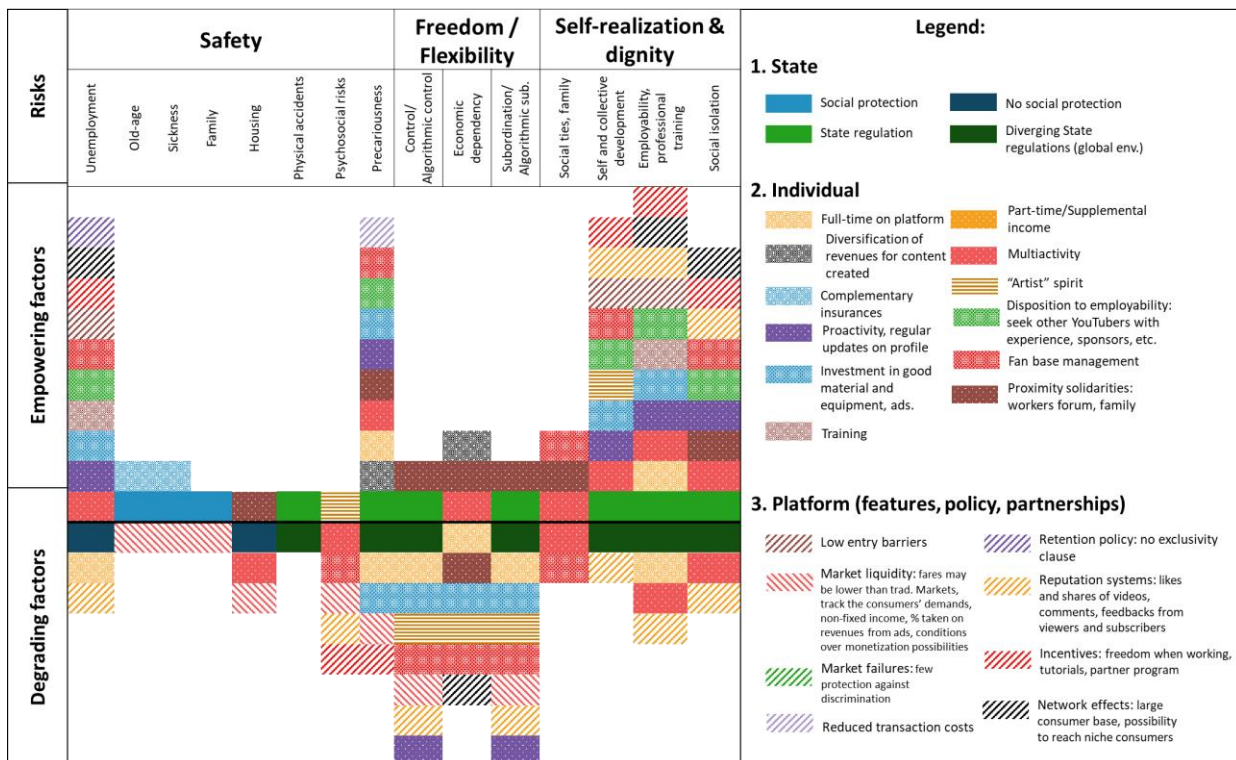
Type 6: online marketplace sellers



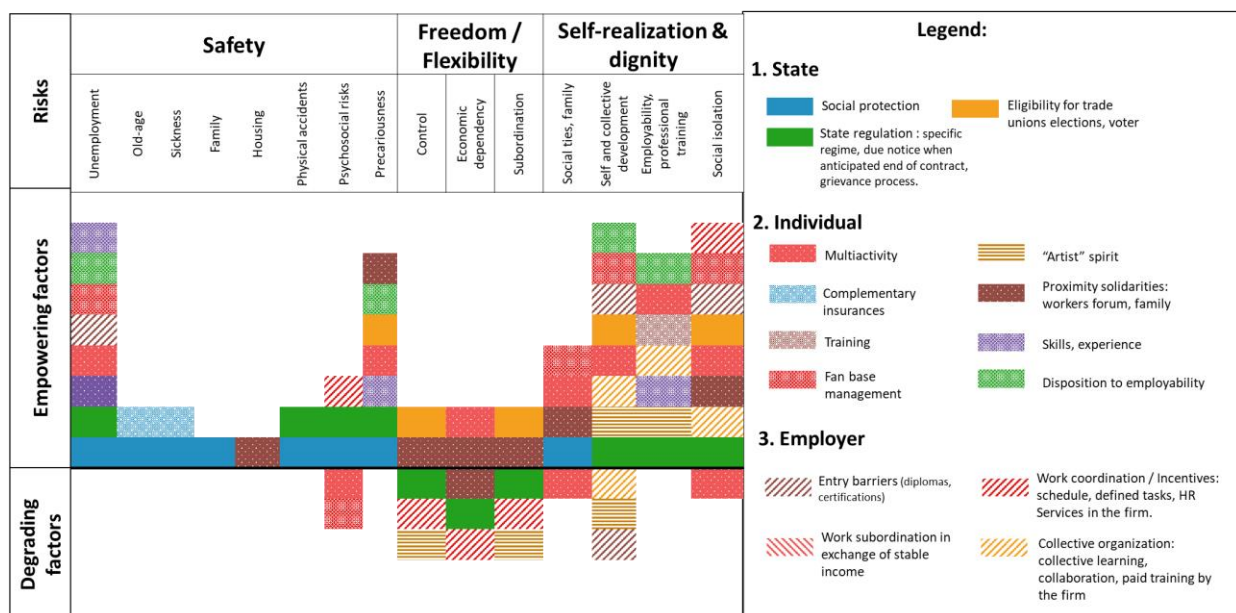
Comparable type 6: traditional shop owners



Type 7: Content-creators (YouTube case)



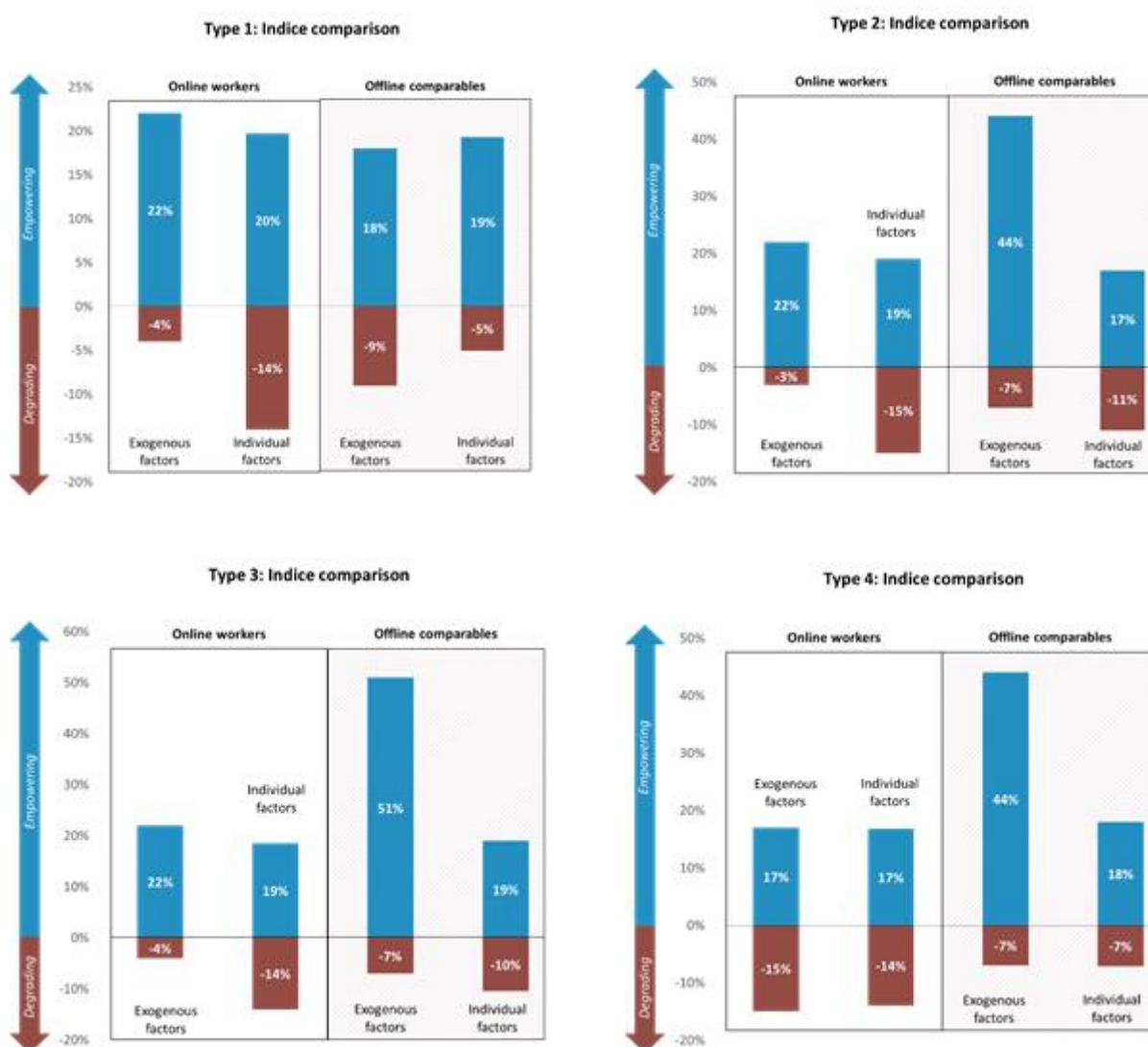
Comparable type 7: Temporary workers in the entertainment and cultural sector

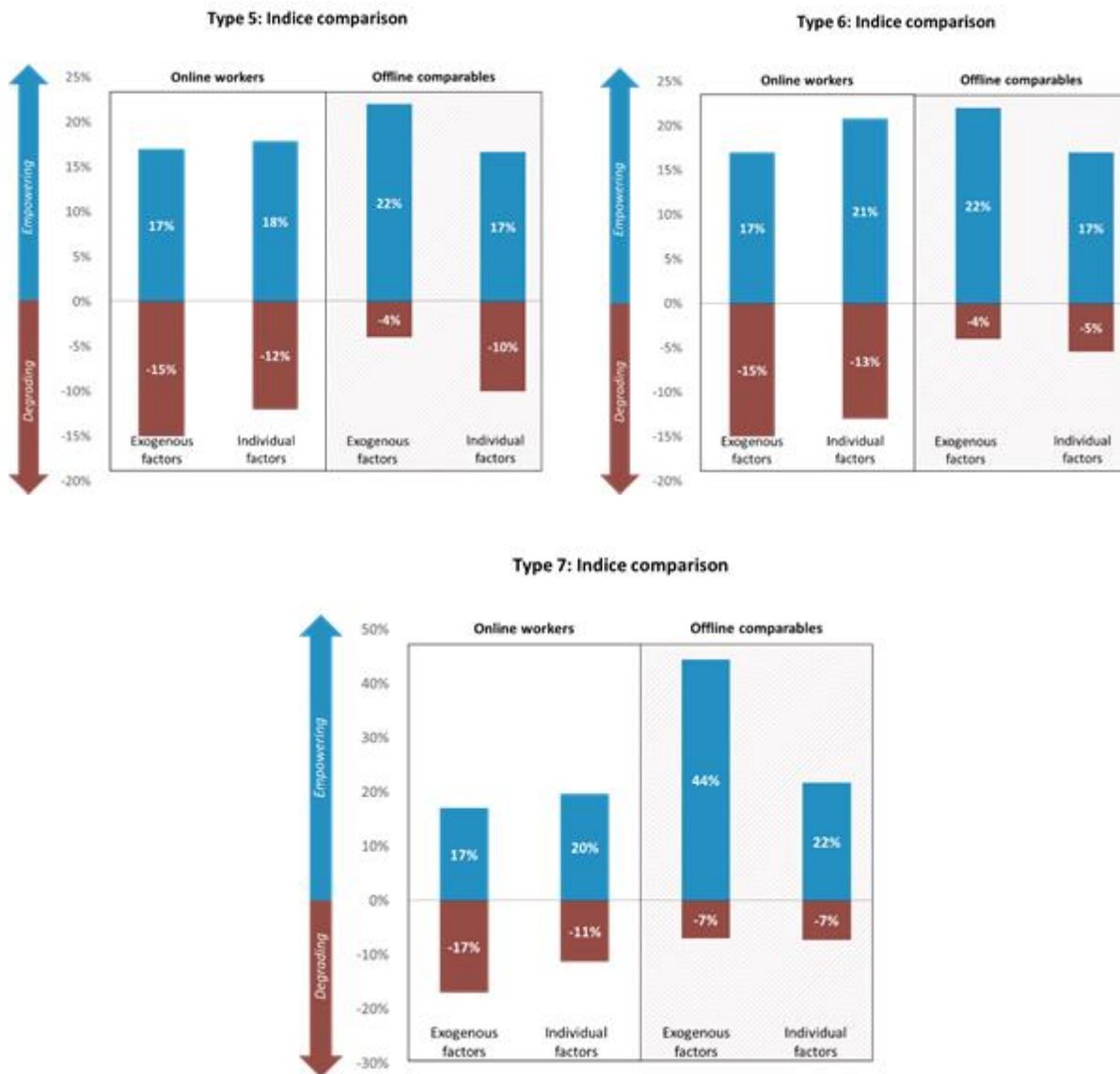


The cushions were conceived in such a way that the reader can focus on the different factors which can potentially be mobilized to face each type of identified risk. Yet risks may be interdependent: unemployment and precariousness negatively affect the probability of finding decent housing. Similarly, the different factors mobilized may have different consequences on an individual's vulnerability to risks: financial help from the worker's family may mitigate the vulnerability to poor housing and to the economic dependency to an employer or platform, but it might also increase an individual's economic dependency on their family and have negative effects on an individual's expectations in terms of self-realization (Abdelnour et al, 2017).

In order to facilitate the understanding and reading of cushions we propose to compare them by means of indices measuring the propensity of the identified factors to aggravate or improve an individual's situation or vulnerability. These indices measure, in percentages, the propensity of the mobilized factors identified in the literature review to empower individuals or aggravate their situation when facing risks.

Figure 2: Factors' propensity to improve or degrade individuals' vulnerability to risks





Source: Authors' representations

Comments

It is no surprise to see that the vulnerability of online and offline workers, whatever their sectors of activity or the platforms on which they are connected, is fairly similar for risks which are universally covered by the French social security system—excluding the risk of unemployment that also tends to increase one's vulnerability to precariousness, easily explained by the self-employed nature of platform work. In addition, the indices show that exogenous factors tend to be more empowering than individual factors for the platform workers and their offline counterparts. This is especially the case when offline counterparts benefit from stable workers' social benefits or from specific protection regimes—e.g., the workers benefitting from the *intermittent du spectacle* regime have exogenous factors which tend to be twice as empowering when compared to self-employed YouTubers. The literature review led us to identify a higher number of individual factors (individual strategies and employers/platforms' policies or features) that can both empower and aggravate individuals' vulnerability to risks. As a consequence, the overall propensity of individual

factors to influence individual vulnerabilities to risks is lower than exogenous factors, as the proportion of identified individual factors mobilized per risk is lower than the proportion of exogenous factors. For example, for the type 7, 1 exogenous factor out of 4 is mobilized to improve workers' vulnerability to the risk of retirement, whereas 1 individual factor is mobilized out of the 20 identified.

The main takeaway of both cushions and indices is that a good part of a worker's vulnerability to risks is *potential* (Soulet, 2015), as it depends on individual strategies to face specific risks, on employers/platforms' policies or features to improve the experience of workers, and also on individuals' own expectations. This explains why this *potential* for vulnerability, which translates into a broad mobilization of individual strategies and platform features, mostly concerns risks associated with one's desire for freedom, dignity and self-realization, where the consequences of one identified factor may vary widely between two individuals. The vulnerability to risks associated with freedom and dignity is also where the differences between platform workers and their offline counterparts are the most pronounced, as it tends to rely more on individuals' own strategies and on the platform market organization. For instance, while a traditional salaried individual is economically dependent on their employer—which gives a certain amount of protection in exchange for a loss of freedom (Supiot, 1999)—, a platform worker's economic dependency depends on their ability to multitask, develop a clientele on the side or be financially supported financially in other ways.

This observation is strongly tied to the debate regarding individual flexibility when connecting to platforms. An individual may not spend their entire time on only one platform, instead using multiple platforms to find gigs, especially when flexibility and autonomy is highly valued (Chen et al, 2017). They will thus be confronted with different types of cushions throughout the day and may then mobilize different strategies to cope with risks involved with platform work.

Thus, the greatest bargaining power may not lie in the hands of platforms if individuals are sufficiently free to connect to one platform and then to another, or when they have a regular 9-to-5 job and solely seek a way to increase their income in platform work. Patrice Flichy (2017) showed how individuals may find in digital work a way to start a new career and develop new skills at a certain moment in time. We can then assume that individuals may “vote” between the different existing platforms, based on their features and options, and choose the best work experience for them; they may thus “influence” platforms' changes, rather than it being platforms that discipline workers. Recent research has shown that Uber drivers in the US showed themselves to be quite elastic in hours-worked, and so product market prices designed by Uber had little effect on hourly earning rates (Hall et al, 2018).

The limit of this work consumption freedom might lie in the initial situation of individuals in the labor market, as explained above with the description of the context in which platform workers operate (Schor, 2017; European Parliament, 2017). When individuals seek in platform work a way to replace stable employment or a stable source of income, they might be especially vulnerable to the risk of subordination to the platforms' conditions and the possibilities platform work gives for individuals' future career developments. Depending on platform work may make individuals particularly vulnerable to the changing work conditions of platforms. The safety cushions only represent the vulnerability of digital platform workers given the current state of the literature, yet we know that vulnerability factors are “moving” (Schor, 2017), as platforms may change their features over time and with limited possibility for workers to negotiate the changes. This was, for example, the case when couriers of Take Eat Easy in Paris saw the fare decline from €7 to €5.75 and had a

very limited ability to advocate for their needs with the firm, as they were not authorized to meet with employees (Klak, 2017).

The cushion analysis is partly limited by the fact that it does not tell whether the income earned via platform work helps provide the worker with a decent living, which constitutes a base for individual self-development. Platform work might then induce a cumulative effect for workers who are “insiders” on the labor market (Emmenegger et al., 2012) and who might benefit from selling under-used assets (time, house rentals, etc). “Outsiders” on the labor market might be more vulnerable to risks of social isolation or a lack of self-development when they conduct fragmented activities on various platforms, whereas “insiders” might be less vulnerable to these as they may not attach the same importance to the work conducted through platforms if it only helps them to earn extra income.

Another limit of the analysis is tied to the scarcity of information available on the social characteristics of platform workers and their profiles (age, gender, work experience). Beyond work experiences and skills, which tend to be correlated with a more successful career as a self-employed worker on online markets (Newlands et al, 2017), the opposition between “insiders” and “outsiders” in the market is also strongly tied to the gender of individuals (Häusermann and Schwander, 2012). For example, further research would be needed to assess whether gender may be an aggravating factor for self-employed individuals. This applies both for online and offline self-employed individuals, as discriminations in the workplace have mostly been studied through the lens of hierarchies and stratifications which are relevant in the context of salaried employment (Abdelnour et al, 2017).

Finally, as explained above, the factors identified were not weighted. It is acknowledged in our work that one individual may not value independence as much as another individual, which leads to a varied sensitivity to psychosocial risks, such as when the former is more averse to risks than the latter (Chevalier and Milza, 2017).

Beyond those limits, **the cushions help questioning the role platforms may play in covering risks for platform workers or reducing their vulnerabilities to them.** The flexibility platforms give to individuals might constitute a better alternative than traditional employment to satisfy workers’ desires and expectations when they are solely seeking a limited-time work experience (Heller, 2017). Yet the difference between the level of individual strategies mobilized between platform work and regular offline work questions the possibility for a harmonization of platform work experience while satisfying the plurality of work experience desires and expectations. This harmonization request has particularly emerged in circles used to collective bargaining, as is the case for the Platform Code proposed by IG Metall, the German Metalworker Union (Silberman, 2017), or from experts of social justice with the set of rules suggested by Richard Heeks (Heeks et al, 2017) to develop “platform justice”.

3 - RAMPING UP SOCIAL COVERAGE FOR PLATFORM WORKERS

3.1 - MACRO TRENDS AND THE FUTURE OF PLATFORM WORK

The idea that all workers are bound to become platform workers is preposterous at best. Indeed, there have been few cases in which platforms have successfully competed directly against fully formed firms employing many salaried workers (Degryse, 2016). The shortcomings of numerous “Uber for X” businesses are now well-documented phenomena. Many that have endured rely on a much lighter model of classified ads (Le Bon Coin) that lacks many features of platforms, such as providing resources to workers, additional services to customers, and directly influencing terms and pricing. In sectors such as cleaning services and childcare, platforms have mostly failed to gain a foothold on the market (seen in the failure of Homejoy and the continuing difficulties of Handy). Technology does not mechanically drive social change. It depends on decisions we make about how to organize our world - that is, the underlying rules of our economy. Only later does technology swoop in, accelerating and consolidating those changes (Hyman, 2018). **However, several macro trends suggest that platform work may grow when compared to salaried work and traditional self-employment.**

The first, as detailed above, is the growing relative attractiveness of platform work. Just as when the whole story started some two centuries ago, self-employed work is generally still defined in terms relative to salaried work. Thus trends in self-employed work (notably professional perspectives and workers’ expectations) are highly correlated with the situation in the world of salaried work. The more secure salaried jobs are, the more self-employed work will attract workers with a relatively higher propensity to take risks. Conversely, the more precarious salaried work becomes (which tends to be the case nowadays), the more workers will embrace self-employed work because they are attracted by its advantages without worrying too much about the security-related trade-offs that came with renouncing salaried work in the past.

Another macro trend is that technology makes it easier to divide work into elementary tasks and outsource some of them to independent workers (Agrawal et al. 2015). The distinctive feature of technology-driven strategies is that tasks are performed in a more productive way thanks to computing and coordinated at a larger scale thanks to networks, making it possible to deliver higher quality at a larger scale—at least when compared to more traditional, integrated approaches based on supply-side economies of scale. Platform strategies involve approaches based on decreasing transaction costs (Lobel, 2018), from user-generated data collection (as when Amazon improves its recommendation engine by analyzing purchase histories) to orchestrating free peer-to-peer contributions (as when travelers submit reviews on TripAdvisor) to harnessing auxiliary amateur paid labor (as on platforms such as TaskRabbit) to effectively outsourcing jobs to self-employed professionals (as on Upwork in the US or Malt in Europe).

Another macro trend is that platforms partnering with self-employed workers are better at harnessing the power of technology than traditional firms that employ salaried workers. Because

they have fewer fixed assets, platforms have an easier time scaling up to match demand, adapting the volume and content of their supply to the growing diversity of demand and carrying out data-driven experiments in real-time. Thus the rise of ubiquitous computing and networks makes it possible to deploy platforms, which in turn makes it possible to deliver high quality at scale rather than having to choose between quality and scale, as was the case in the age of the automobile and mass production. The resulting higher competitiveness of platforms will contribute to expanding the model of platform work.

A related factor is the massive injection of capital by venture capital firms, which makes it possible for the companies operating those platforms to compete for a longer time while still losing money (Janeway, 2018). Because platforms are more competitive, can scale up faster, and aim at conquering 'winner-takes-most' markets, they tend to attract investments by venture capital firms, thus contributing to a positive feedback loop: The more a platform grows, the more it attracts capital, which in turn makes it even easier to grow.

A fourth trend is that self-employed workers are making progress at organizing and collective bargaining (Johnston and Land-Kazlauskas, ILO, 2018). As they become more effective in defending their members' interests and providing them with relevant services (Grossman and Woyke, 2016), the organizations specializing in advocating for self-employed workers (including pioneers such as the Freelancers Union in the US and IPSE in the UK) will focus more and more on platform work and, thanks to their pushing for better working conditions, will contribute to making platform work more attractive.

Obviously, there are also counter-trends. For instance, it is true that bureaucratic corporate organizations can push independent-minded workers toward self-employed work. However, today's corporate forms are more diverse, with flatter organizations and experiments ranging from new management structures to holacracy becoming more frequent. This loosening of salaried work means that the relative attraction of self-employed work is weakened for those, notably among high-skilled workers (Huws, 2016), whose main motive for considering platform work is the rigidity of and level of control exercised by traditional corporate organizations.

Another counter-trend is the multiplication of obstacles to the rise of platform work. In sectors subject to occupational licensing, such as ride-hailing, the frequent response by governments to the emergence of technology-driven platforms has been to enact rules so as to limit the number of workers able to join a platform. As such rules and other regulatory constraints are becoming tougher and more common in many cities and countries, they could result in a trend of slowing down the development of platform work. Another category of obstacles is the need for self-employed workers to invest in certain assets and to cope with high fixed costs.

A third counter-trend is precisely the difficulty of designing and implementing a proper social coverage for platform workers. With the current imbalance in risk coverage that exists between the two worlds, as well as the lack of coverage for risks that are specific to self-employed work, a large part of the attraction of salaried jobs can be explained by the better social coverage that comes with them. If this difference in covering risks persists over time thanks to the resistance of many parties (including, in some cases, self-employed workers themselves, who prefer to hold onto their money rather than contributing to social insurance), then salaried work is bound to remain attractive as compared to platform work. In the context of low unemployment rates in countries such as the US and Germany, this trend is even stronger.

All that being said, it should again be noted how difficult it is to measure the evolution of platform work. Most current statistics and metrics were designed for an economy largely dominated by salaried work, with full-time jobs and primary sources of income being the main focus of surveyors. This makes it difficult to measure platform work, particularly given that it also concerns salaried workers looking to complement their revenues.

3.2 - ASSESSING THE RESPONSIBILITY OF PLATFORMS IN PROVIDING SOCIAL COVERAGE

Economists have been contributing to a better understanding of how exactly value is created by multi-sided businesses (Evans, 2003; Roson, 2005; Acquisti and Varian, 2005; Rysman, 2009)—and how tweaking the trading relationships with counterparties on each side, whether customers or suppliers, contributes to maximizing the total value added and to benefitting the entire system. As shown by Rochet and Tirole (2003), the variety of situations across companies and industries suggests that tweaking the nature of the trading relationship with one side or the other results from a wide range of decisions, whether economic (to maximize output or revenue) or strategic (to position the business so as to differentiate it from direct competitors or to embrace a regulatory constraint). More often than not, those decisions are path-dependent and constrained by the regulatory environment as well as the specific characteristics of a particular industry.

A large part of the related work has been focused on assessing prices and how bringing them down to zero on one side can be an opportune business decision. This is precisely the case in the media advertising industry. For media organizations that derive most of their revenues from advertising, not making television viewers or radio listeners pay to access content makes it possible to maximize the amount of attention they supply, which in turn makes it possible to maximize advertising revenue—with a subsequently favorable consequence for the audience, who can access higher quality and more diverse content. In other cases, such as retail banking, revenue is derived from both customers (who pay interest on the money lent to them) and suppliers (who pay fees to the bank that manages their savings).

However, there are many other parameters apart from price that govern the relationship of a multi-sided business with its suppliers. Among them are the possibility for suppliers to directly market themselves to customers, whether they have the ability to refuse to supply certain customers, the frequency with which the terms of the contract with suppliers are changed, the autonomy that suppliers enjoy when it comes to scheduling, and the revenue-sharing model. According to Thompson (2018), there's a great variation in constraints between pure platforms (or *"tool providers"* according to Choudary, 2018), which *"facilitate a relationship between third-party suppliers and end users"*, and aggregators (or *"labor platforms"* for Choudary, 2018), which *"intermediate and control"* this relationship on behalf of customers.

It is important to stress the fact that when a platform provides a lesser degree of freedom to suppliers, this is not necessarily to the latter's disadvantage. For instance, if the business operating the platform fixes a uniform price for all suppliers for a certain service, it can be considered a term that's adverse for those suppliers who, due to their reputation, could establish a higher price. It also prevents wars of attrition between suppliers, since the price is a floor as much as it is a ceiling, preventing more competitive suppliers from bringing prices down across the marketplace. In other cases, when the platform provides access to an exclusive resource, it effectively helps suppliers to do a better job and increases the revenue from which they benefit.

However, the more platforms constrain how suppliers perform their work, the more they raise questions on two fronts. One is antitrust (Evans, 2017; Jakhu and Malik, 2017), by which it could be argued that the sum of all the constraints imposed by platforms on their suppliers harms consumers by preventing suppliers from lowering prices or differentiating their value proposition. The other is labor law (Lobel, 2017), as more constraints and a more exclusive relationship imposed by the platform onto its suppliers can lead courts to reclassify the underlying conditions as employment contracts.

When it comes to the question of social coverage, platform workers are clearly exposed to risks whose unprecedented nature and/or magnitude call for properly adapted coverage. However, assigning the responsibility of covering those risks should take into account the particular nature of the relationship between a platform and self-employed workers. One key question thus becomes whether platforms themselves find an interest in developing protections for workers providing the services.

Platforms can adopt two different and non-mutually exclusive views on the idea of expanding social coverage. The first consists in considering social coverage as something that calls for leveling the playing field. Institutions, prevailing rules, norms, and regulations are often seen as constraints to business growth. However, another way to look at institutions is not to see them as constraints but as resources. Once institutions are established and enforced, they become “*collective resources*” to be used by agents to deploy their own strategies and achieve their goals (Commons, 1934; Coriat and Weinstein 2004). Platforms’ strategies may combine a mix of these views at different moments in different contexts and for different reasons. In Europe, Uber for example takes a public stance on social and employment public policies while also taking private initiatives at the level of the firm.

The idea of business proactively embracing the idea of improving workers’ welfare is not unprecedented. The history of welfare politics is not the simple story of labor-based organizations triumphing over a business community forced into retreat (Esping-Andersen 1985). In Europe, at least, as we are reminded by Thelen (2001) and Mares (2003), the greatest pro-worker shifts in the fields of social coverage and collective bargaining were the result of the political moves of employers who sought to avoid a situation where they would have to compete largely on the level of wages and benefits.

The other view is that rather than simply leveling the playing field, social coverage would be a proprietary asset provided by the platform to differentiate itself from its competitors and attract and retain the best or the most suppliers. Government authorities can enjoy such a perspective as it suggests that competition between platforms on the supply side will be enough to extend social coverage for platform workers, without the government having to enact new mechanisms and/or allocate public money to finance it. And indeed, providing extended social coverage to workers is part of the relationship that platforms must build for their suppliers, since from a business strategy perspective, other players will seize the opportunity if platforms do not strategically position themselves within this niche.

However, the purpose of social coverage is not only to cover workers against risks. It is also to empower them, including in their relationship with the platform itself, so as to make it possible for value to be shared in a fairer and more efficient way. For one, platforms themselves are part of a larger acceptance of social coverage as they decrease the criticality of certain risks as opposed to non-platform self-employed work. One case is that working on a platform effectively

reduces the probability or impact of a given risk (for instance, it is easier to find customers on a platform, which reduces the probability of being unemployed). The other case is when working on a platform makes it easier to pool resources so that workers can be covered against certain risks through a collective mechanism rather than on an individual basis.

Beyond that, it seems relevant to introduce a distinction between platforms depending on the nature and balance of the relationship they entertain with workers. All platforms should be approached as providing opportunities to workers within the particular framework of self-employed work. In this regard, it is ill-advised to try to approach social coverage using salaried work as a model and to somehow force platforms into treating self-employed workers as salaried workers. However, there can be great differences, from one platform to the other, in terms of how value is shared with third-party suppliers.

Certain platforms provide access to a solvable customer demand and secure the relationship with suppliers while streamlining the experience for the end user. Their goal, as stated by Choudary (2018), is *“the creation of an efficient or well-functioning market that can increase the platform’s market share”*. As a result, they tend to have the upper hand on aggregated suppliers as they grab most of the returns derived from liquidity and network effects. In those cases, relying on competing platforms to provide social coverage could only aggravate their bargaining power with platform workers.

Other platforms are simply “tool providers” (Choudary, 2018), thus empowering self-employed workers in their search for activities. Only under certain circumstances is the platform’s primary business goal aligned with the empowerment of workers. In that case, platforms providing social coverage are effectively a factor that favors worker empowerment, as opposed to a technique *“aimed at the creation of an efficient labour market, by maximizing the success and repeatability of the core interaction”* (Choudary, 2018).

It should be stressed that all platforms can contribute, whether financially, by providing data, or even by taking charge of operations, to extending social coverage for platform workers, whatever their microeconomics and the particular nature of their relationship with workers. However, the channel by which social coverage is extended should be neutral as regards the balance of the relationship between platforms and self-employed workers; at best, it should be designed so as to increase worker empowerment in each case, whether platforms are *“tool providers”* or operators aggregating suppliers at the scale of the entire market.

3.3 - A PARADIGM SHIFT: FAVORING MOBILITY RATHER THAN SETTLING

The problem with maintaining an institutional advantage to being salaried is that it stands against the technology-driven trends that make self-employed work more rewarding in today’s economy. This is easily understood in a world where salaried work is synonymous with economic security. But it also creates a lack of opportunity for all those, whether entrepreneurs or workers themselves, who could make the most of the current paradigm shift.

Some would say that the relative attractiveness of salaried work must be enhanced by social and economic institutions, as it is the form of work that provides the best conditions to most workers (Friot, 2012). Others would object that the rise of salaried work was linked to the emergence of a mode of growth linked to the technology of the day—and that since technology has radically

changed, the forms of work must change too, including with a radical upgrading of existing institutions. Having a steady salaried job over the long term—what we would call settling—once came to be seen as the most accomplished form of work. But today, it looks more likely to become one option among others rather than the norm, as it is becoming more and more difficult to settle within the world of salaried work. Askenazy et al. (2013) consider, for instance, that only one third of workers are true insiders, having an uninterrupted and upward-moving salaried career. At the same time more and more workers are considering being mobile as an opportunity to find a job (when they are unemployed) or to improve their working conditions and/or purchasing power (when they leave a salaried job to embrace self-employed work).

Indeed the concept of mobility radically changes the social perspective regarding platform work. Most people consider platform work as a degraded version of salaried work or a less rewarding version of traditional self-employed work. But with upgraded social coverage, it is entirely possible to consider platform work as a positive phase in a worker's professional life. In certain cases, it also provides workers with long-term perspectives as some platforms make it possible to improve earnings and social status over time. In other cases, it makes it easier to enter the job market for the first time or to make up for a temporary loss of income while switching from one relatively stable job to another. In such cases, entering platform work is not an end in itself so much as it is a fallback position before rebounding. In order to follow this kind of thinking, one needs to ask under which conditions (including social coverage) working as a mobile worker can become a preferable option to a degraded salaried position (Standing, 2011; Bouffartigue, 2015).

Under which conditions, from a worker's perspective, can platform work appear as an augmented version of traditional self-employed work? A platform is both a marketplace, where self-employed workers can find customers, and an infrastructure, which provides them with many resources to get better at doing their job (Maity et al. 2016). Rebounding and finding a new source of income can appear difficult. It usually requires training, meeting potential counterparties (a future employer, client, or investor), and searching the housing market, all while somehow securing income to make ends meet. If platforms make it easier to do such things, then rather than promoting settling as a way of life, they effectively constitute an infrastructure designed for mobile workers. This would imply a paradigm shift in our understanding of the world of work. If these conditions were met, mobility, rather than settling, could provide the lens through which platform work and the associated risks are assessed and provided with adequate coverage.

In general, this is not the way government authorities have considered platform work. In many cases, platforms have been seen as an obstacle for workers trying to settle. Most regulations have been aimed at turning platform workers into settlers (including the possibility of instituting the idea of a "*responsabilité sociale*"). Yet platforms are both a factor in the rise of self-employed work and a factor in the evolution of self-employed work itself. Platforms do not attract only those who are keen to be on their own. They also attract the early adopters of a new approach to the job market: the mobile ones. Reflecting on social coverage of platform workers should take into account this particular trait. And in many ways the stated preference for settling (under the form of salaried work) as opposed to mobility (as can be found in the world of platforms) has become an obstacle to extending the social coverage of platform workers as a category distinct from salaried work.

Using mobility as the most relevant paradigm to design social coverage for platform workers inspires the following broad principles. First, the coverage of traditional risks such as having children, illness, and old age should not be a factor for workers deciding between mobility and

settling. If such neutrality is ensured, workers opting for platform work should be considered as willing to embrace the corresponding risks, notably income instability and difficulty in accessing critical resources such as credit and housing. Thus all specific coverage mechanisms could be targeted at the risks that are specific to platform workers, not those that they have in common with salaried workers. Finally, it should be borne in mind that joining a platform can correspond to two different situations: on the one hand, there are the workers with perennial perspectives, for whom platforms tend to provide resources to make them better at doing their jobs over time; on the other hand, there are those who use platforms as a transient situation or a backup plan, and in which case policy and platform resources should be targeted at making it easier to enter the platform and rebound from there to another job.

4 - THREE SCENARIOS OF COVERING RISKS FOR PLATFORM WORKERS

A certain number of actions to be taken by governments in terms of securing professional careers and social protection have already been identified through the analysis of professional trajectories viewed as *atypical*—even if these are becoming more and more common, which means they are no longer atypical in a quantitative sense. These new situations might be covered by existing and adjusted codes and statuses, by (reformed) assistance benefits and by (existing and improved) social protection schemes.

Three main families of solutions are currently being contemplated to face these challenges. They correspond to the three types of welfare regime identified in Esping-Andersen's work: the *"liberal"* regime, the *"conservative-corporatist"* regime, and the *"social-democratic"* regime. They consist in either the implementation of a universal unconditional basic income (a genuinely *"liberal"* solution), the improvement of the existing social protection schemes for independent workers (an occupational solution typical of the *"Bismarckian"* approach to social protection), or the *"flexicurity"* model that guarantees to all both a high level of minimum income and universal rights to social services and publicly financed training (a Nordic-style solution).

4.1 - SUPPORTING PLATFORM WORKERS WITH UNIVERSAL BASIC INCOME

In the US and Europe there is a renewed debate on the development of a universal basic income. In its simplest form, such a mechanism can be defined as (i) an *"income paid by a political community to all its members on an individual basis, without means test or work requirements"* (Van Parijs, 2006:8) or (ii) *"unconditional cash transfer to everyone in a geographic/political territory, on a regular/long-term basis"* (Marinescu, 2018).

From the economist Milton Friedman to the political philosopher Philip Van Parijs, there has long been a great variety of reasons put forward to justify an unconditional basic income: to fight poverty, to simplify social protection systems by providing a single benefit for all, to increase access to social benefits, to remove unnecessary bureaucratic elements of the welfare state, to fight non-use of benefits due to complex procedures and stigmatization, and to guarantee the freedom to choose to work or not.

The rise of the platform economy and the ensuing precariousness of work with intermittent income provides a second source of debate. Much of the current interest in universal basic income stems from a belief that technology is rapidly eliminating jobs faster than new ones can be created, and so future job growth will be much lower (Brynjolfsson and McAfee, 2014). Universal basic income might intersect with existing welfare states policies (McGahey, 2017) and one can easily envision different varieties of this approach being produced in the various kinds of welfare states (Esping-Andersen, 1990). However, the prevailing argument put forward in favor of these experiments is the *"liberal"* one (as discussed by Esping-Andersen, 1990). Financial constraints as well as the desire to replace existing social benefits (and their associated bureaucracies) have led to the proposal of a relatively low basic income being handed out to everyone, principally financed

through income tax. For most people though, the amount would be paid back to the government through income tax. In this version, basic income would in reality be an unconditional negative income tax credit.

That being said, a fixed amount of money distributed to everyone in the entire economy would not cover platform workers against the adverse consequences of opting for this form of work—such as the unaffordability of urban housing and uncertainty when it comes to pensions. Furthermore, platform work is so marginal in today's economy, even as it is quite representative of a job market dominated by mobility, that the systemic impact of a universal basic income would be felt on other segments of the job market rather than in the relatively narrow segment of platform work.

A more focused version of the mechanism would be a basic income targeted at platform workers only—one which would resemble the mechanism covering France's *intermittents du spectacle* (Menger, 2006) against the risk of not earning income during long periods of time. But there are several shortcomings here. One is that such a mechanism still would not cover the specific risks to which platform workers are exposed, such as access to the housing market or little retirement income. Another problem would be that it would not be neutral in terms of allocating workers to the different segments of the job market. Salaried workers and those attracted to self-employment would be attracted to platforms in order to access the related benefits, thus distorting the market by promoting platform work at the expense of other forms of work. A third shortcoming would be that, like with *intermittents du spectacle*, determining the right to claim the benefit would be based on assessing the amount of work done through platforms, which would be made difficult by the methodological and practical reasons explained above.

4.2 - COVERING PLATFORM WORKERS WITH A BISMARCKIAN-OCCUPATIONAL LOGIC

The so-called “conservative-corporatist” model, or “Bismarckian” model, is organized on the basis of occupational categories. It is designed less to reduce inequality than to provide workers with security and to make it possible for them to conserve their given status. The level of social protection offered to each beneficiary is determined by their market performance and employment situation.

As a result of the relatively generous level of social benefits provided, the “Bismarckian” model also guarantees insured individuals a certain level of independence in relation to the market when faced with a contingency. In this case, dependence on the market is indirect, insofar as the level of social benefits provided by these systems is itself related to prior employment (and family situation). The universality of coverage is therefore dependent on the capacity of society to ensure full employment for the covered workers.

In this context, one solution could be to create a specific status for self-employed independent platform workers, linked to a specific social protection regime. In certain countries, dependent self-employed workers can rely on existing specific statuses previously designed for people whose position lies between salaried work and autonomous/independent/self-employed. However, no new status has been created in response to the emergence of the platform

economy⁷. The growth of self-employed work relying on platforms presents a challenge in many jurisdictions with regards to how this employment relationship is governed and what forms of social protection accrue to this status. The main concern is to improve the access to and level of social protections for those workers who are not salaried employees and who do not have one specific employer.

As of now, European countries (Eurofond, 2017) usually base independent workers' social protections on a mix of universal rights (such as access to basic healthcare or a minimum income) and a specific professional protection to be associated with specific schemes and social contributions. However, even when the self-employed are formally covered, they may fail to have effective access to a social protection scheme because of ill-fitting eligibility criteria (ESPN, 2017).

In the US, economist Alan Krueger (2018) has come up with the concept of a Shared Security Account (SSA), an idea he borrowed from Hanauer and Rolf (2015). With an SSA, (i) all workers, regardless of their status (contingent, part-time, platformed), would be covered by a system that provides health insurance, retirement benefits, and paid leave; (ii) the benefits are prorated to the earnings; (iii) employers and online platforms would contribute 25% of their workers' compensation into a fund to pay for those benefits; (iv) workers could choose which benefits they want. The SSA would lead firms to use the various forms of work contracts for other reasons (such as increasing service quality to end customers or mobilizing a rare external competency) rather than to cut labor costs. Along these same lines, some argue for the allocation of the social security financing burden across platforms based on the number of hours the worker works for each (Hill, 2015).

In this scenario, platforms would become a specific industry, with their own social protection scheme and their own level of contributions and protections. One would have to elaborate specific mechanisms to cover specific risks. This, however, would require an agreement from the platforms' side to recognize these risks (and their own responsibility alongside a willingness to pay and pool these efforts within a common and specific scheme).

For such an approach to work, it would be necessary to reinvent a form of social partnership and paritarism (the joint management, decision-making and financing between those who pay for the program and workers who benefit from such an occupational scheme). One would need to see the further emergence and institutionalization of representative unions of platform workers who can take part in the financing and management of occupational social protection. As stated above, these are currently only found in an embryonic form. A recent report by the International Labor Organization (2018) called for a better institutionalization of tripartite interactions between the platform, the regulator and the workers (and their representatives), and touted the regulation of data as a pillar of such institutionalization.

The challenge for governments and policymakers is to provide a specific scheme for people who by definition do not have a stable situation nor status, and who also do not have the possibility to pay regular and high social contributions. Without high public subsidies, such a scheme would probably not be stable or balanced. It would provide relatively little protection (proportional to the contribution capacity of the new independent workers, which is usually relatively

⁷ Haut Conseil au Financement de la protection sociale (HCFips), « Rapport sur la protection sociale des non salariés et son financement », published in October 2016.

low). Moreover, copying and pasting the Bismarckian logic would not protect against the risks associated with intermittence—those successive periods of activity and inactivity and more generally the specific risks met by independent platform workers (mobile workers) as described above.

As such, these evolutions would only be reproducing one of the main shortcomings of the “conservative-corporatist” model of social protection, that is to say its rigidity and inability to evolve. This completely ignores the natural porosity between platform work and the rest of the job market, and the fact that individual careers now constantly move between various positions (salaried or platform worker, entrepreneur, employer, independent workers). One of the main issues would be the portability of the earned social rights for mobile workers shifting frequently from one type of occupation to another.

France, however, seems to be embracing this logic. The latest reform in 2018 applies the categories of traditional wage-work to self-employed workers. Workers falling under the defunct *Régime social des indépendants* have been incorporated into the general scheme for salaried workers within the *Sécurité sociale* system. This might not solve the specific problems met by platform workers. As for the new unemployment insurance, it is supposed to also cover independent workers. But in reality its scope would only concern a tiny minority of self-employed workers.

4.3 - PROVIDING COVERAGE FOR ALL WORKERS USING THE FLEXICURITY MODEL

In Nordic countries, the development of platform work has been less contentious than in other countries, at least with regard to the situation and protection of platform workers (there have been many debates about the need for platforms to pay taxes in these countries). This is probably due to the fact that the pre-existing social protection model is able to provide social coverage to the “new” independent workers, including platform workers. This model is known as the flexicurity model.

Flexicurity boils down to the deliberate and coordinated effort to separate the provision of benefits from work (Lang, 2005). Flexicurity has been a popular model for social policy in Denmark and in the Netherlands. Wilhagen and Tros (2004) define flexicurity as “*a policy strategy that attempts, synchronically and in a deliberate way, to enhance the flexibility of the labour markets, work organisation and labour relations on the one hand, and to enhance security – employment security and social security—notably for weak groups in and outside the labour market on the other hand*”.

If the government can guarantee citizens’ access to healthcare, housing, education, and training, without regard to employment status, those citizens will be protected even though they are not necessarily salaried workers. Meanwhile, government social policy does not just compensate for market failures, but works alongside markets to help sustain a flexible, well-trained, highly productive workforce. This is the spirit of social policy reform such as the “*social investment policies*”, i.e. policies that invest in human capital (both children and adults), employability, or the coverage of new social risks, such as single parenthood, atypical employment or a lack of childcare facilities (Bonoli, 2005, Morel et al. 2011; Van Kersbergen and Hemerijck, 2012; Gingrich and Ansell, 2015).

A strong point of such policies is that since they are universal, they are more likely to be politically durable. Hence, they would not specifically target platform workers and they are not income-dependent. However, a precondition for the success of this scenario is to guarantee there are sufficient resources to finance these policies. The main challenge is to ensure that new independent workers and the platforms that provide them with business all pay their taxes (Colin and Collin, 2013). Otherwise, we run the risk that social policy will subsidize and socialize risks without reaping the benefits of a thriving digital economy.

Such an approach presupposes that what currently appear as specific risks for atypical and platform workers may become more generalized risks faced by a large part of the working population. As such, there is a need for universal protection against these emerging risks. Providing universal coverage for the new social risks would guarantee neutrality (social protection that will not be oriented towards this or that segment of the labor market) and strengthen the economic security of all workers. One does however need to better identify these risks (as we have tried to do in section 2), and to elaborate the specific institutions that can cope with them (whether that be insurance or services such as child or elderly care, education or training facilities).

One way forward would consist in using the experience of platform workers as a small-scale experiment to design a social coverage policy more in line with today's economy. After all, if platform work is an umbrella category, so is salaried work. A wide variety of situations are encompassed within the idea of salaried work, from steady 9-to-5 jobs in large organizations to looser types of employment contracts (in terms of hours and conditions) in small and medium businesses to minimal rule enforcement in the proximity services sector that includes restaurants, child care, and others.

We have laid out 3 scenarios that are based on ideal-types inspired by the welfare regimes identified in Esping-Andersen's work. The diversity of capitalisms, or productive models for firms, have been acknowledged (Amable, 2003; Boyer 2005; Boyer and Freyssenet (1995). When it comes to supporting an independent workforce empowered by platforms, this suggests three things:

First, there is no one-best-way. One reason is that there are different types of platforms workers (we counted 7), each type of platform worker has very different risk profiles, motives and priorities, all of which also vary in different contexts. In France, Uber drivers are mostly driving full-time while in the US it is a part-time activity. In the US, the absence of universal health-care or widespread free higher-education gives more value to the "flexibility" of earning an income through Uber than in France. Further, the policies that will be implemented to cover risks for platforms workers in the digital age will depend on the type of compromises that can be established between the dominant social groups in historically specific conditions (Amable 2009). In France, labor market institutions and social protections still play a central role in the stability of the dominant socio-political compromise. Changing an institution implies (re)-opening a social conflict, which implies a real cost (Amable, 2015). For instance, Uber learned this the hard way, as was acknowledged in 2018 by Thibaud Simphal, its Regional General Manager, Western & Southern Europe : *"We have had strong*

*booster shots! The demand for social protection in Europe is stronger than anywhere else, and Uber cannot ignore it”.*⁸

Second, the ideal-types fleshed here out are not carved in stone. Introducing ambitious policies to cover risks for platform workers might contribute to the recomposition and hybridization of current institutional architectures. For instance, it might be institutionally more coherent (and politically easier) to introduce portable benefit schemes in a national context infused with an occupational-logic model. But it need not be built and coordinated only by unions. Portable benefit schemes can also be administered by the State, by civic society institutions, by platforms themselves, or by financial institutions.

Third, historical and institutional research teaches us that there’s no such thing as a system builder implementing a grand scheme (Streeck, 2005; Boyer, 2007). In opposition to social engineering, a line of research ranging from Coase to Ostrom and passing through Hayek emphasizes our human capacity for what economist Samuel Bowles calls “bottom up problem solving”. Ostrom (2000) and Coase (1960) in particular gave careful attention to empirical cases, and for them the key to solving social problems – communities for Ostrom and bargaining for Coase – was not an “unregulated market”.

⁸ https://www.lesechos.fr/12/02/2018/LesEchos/22633-322-ECH_thibaud-simphal--directeur-general-d-uber-pour-l-europe-de-l-ouest---uber-n-est-ni-virtuel-ni-dans-le-cloud---.htm

CONCLUSION

Our diagnosis in the previous sections leads us to identify two broad objectives policymakers should take into account while reflecting on expanding covering risks for platform workers.

An initial goal would be to improve platform workers' collective capacity to organize and defend their interests. Since platforms tend not to provide tools for social network creation between workers, collective action is deterred (Choudary, 2018). In the absence of relevant institutions, platform workers tend to be squeezed from two sides due to the customers' increasing bargaining power and the increasing competition between one another.

Re-using Albert Hirschman's simple and effective framework of "exit, voice and loyalty" (1970), we observe that current efforts at organizing are mostly focused on "voice". For instance, Uber drivers in Paris created the *Syndicat des chauffeurs privés VTC* [Union of Passenger Transport Operators] and initiated a coordinated strike to block the roads leading to Charles de Gaulle airport before demonstrating outside Uber's Paris headquarters (Chazan, 2016). Their actions ultimately lead to the first apparent instance of tripartite industrial relations within the platform economy (Kilhoffer et al., 2017).

However, there is currently little evidence that platforms workers have been organizing to smooth their "exit" (Vandaele, 2018). So far, the possibility of making workers less reliant on one platform has been minimally dealt with through data portability, as it is mandated by GDPR, or via a narrow conception through regulation or competition law. Public policies should lay out the conditions for the emergence of platforms unions whose goals would be to help their members switch between platforms, would provide them with all the necessary training, and help them to relocate closer to new opportunities.

So far, the best promoters of self-employed work are self-employed workers themselves. At the same time, the strength of identification with a group is the most important determinant of unionization (Kelly and Kelly, 1994). From the standpoint of platform businesses, the "safest harbor" to bring additional services to their users without being reclassified as an employer might not be to engage in intricate legal discussions with courts or policy makers. A more ambitious vision would be to let platforms workers organize themselves to build their own sense of identity as non-salaried workers. A model of new unionism characterized by features such as the servicing of members as customers was developed in Britain in the 1990s (Munro and Rainbird, 2000) and could be inspiring.

The second goal would be to stimulate professional and social protection dynamics that make it possible for platform workers to make the most of the mobility paradigm.

Platform workers should be covered against critical risks, both those that they have in common with salaried workers and those that arise due to the specificities of platform work. Social policies in the digital economy should go beyond the narrow terms of tax benefits and redistribution mechanisms. They should directly focus on the broader risks with which the digital economy confronts the individual: volatility of income, spatial concentration, etc.

Among the three scenarios of evolution for social protection, we believe that in the French and European context, the third one, based on the flexicurity model, which provides a universal access to (old and new) social risk protection, is the best way forward. One must, however, be able to identify the reality of new social risks and to elaborate the best potential institutional

arrangements for coping with them. Platforms themselves may play a key role here in analyzing (and rendering accessible) their data on the specific risks run by those using their platform, and in experimenting with innovative social protection tools.

Finally, the investigation of what could be the appropriate social coverage for platform workers is an invitation for social scientists, notably political scientists, economists, and sociologists to reinforce their collaborations. All too often, the territory is sharply divided: the economic literature looks at social coverage as a category of public expenditure and its effects on growth, or at a more microeconomic level through the lens of insurance mechanisms and moral hazard (Einav and Finkelstein, 2011), while political scientists focus on State-led actions.

The emergence of platform work and the debate over the appropriate social coverage should force us to break with a widespread false distinction between, on the one hand, the distribution of income (an “economic” process) coordinated by an “invisible hand” that occurs between “real” wealth producers and, on the other hand, the redistribution process (a “political” process) coordinated by the State in order to maintain social peace and its own legitimacy (Coron, 2018).

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