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## RESEARCH ARTICLE

# From loopholes to deinstitutionalization: the platform economy and the undermining of labor and social security institutions

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**ABSTRACT:** Previous research on platform work has concentrated on questions of organization, technology and regulation, while the focus has been much less on institutions and mechanisms by which platform work challenges existing labor market and welfare state institutions. This article deals with platform-driven deinstitutionalization using the example of social security in the conservative German welfare state. We argue that the main feature of platform work is the weakening of labor- and welfare-related institutions. We show how platforms undermine the German social security scheme in a functional perspective by using solo self-employment or minijobs, resulting in varieties of externalization of social protection. Furthermore, the social security institutions are normatively undermined by the strategic use of two main narratives: while the sharing narrative negates power asymmetries and highlights peer-to-peer relationships at eye level, the entrepreneurship narrative promotes ideas of autonomy and self-realization. Both strategies aim at redefining social security institutions and undermining collective protection. We discuss the disruptive effects of platform work and the inability of the social security institutions in Germany to adjust to the digital age and ensure sufficient social protection for workers in non-standard forms of employment. The analysis also implies that future regulatory policies have to take power struggles over cultural framings into account.

**KEYWORDS:** Digital labor, gig economy, institutional change, platform work, self-employment, welfare state

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## 1. Introduction

In the course of the rise of the platform economy, the focus of political regulation and scientific analyses of current work and employment-related changes has shifted towards platform work as a new, dynamic and hyper-flexible form of employment. Although platform work is a quantitative niche in western post-industrial labor markets to date, it is ascribed a ground-breaking importance for boosting even more flexible and volatile forms of employment. In the European Union, digital labor platforms (DLP) have continuously increased their total revenues and employment numbers in recent years (Groen et al. 2021).

Labor platforms enable far-reaching options for the rationalization of labor power. They organize “multi-sided-markets” (Sanchez-Cartas and León 2021) and match supply and demand through digital technologies. Enterprises and private individuals can outsource tasks, so called “gigs”, to a crowd and thus realize benefits compared to “classic” instruments of rationalization. For suppliers, DLP offer both low-threshold opportunities for earning (extra) money and participating in paid labor. In addition, they may enlarge the pool of potential customers for self-employed and freelancers. These new, digitally enabled organization principles produce digital platform labor markets with disruptive effects, since DLP “[...] transform labour markets from markets for jobs to markets for tasks” (Drahokoupil and Vandaele 2021: 1). This development enforces organizational, time-related and spatial flexibilization. Labor is being released from the company and thus anonymized and individualized. Especially those forms of platform work performed solely online (“crowdwork”) enable access to a global crowd competing for gigs. Stability based on employment contracts is being replaced by flexible sequences of temporary gigs and a loose, short-term relationship to a client. Algorithmic management offers additional technological rationalization opportunities, especially via tracking, rankings and ratings. The result is a digital “on-demand” labor market which increases the accessibility of the work force. Against this background, Haidar and Keune state: “Labour platforms can be considered one of the frontiers in this process of optimization and the latest manifestation of the capitalist labour process” (2021: 3).

Meanwhile, academic debates increasingly emphasize the potential for ground-breaking transformations of modern welfare states due to digitalization – be it with respect to automation and workplace loss, new demands for qualification or a further flexibilization of work in the platform economy (see the contributions in Busemeyer et al. 2022; Eichhorst and Rinne 2017). These contributions point to the fact that the digital transformation of the economy may lead to an erosion of the foundations of modern welfare states. This is sometimes discussed as a disruption of the established economic model which is based on high employment rates, employment stability and decent paid jobs subject to social security contributions. In this context, research has pointed to the far-reaching risks of the precariousness of platform work (Montgomery and Baglioni 2021). Besides contributions dealing with structures and elements of a new digital capitalism (Srnicek 2017; Staab 2019), new organization and business models and their effect on work organization and working conditions are heavily debated (Schüßler et al. 2021). Moreover, research has pointed to new digital technologies and their appropriation by individuals (Norlander et al. 2021; Polkowska 2019) as well as questions on how to regulate platform work on a (supra-)national level (Garben 2021).

Consequently, questions of *organization*, *technology* and *regulation* dominate the debates on platform work, while the focus is much less on *institutions* and *institutional dynamics*. (Neo-) institutional analyses primarily focus on the influence of political economies on the prevalence of platform work. Such contributions suggest that coordinated market economies with fully developed social security schemes impede the spread of platform work, while liberal market economies with lower levels of guaranteed social protection offer more incentives

for participating in platform work (Krzywdzinski and Gerber 2020; Funke and Picot 2021). In such analyses, the institutional environments are taken for granted and thus conceptualized as independent variables influencing the spread of platform work. However, it remains unclear how platform work itself challenges existing labor market and welfare state institutions and whether it evokes institutional change (for an exception, see Nullmeier 2022).

This article takes this as a starting point for dealing with platform-related processes of deinstitutionalization using the example of social security in the conservative German welfare state. We argue that despite the heterogeneity of platform work, its main feature is the substantial weakening of labor- and welfare-related institutions such as companies, professions and social insurance schemes. We show how, on the one hand, the business models and externalization strategies of platforms undermine the German social security scheme in a *functional* perspective and how, on the other hand, this institution is *normatively* undermined by the strategic use of specific cultural narratives. We summarize that the platform economy does indeed intensify the deinstitutionalization of work and welfare, but at the same time follows a long-term trend of flexibilizing work and individualizing social protection that has also characterized many segments of the “analogue” labor markets since the 1980s. The analysis implies that regulatory policies cannot be reduced to legal norms only but have to take power struggles over cultural framings into account.

In this article, section 2 starts by explaining our understanding of institutions, presenting theoretical considerations on institutional change and explicating the social security institutions in the German welfare state. In section 3, we summarize main features of the disruptive effects of platform work. Section 4 analyzes how platforms seek to undermine social security institutions both functionally and normatively and gives empirical evidence by illustrating the theoretical considerations with quotes from digital labor platforms. In a conclusion and discussion in section 5, we link our findings to the debates on labor market and welfare state flexibilization, discuss possible future paths of the German social insurance scheme and outline challenges for future regulatory policies of platform work.

## **2. The institutional embeddedness of work and welfare**

Modern labor markets are significantly shaped by institutions. In the course of modernization processes including a functional differentiation of society, complex institutional sets structuring and regulating the labor market have emerged (Beckmann and Spohr 2022). Although such institutions vary across different political economies, ubiquitous institutions in industrialized countries contain legal norms of labor and social law, collective agreements, social security schemes or professions. Before we deal with processes of deinstitutionalization in the platform economy, we first need to address some general elements and functions of institutions and the question how and why institutions may change over time.

### **2.1 Elements and functions of institutions**

Institutions comprise more or less binding sets of rules in a society that are permanent and have a regulating and orientating function for individual or collective actors (Göhler 1997a; Pries 1998). These sets of rules can contain both formal rules such as laws or orders as well as informal norms. Institutions have a structuring power for social interaction. They are the result and product of negotiated interests and ideas in a society and symbolically represent legitimate rules and behaviors (Lepsius 1990). Since institutions define rules and

sanction violations of these rules, they control and constrain behavior. However, “[...] it is equally important to recognize that institutions also support and empower activities and actors. Institutions provide stimulus, guidelines, and resources for acting as well as prohibitions and constraints on action” (Scott 2014: 58). Institutions form and stabilize social order on a macro level and at the same time function as subjective guidelines for individual and collective actors on the micro-level. Although institutions are created and reproduced by men and their social action, they tend to appear as something “natural” and objectively factual (Berger and Luckmann 2009: 94).

According to Scott, institutions comprise regulative, normative and cultural-cognitive pillars (Scott 2014: 56). The *regulative* pillar contains formal rules such as laws. Here, compliance is legally coercive and violations are legally sanctioned. In contrast, the *normative* pillar of institutions comprises reciprocal expectations based on accepted norms and values in a society. Such informal rules are governed via morals. Thus, violations are not legally, but morally sanctioned (e.g. via humiliation). The *cultural-cognitive* pillar of institutions stresses that institutions are being internalized by individuals and thus help individuals to make sense of the social world (ibid.). This is due to the fact that their inherent ideas, norms and expectations “are taken for granted by larger or smaller groups of people” (Ahrne and Brunsson 2011:89).

## 2.2 Institutional change

“Institutions by definition are the more enduring features of social life [...] giving „solidity“ [to social systems] across time and space“ (Giddens 1984:24). Institutions are stable themselves as much as they have a stabilizing effect for the social order of societies. At the same time, it is obvious that they change over time, may disappear or get more or less modified. Hence, institutions are stable, but not static. They are not only existing social orders, but social processes (Scott 2014: 58). In (post-) modern societies, institutions are confronted with paradox expectations: on the one hand they ought to be permanent and by that fulfil their stabilizing function. On the other hand, they ought to be open for change and able to adjust to changing environments (Kervégan et al. 2021).

Although institutional change happens continuously, its mechanisms and causes are contested and explanations differ according to the understanding of institutions and theoretical approaches (see the contributions in Göhler 1997b as well as Streeck and Thelen 2005a). There is broad agreement though that there is disruptive, revolutionary institutional change as well as incremental, subtle institutional change (Scott 2014). In cases of institutional change, often not only one, but a whole set of institutions change (Göhler 1997a: 27).

However, prominent approaches such as Historical Institutionalism tend to emphasize the path-dependent stability of institutions and their resistance to change. In such approaches, institutional change especially happens at “critical junctures” and is abrupt and transformative in nature (Pempel 1998). These short episodes of radical change can be triggered by external shocks, but also by a conjunction of policy streams, situational factors and strategies of political entrepreneurs (Spohr 2016). Streeck and Thelen (2005b) criticize the widespread focus on critical junctures and radical forms of institutional change. Such perspectives may not only overlook the various subtle forms of institutional change but assume a coherent link between processes and results of institutional change – a differentiation which they take as a starting point for a conceptual typology of institutional change (see table 1).

**Table 1 – (Ideal-) Types of institutional change: processes and results according to Streeck and Thelen**

		Result of change	
		<i>Continuity</i>	<i>Discontinuity</i>
Process of change	<i>Incremental</i>	Reproduction by adaptation	Gradual transformation
	<i>Abrupt</i>	Survival and return	Breakdown and replacement

Source: Streeck and Thelen (2005b)

The typology shows the possible links between processes and the results of institutional change. Apparently, abrupt institutional change resulting in a path-breaking transformation of institutions (“*breakdown and replacement*”) is only one of four possibilities. In contrast, abrupt forms of institutional change may also lead to a continuity of institutions (“*survival and return*”). Also in cases of incremental forms of institutional change, the result remains contingent and may comprise either institutional continuity (“*reproduction by adaptation*”) or discontinuity (“*gradual transformation*”). Hence, institutional change has many faces. It is dynamic with respect to the process of change and contingent with respect to the outcome. Institutional change may, but need not end in deinstitutionalization, i.e. a cutback of existing rules and norms. Such cases often go hand in hand with re-institutionalization, i.e. the emergence of new or additional rules.

One dimension of institutional change refers to the *function* of institutions (Oliver 1992). Institutions may lose their ascribed function (*loss of function*). In such cases, institutions are no longer able to fulfil their purpose – e.g. a law that no longer offers an effective protection. However, institutions may also change their function, e.g. by fulfilling a new function or by adding additional functions to the original one (*change of function*). Collective agreements, for example, may regulate various qualitative matters in addition to the core regulations referring to the employment conditions. The loss or change of institutions’ function can evoke legitimation problems. In addition to that, socio-cultural, political or economic change may lead to a *normative* change of institutions. In these cases, the norms and values incorporated in institutions perish.

However, beneath these causes fostering institutional change there may be different mechanisms driving the change. While established approaches like Historical Institutionalism focus on disruptive change leading to a radical transformation of institutions at critical junctures, recent contributions have emphasized different mechanisms of gradual institutional change (Conran and Thelen 2016). Mahoney and Thelen identify four main mechanisms of institutional change which differ with respect to the relationship between old and new rules of an institution as well as the question whether rules are formally or informally changed (ibid.: 16). The most obvious mechanism is *displacement*. Here, old rules are removed while new ones are introduced. While this mechanism is typical for radical institutional change, it can also occur in gradual forms of institutional change. The second mechanism is *layering*. Contrary to the first, there is no removal of old rules, but still new rules are introduced on top of the old ones. This can lead to a functional change of an institution. According to Mahoney and Thelen (2010), this additive mechanism may especially be observed when (political) actors are not able to fully transform an institution. The third mechanism is *drift*. Here, formal rules of an institution are neither removed nor newly introduced. Rather, old rules are (informally) neglected and thus have a changed impact. This may especially be the case when external conditions change. The last mechanism is *conversion*. Its main characteristic is the new interpretation of old rules, while they are neither formally removed or

informally neglected. Rather, (political) actors strategically define and interpret old rules in their interest and thus foster institutional change.

In a prior typology of mechanisms leading to gradual institutional change, Streeck and Thelen (2005b: 29f.) include another type which they call *exhaustion*. They admit that this type is much more a mechanism leading to the breakdown of an institution rather than its change. For the following analysis, it is nevertheless important since Streeck and Thelen emphasize that “institutional exhaustion is a process in which behaviors invoked or allowed under existing rules operate to undermine these” (ibid.: 29). Especially with institutions “growing older”, “they may meet ‘limits to growth’ where their further expansion destroys or uses up resources that they require for their continued operation” (ibid.: 30).

Based on these considerations on institutional change, we can summarize the following aspects: institutional change can have different faces. It may be a disruptive process leading to a radical transformation of an institution. However, more often institutional change is more subtle in nature, involving incremental process and a gradual change of an institution. As we have shown, there may be different mechanism behind these (gradual) changes, having different implications with respect to the relationship of old and new rules as well as formal or informal changes of rules. Moreover, there is an interplay between the rules and functions of an institution and its norms. As we have shown, institutions may lose their function and their legitimation if their inherent ideas are no longer accepted. The functional and normative undermining in combination may also lead to changes with respect to the cultural-cognitive elements of institutions. In order for institutions to lose their sensemaking-function for individual and collective actors, however, they first need to undergo functional and normative changes and by that lose their ability for structuring behavior (Beyer 2006). Due to that, the following analysis of de-institutionalization processes of labor and social security in the platform economy focuses on the two major dimensions of institutional change: the function of an institution and its inherent norms.

### 2.3 Social security institutions in the German welfare state

Despite its far-reaching reforms promoting activation and workfare policies in the past two decades, the German welfare state is still considered a prototype of a conservative welfare regime (Esping-Andersen 1990). The institutionalized social security in this Bismarckian welfare state model is organized via social insurance contributions. Thus, the major social security institution is the social insurance (here and below defined as the sum of the several social insurances). Due to the importance of the social insurance scheme, the German welfare state is often considered a *social insurance state* (“Sozialversicherungsstaat”) (Riedmüller and Olk 1994). The social insurance in Germany covers five single insurances. They are – in chronological order of their implementation – health insurance (1883), occupational accident insurance (1884), pension insurance (1889), unemployment insurance (1927) and nursing care insurance (1995). Since almost all insurances are linked to formal employment relationships, the German model of social security is highly labor-centered<sup>1</sup>.

The several social insurances differ with respect to their kind of benefits. Employers and employees finance all insurances equally. The health and nursing care insurance mainly provide *benefits in kind*, whereas the unemployment and pension insurance provide *cash benefits*. The occupational accident insurance combines

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<sup>1</sup> An exception is the health insurance. In Germany, this insurance is obligatory independent of the employment status.

both elements. The health insurance and the nursing care insurance function according to the principle of need, i.e. benefits are granted independent of previously paid insurance contributions. In contrast, the unemployment and pension insurance function according to the principle of equivalence, i.e. claims depend on prior payments of contribution. Especially for the equivalence-based unemployment and pension insurance, the requirements for full claims are high since they require the participation in a permanent, continuous and decently paid standard employment relationship (SER) (Heinze et al. 1999).

From this follows that forms of employment deviating from the SER and a “regular” employment history are institutionally sanctioned in the German welfare state. This especially holds true when working hours and/or wages are low and employees have discontinuous employment histories (Bäcker 2021). In particular, it affects employees in minijobs and self-employed. While minijobbers do hold a dependent employment, their employment relationship is largely not subject to social insurance contributions. Even in cases of voluntary contributions to the pension scheme, claims remain low due to the income limit of 520 Euros per month (Beckmann 2020). The other vulnerable group is the (solo-) self-employed. Unlike in some other European countries, (solo-) self-employed are usually not members of the social insurance scheme<sup>2</sup>. The legislator argues that self-employed can assure their social security independently and do not require collective protection – although empirical studies indicate that especially many solo self-employed are hardly able to assure their social security privately due to low income (Schulze Buschoff 2016).

Estimations suggest that approximately one quarter of the self-employed in Germany are protected by obligatory special systems (ibid.). In addition, anyone self-employed can make contributions to the compulsory social insurance scheme voluntarily. However, legal requirements are often as high as the costs. Since employers’ contributions are missing, self-employed need to pay both employers’ and employees’ contributions. Altogether, the social protection for self-employed in the German welfare state is disparate, in many cases inconsistent and nontransparent for the self-employed themselves (Schuler-Harms and Goldberg 2019: 198). Institutional closure promotes a segmentation of social protection with well protected employees in various SER-intensive industries and precarious segments in the labor market periphery.

This close link between labor market participation and social security in the German welfare state entails a strong structuring of labor-related behavior by the social insurance scheme. In reference to the conceptualization by Scott discussed above, this is visible in three dimensions: in a *regulative* perspective, the social insurance scheme defines conditions of social security that are legally binding. Deviant labor-related behavior in non-standard forms of employment is possible but sanctioned with a (partial) exclusion from collective protection and/or low insurance claims. In a *normative* perspective, the social insurance scheme has a positive connotation in society. This especially holds true for the combination with the SER, which not only is the empirical normality but a desirable point of reference for labor market participation. Just like other welfare state institutions, the social insurance incorporates norms of moral commitment and is based on a moral economy of (selective) solidarity and reciprocity (Mau 2004). In a *cultural-cognitive* dimension, the social insurance scheme and a “regular” employment history have developed into an internalized normality.

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<sup>2</sup> Over time specific professions such as craftsmen, midwives or artists have been integrated into the existing security schemes or there have been introduced special schemes like the ‘Künstlersozialkasse’ for artists and publicists which covers 50% of members’ contribution for pension, health and nursing care insurance.

The strong structuring function of the social insurance scheme can only be fully understood in the combination of these three pillars.

### 3. The disruption of work and organization in the platform economy

The German labor market and welfare regime have been shaped by stable institutions which structure and regulate work and social security around a secure employment history in the SER. However, with the platform economy a new field of labor has evolved in recent years, challenging established structures and logics: in this new field, labor is no longer organized in companies, and flexible forms of employment are widespread. The platform economy not only involves digital labor platforms for crowd- and gig-work, but a huge variety ranging from e-commerce (e.g. Amazon, eBay, etsy), crowdfunding (e.g. Kickstarter, Patreon) as well as several search, entertainment and social-media platforms (e.g. Google, YouTube, Facebook, Instagram). With respect to platform work, research often focusses on DLP; however, new forms of labor enabled by the platform economy may also evolve aside from digital labor platforms (e.g. influencers on social media) (see Kenney and Zysman 2019; Hoose and Rosenbohm 2022).

Platforms are digital infrastructures which bring together actors in multi-sided markets (Sanchez-Cartas and León 2021). This matching is based on algorithms, rankings and ratings. Platforms reduce transaction and searching costs (Koutsimpogiorgos et al. 2020: 529). For customers, platforms increase the accessibility of products, services and information. The use of the platform mechanism makes this digital capitalism an economy of constant availability (Staab 2019). However, the conditions of exchange (e.g. of products, services, labor power) are defined by platforms' rules and terms of use (Kenney and Zysman 2016). Academic debates on platform work show the ambivalence of chances and risks of this new form of employment. On the hand, platform work is considered a form of employment offering flexibility and autonomy for platform workers, e.g. with respect to working hours or tasks they want to work on. However, wages often remain low, work is highly volatile and the digital infrastructure of platforms (e.g. algorithms matching gigs with workers) remains nontransparent.

Previous surveys show remarkable differences in the total number of platform workers (for an overview Hünefeld et al. 2021: 171). This is also due to a huge variety in concepts and methods to define and measure platform work (Pesole et al. 2019). However, all surveys underline some general findings: (1) in most European countries, platform work is rarely the main source of income of platform workers. Based on a survey of 24,108 people in 14 European countries, Piasna et al. (2022) show that only one percent of the sample can be considered main platform workers, defined as those working at least 20 hours/week via platforms or earning more than 50 percent of their income through platform work (ibid.: 14). Also in Germany, only a small minority of the 5.6 million people who have performed platform work in the past do it as their main job (BMAS 2020a; Urzı Brancati et al. 2020: 16). Thus, platform work mainly functions as a side job for earning additional income (Schönefeld and Hensel 2019; Serfling 2019). This also evokes new interdependencies between traditional and new forms of employment as well as new mixtures of work and non-work, paid and unpaid tasks and secure and precarious work forms. Hence, also new combinations of dependent and self-employment arise, making the platform economy a pioneer of hybrid employment (Bögenhold 2019). (2) Platform work has increased rapidly in recent years (Groen et al. 2021) and there is little doubt that it will do so in the future (Mandl 2021). The expansion goes hand in hand with hopes regarding vulnerable labor market groups such as low qualified, migrants or long term unemployed who could benefit from easy entrance into platform work. Recent findings



show that the platform economy indeed offers employment opportunities for such vulnerable groups, yet cannot eliminate general labor market inequalities (Gerber 2022; Newlands 2022).

According to our observation, previous research on platform work has mainly centered around three major themes. The first strand focusses on new forms of *organization* in the platform economy. Contributions from economic sociology view platforms as the main feature of digital capitalism (Srnicek 2017). In this perspective, the main aim of platforms and enterprises of commercial internet is to create proprietary markets (Schiller 2016; Staab 2019). As volatile monopolies (Dolata 2019a), they try do so by the strategic use of expansion policies, patents and network effects, trying to bind customers to specific platform ecosystems (Grabher and van Tuijl 2020: 1007). Hence, platforms cannot be considered hierarchical organizations, but rather a hybrid between organization and market (Schüßler et al. 2021: 5). Due to that, platform work takes place outside of operational control (Sydow and Helfen 2020: 221) and is characterized by loose coupling (Kirchner and Beyer 2016), but at the same time creates new dependencies between platforms and platform workers via algorithms or ratings.

Platforms match supply and demand for tasks, products and services through their technological infrastructure. This infrastructure is also used for monitoring the execution of tasks and the delivery of results and payments, hence offering optimized instruments for rationalization. Hence, *technology* is the second main focus in research, especially pointing to the changes of work organization through digital technologies. Many decisions on digital labor platforms are based on nontransparent algorithms that are controlled by platforms. For platform workers, the algorithms' modes of operations remain cloudy (Duggan et al. 2020: 119). Platform technologies define interfaces and structure possible interactions between actors (Ametowobla and Kirchner 2022). However, platform work is not determined by algorithms or other technologies: they may constrain social action, but also offer opportunities for deviance. Moreover, most platforms use a variety of technologies ranging from algorithms, apps, artificial intelligence to big data (Meijerink et al. 2021: 4). In one way or another, all of these technologies help platforms to interact with the platform periphery (Ametowobla and Kirchner 2022), creating new forms of work organization beyond control by bureaucracy or markets (Rani and Furrer 2020: 213).

These organizational and technological innovations provoke debates on the *regulation* of platform work as a third major topic in current research on platform work. Platforms are market organizers (Schüßler et al. 2021) and define not only competitive conditions, but also interfaces and thus social orders (Kirchner 2021). They structure the behaviour of workers. However, unlike "traditional" institutions with a similar function, platforms act in their own economic interest and their forms of organization and technology are not controlled democratically (Dolata 2019b). Platform work is not embedded in regulations based on employment contracts, but platform workers mostly perform as self-employed. This provokes debates on new forms of regulation (Hoose and Haipeter 2021).

Despite these disruptions regarding work organization and technology, Thelen (2018) stresses the importance of different *institutional environments*. Using the example of Uber, she discusses the diverging market entrances in various countries. In Germany, Uber was not successful since there was opposition by taxi associations as well as legal challenges brought forward by court decisions (Rosenblat 2018). In general, main features of coordinated market economies such as strong trade associations and unions, antitrust laws and lower financialization – e.g. with respect to venture-capital – are said to limit the spread of platforms and platform work (Krzywdzinski and Gerber 2020; Funke and Picot 2021). However, such contributions take the institutional environments for granted and conceptualize institutions as independent variables influencing the

spread of platform work. In contrast, it remains unclear how platform work itself challenges existing labor market and welfare state institutions and whether it evokes institutional change.

This question is of major importance as many research contributions point to the social risks of platform work. Some contributions see platform work as condensing the various trends of the flexibilization of work, e.g. commodification, intensification, subjectification and new forms of labor control (Kovalainen et al. 2019; Stanford 2017). Platforms enable low-threshold and new forms of self-employment (Cutolo and Kenney 2021). Still, self-employment in the platform economy remains diverse and comprises a huge variety of individual motivations and employment backgrounds ranging from precarious, low qualified micro-taskers who perform low-paid gigs to highly skilled freelancers working on profitable projects. This heterogeneity is a huge challenge for effective social protection since the ability to invest in sufficient private social security varies strongly across platform workers (Chesalina 2021).

Previous research on the social security of platform workers varies considerably with respect to scope, methods and findings. Still, all investigations show a low level of social security deriving from platform work. According to Joyce et al. (2019: 172), between 68 and 82 percent of those platform workers who depend on this source of income have no access to social security schemes except health insurance. Berg (2016) shows that 90 percent of micro-taskers on Amazon Mechanical Turk do not make any contributions to social security schemes. This low level of social security has also been confirmed by other surveys comparing different countries (ILO 2021). For Germany, previous research indicates the same trend, with protection against unemployment/ loss of earnings and old age being particularly precarious (Leimeister et al. 2016; Bertschek et al. 2016).

Although the exact degree of social security of platform workers remains vague, all studies have three main findings in common: *first*, for the social protection of platform workers it is essential whether platform work is the main job or functions as a means for additional income. By trend, social risks especially emerge when additional income and access to social insurances through a main job are missing (Leimeister et al. 2016). However, there are also cases in which multiple low paid and unsecure jobs cumulate so that the main job may not always offer sufficient social protection (ILO 2021). *Second*, insufficient social protection especially occurs in liberal market economies with poor institutionalized social security and a general paradigm of individualized protection (Joyce et al. 2019). *Third*, social protection differs with respect to specific risks: while protection against sickness is relatively widespread, other risks such as old age, unemployment and accidents are a lot more precarious (ILO 2021; Joyce et al. 2019).

Platform work conflicts with the established social security institutions in modern welfare states, leading to a digital labor market segment that is widely unregulated with respect to core norms of labor and social law (Behrendt et al. 2019; Forde et al. 2017). Hereinafter, we argue that this is due to the functional and normative undermining of social security institutions and that it is the platforms who play the most active role in pushing this development.

## **4. Deinstitutionalization of social security in the platform economy**

### **4.1 Functional undermining: free-riding through individualization and externalization**

The problem of a structurally insufficient social protection of platform workers is primarily rooted in platforms' business models and their specific use of labor power. All over the world, the vast majority of gigs

on digital labor platforms is carried out by (solo-) self-employed persons. According to the estimation by Groen et al. (2021) 90 percent of platform workers in the European Union carry out their gigs as self-employed and do not have an employment contract with the platform. The platforms hereby substitute permanent employment relationships with temporary agreements (Drahokoupil 2021).

By using solo self-employment, digital labor platforms can avoid responsibility for matters concerning labor and social law. Although welfare state's social protection for self-employed varies across the EU, social protection is usually lower than it is for employees in dependent employment relationships (Kool et al. 2021). As we have discussed above, this especially is true for the SER-centered German model. For the German case, (solo) self-employment in the platform economy requires private forms of social security. There may be exceptions for those platform workers who perform artistic or publicist tasks, as they may derive claims from the 'Künstlersozialkasse' (KSK) (OECD 2018: 123ff.). However, empirical findings indicate that only a small minority of platform workers performs such tasks (Piasna et al. 2022).

The heavy use of self-employment in the platform economy has provoked debates about bogus self-employment. Many authors argue that solo self-employed platform workers are in many ways dependent on platforms – be it with respect to economic aspects or their technological infrastructure (Schor et al. 2020; Chesalina 2021). At the same time, the lines between dependent and self-employment become blurry, giving rise to legal discussion about the necessity of a third employment category (Kocher 2022). While bogus self-employment has indeed been a huge matter with respect to gig work, the picture looks different regarding crowdwork. Chesalina (2021: 58f.) points to the fact that many platform workers are not only dependent on platforms, but on various clients they work for. Moreover, the vast majority works for more than one client, the relationship between clients and platform workers is short, temporary and volatile in most cases, and many platform workers are active users on multiple platforms. Thus, many crowdworkers will probably not fulfill the criteria for bogus self-employment (ibid.).

Platforms' strategic use of self-employment in order to functionally undermine compulsory social insurances is accompanied by a German specialty: the use of so-called minijobs. Minijobs are a special form of dependent part time employment in the German labor and welfare regime characterized by an income limit of either 520 Euros per month or a temporal limit of max. three months or 70 days of labor per year. For employees, minijobs are not subject to social insurance contribution. Thus, this form of employment seems attractive since the gross wage is the net wage. Employers have to make flat contributions to the pension scheme and the health insurance. However, employees do not gain claims based on these contributions (Beckmann 2020). For platforms operating in Germany, minijobs expand the portfolio for a functional undermining of the social insurance scheme. Especially in cases of bogus self-employment, minijobs offer an institutional exit option that allows avoiding social security institutions despite offering a dependent employment relationship.

The functional undermining of social security institutions is a strategy of digital labor platforms that involves the use of self-employment and minijobs. By this avoidance of the established institutions, platforms use a strategy of free-riding with three possible outcomes. The first option is the externalization of social security to the platform workers themselves. This strategy of *individualization* requires high income through platform work for sufficient social protection and thus the possibility for private insurances or other instruments for generating financial security. It may also involve hybrid self-employment. Many platforms explicitly emphasize that they are by no means employers and that all tasks carried out via the platform are not based on a formal employment contract. One example is TextMaster, a labor platform for translation services which

stresses that the “use of TextMaster does not in any way constitute a form of employment contract. The authors explicitly acknowledge that they are independent service providers and that consequently they remain independent in the management of their time and their obligations and that they are free to accept or reject the assignments offered by TextMaster. Social security, legal and tax declarations must be made by the author according to the laws and legislation applicable in its country” (TextMaster 2022; own translation). Helpling, a labor platform for housekeeping and craft services, also emphasizes the individual responsibility of their gig workers: “As a self-employed service provider, you are your own boss [...] We would like to note that you are solely responsible for your insurance and taxes” (Helpling 2022). Also Twago, a platform for various kinds of freelance tasks like translation, programming and design make clear that they are not a “typical” job exchange but a platform that conveys “jobs which are temporary with a clearly defined scope. No permanent positions are being conveyed” (Twago 2022; own translation).

These individualization strategies are accompanied by two prototypical strategies of *externalization*. The first one is *labor market-related externalization*. Here, platforms are free-riding on the securities offered by regular employment relationships in the “old economy”. Many platforms try to recruit employees who have a “regular” main job. “We find that in order to achieve positive outcomes for their workers, platforms are free-riding on the security provided by conventional employment, suggesting a parasitic relationship between the two labor markets“ (Schor et al. 2020: 835). This strategy not only allows platforms to externalize the responsibility for social protection, but also makes platform work attractive for potential platform workers as they get easy access to a (supposedly) informal labor market. Hence, additional income from platform work in many cases is more attractive than long hours in the (formally regulated) main job.

The second externalization strategy is based on platforms’ presumption that a specific group of platform workers has access to other sources of social protection due to their life phases or private living conditions. This group involves housewives/-men, unemployed, students or pupils. In this form of *extended externalization* social protection is externalized either to the family or to established institutions of basic social benefits. In the German welfare regime, married people can derive health insurance claims from their husbands/wives, whereas recipients of unemployment benefits stay members of compulsory health insurance. Crowd Guru, a labor platform for data preparation, texts, tagging and machine learning, explicitly addresses a target group of potential platform workers who have access to other forms of income and social protection. According to their website, Crowd Guru is suitable “as a side job for students, a part-time job during training, for additional income to the main job, flexible work during parental leave, additional income for self-employed during periods with only few jobs, for additional income for benefit recipients, for extra income for retirees and income for German speaking people abroad” (Crowd Guru 2022; own translation). Expertcloud, a platform for customer support, even encourages its platform workers to ensure other sources of income when stating: “Of course you can also have other clients besides Expertcloud, it is even desirable. Please do not see us as your only source of income [...] You can also become self-employed on a part-time basis and work for us” (Expertcloud 2022; own translation). Some platforms like Zenjob even specialize on side jobs and use restrictive requirements for potential platform workers: “You must also be enrolled full-time at a university or have a full-time job” (Zenjob 2022), hence making use of other forms of institutionalized social protection.

Aside from the platforms, also companies using DLP as clients drive the individualization and externalization of social security. When companies split a job into several independent tasks and source them out to the crowd, they may benefit with respect to speed and available know-how. However, they also benefit with respect to labor and social law-related aspects. In comparison, in-house solutions require full social

insurance coverage. Consequently, companies of the “old economy” may be both victims and drivers of free-riding and hence the deinstitutionalization processes in the platform economy.

The functional undermining of social security institutions by platforms and companies using DLP as clients is made possible because the German legislator has not brought forward a reform of better social protection for platform workers yet. However, in November 2020 the German Federal Ministry of Labour and Social Affairs published a position paper with several proposals for the regulation of platform work. Aside from administrative aspects such as reporting obligation and better control opportunities of the terms of contract, it explicitly addresses ideas for a better social protection of platform workers (BMAS 2020a). According to the position paper, the Federal Ministry wants to integrate platform workers into the pension scheme and ensure that also the platforms make contributions to the pensions scheme. Moreover, the Ministry announced to further check the integration of platform workers in other social insurances such as the health insurance and examine whether those gig workers who work on-site can be integrated into the occupational accident insurance (*ibid.*). When the position paper was published, the authorized Minister, Hubertus Heil, said: “We will not allow that the social rights of platform-mediated employees go to rack just like we are currently observing in the USA. Digitalization must not be mistaken for exploitation. Trusting the self-regulation of firms alone will not be enough. Hence, we as the legislator are in charge [...] We cannot accept that platforms alone dictate the conditions” (BMAS 2020b, own translation). Contrary to these announcements, there have not been any draft legislations or even legislative proposals since then. Hence, the regulatory loopholes as well as the missing institutional embeddedness of platform work in Germany remain.

## **4.2 Normative undermining: narratives of sharing and entrepreneurship**

The functional undermining of social security in the platform economy is only one side of the coin. As discussed before, institutional change is often initiated or accompanied by changing normative frameworks. Since institutions symbolically represent norms and values, changes in such norms and values may lead to institutional change. The functional undermining of social security is without doubt the nucleus of deinstitutionalization processes in the platform economy since platforms actively make use of regulatory loopholes and renew the access to labor power. However, for a full picture we also need to consider processes of normative undermining.

Since the very beginning, platforms have tried to frame economic activities in their own interests, starting with the influential *sharing narrative*. Here, ideas like reciprocity and solidarity were highlighted (“sharing is caring”). Platform activities were framed as a peer-to-peer-exchange in a community of like-minded people (Ravenelle 2019). Especially at the start, the sharing narrative transported high hopes of an alternative economic model seen as a decommodified counterbalance to capitalist exploitation (Schor 2020). The sharing narrative carried two implications: on the one hand, power- and information-asymmetries were negated. Rather, the sharing economy was idealized as a reciprocal exchange and early tendencies of commercialization were widely ignored. On the other hand, the sharing economy was conceptualized as an independent sphere aside the “traditional” market and its mechanism. Hence, the sharing narrative “carried the implication that these transactions belonged to the more personal peer-to-peer realm, and ought not to be regulated, governed, or taxed in the same manner as similar transactions in a more commercial vein” (Oei 2018: 113). From early on, critics stressed that platforms’ business models were often based on making strategic use of regulatory loopholes and sometimes even going beyond that: “Illegality is a method of the

,sharing economy““ (Scholz 2016: 7). Still today, many labor platforms reproduce the sharing-narrative by emphasizing the characteristics of their community and ideas of sharing. Malt, a platform for freelancers, stresses that “it takes a community. We care about each other [sic] and we believe in sharing. Whether it’s knowledge, networks or even a good meal, there is always room at the table” (Malt 2022).

It is obvious that the sharing narrative has become less influential in the course of the commercialization of the platform economy. Schor (2020) has described in detail how the alleged counterculture has ironically developed into capitalism’s spearhead. The commodification of transaction has weakened the original ideas of the sharing narrative. However, platform pioneers such as Airbnb and Uber had demonstrated in their early days that (1) they are willing to put established sets of institutions of work and economy into question and (2) accompany their business models with cultural storytelling and by that, shape public opinions and debates.

Meanwhile, a new narrative of the gig-economy that highlights freedom, autonomy and entrepreneurship (Schüßler et al. 2021) has replaced the sharing narrative. Like the sharing narrative, it defines economic activities on platforms against the background of the “old economy”. This *entrepreneurship narrative* highlights spatial and time-related flexibility of work, the opportunity to “be your own boss” and have the independence to choose which gig to take. Although research has questioned the actual degree of autonomy and rather pointed to the manifold instruments and strategies by platforms to *reduce* workers’ autonomy (Shibata 2020), this narrative remains powerful. Haidar and Keune (2021) link this narrative to Bröcklings “entrepreneurial self” (Bröckling 2015). Here, ideas of autonomy and self-realization are rooted in the 68 movement and their aversion to taylorist/fordist work organization including strict control and alienation. Platforms pick up these cultural concepts just like Californian start ups from the 1990s. This neoliberal “Californian ideology” (Barbrook and Cameron 1996) “hybridizes participatory ideals, cyber-enthusiasm and economic liberalism” (Arcidiacono et al. 2019: 613).

While the majority of previous research contributions highlights new technological and organizational restrictions of autonomy as well as tightened forms of control in platform work, many platforms themselves present platform work as an alternative to “conventional” forms of work. “The platforms in all their diversity are permeated by this conception. They discursively present themselves as an opportunity for workers to increase their autonomy, organize their own time, earn income and obtain other benefits (learning, self-development, meeting people, constructing networks), without bosses or restrictions, and according to the individual investment that each worker-entrepreneur makes of her time, skills, efforts, motivations and emotional commitment” (Haidar and Keune 2021: 17). WorkGenius, a labor platform for freelancers, consequently, claims to be “powering the Future of Work”, stating that “we believe in a world where talent comes first – no lengthy, costly application process, no rigid contract structure, and no room for any kind of discrimination or favoritism [sic] - ever” (WorkGenius 2022). These supposed advantages of a new digital working world are often accompanied by affirmations stressing the chances for individual development. UTest, a platform for software testing, advertises its platform by promoting: “Learn New Skills, Grow, and Connect” (uTest 2022), while 99designs, a platform for freelance designers, states: “Fire up your Freelance career [...] Do what you love, and get paid for it” (99designs 2022). Often, the individual-centered entrepreneurship narrative and the collective-centered sharing narrative hybridize, e.g. when delivery platforms address their “riders” as a collective community or Amazon Mechanical Turk their microjobbers as “turkers”.

The narratives described are of great importance for the normative undermining of social security. They help shifting the emphasis from collective solidarity towards individual responsibility of subjects. The social insurance scheme in the German welfare state is closely linked to the idea of collective solidarity, although, as

we have discussed in section 2, there has been institutional closure since the very beginning. Still, the social insurance scheme is embedded into an institutional setting of collectively regulated standard employment relationships and continuous employment histories, which has formed ideas of normal labor since the 1950s. The narratives discussed represent an attempt to question these institutionalized normalities and re-shape them in the platforms' interests. It is important to note that there is a close link between platforms' organization and business models aiming at a functional undermining of institutionalized social security on the one hand and the normative undermining through cultural narratives on the other hand: self-employment and individualization are all the more attractive when sold as opportunities for self-realization and autonomy.

## **5. Discussion and conclusion: contingent deinstitutionalization**

New forms of work organization in the platform economy go hand in hand with a weakening of labor and welfare-related institutions. That comprises many institutions that have been constitutive for the "analogue" working world since the 1950s. The platform economy changes professions and work organizations, dissolves work from its social embeddedness and thus weakens opportunities for collective action. As we have shown, also social security institutions in modern welfare states face huge challenges. Using the example of the German welfare state, we have shown that processes of deinstitutionalization affect both regulative and normative pillars of institutionalized social security. In the long run, these changes may also have effects on the cultural-cognitive pillars as internalized normalities may change in case institutions no longer serve their purpose (functional undermining) and/or social norms symbolically represented in institutions change (normative undermining).

Considering our theoretical assumptions, we can summarize the following findings: the example of institutionalized social security in the German welfare state shows that institutional change often affects multiple pillars of institutions (Scott 2014). Hence, deinstitutionalization of social security in the platform economy cannot be reduced on the regulative pillar and platforms' strategies to make use of existing loopholes in labor and social law. In fact, it also comprises platforms' attempts to change the normative point of reference and hence the normative pillar of the social insurance scheme. This is embedded in a cultural turn in which the relationship between protection through collective solidarity and individual responsibility is trying to be re-defined. Hence, these changes affect the moral economy of the (German) welfare scheme and its inherent paradigms of reciprocity and solidarity (Mau 2004). Moreover, the analysis validates that in many cases not only one single institution, but a whole set of institutions changes at once (Göhler 1997a). Deinstitutionalization processes in the platform economy are a mutual conglomerate of institutional change of work, organization, technology and social security.

Despite its disruptive effects for established labor market and welfare state institutions, platform work continues several trends of flexibilization of labor markets and changed socio-political paradigms that have been influential since the 1990s. First, platform work continues the segmentation and polarization of post-industrial labor markets. Previous research has shown in detail how in the majority of western countries dynamic segmentation has shaped labor markets in the past decades, resulting in multiple polarizations regarding working conditions, career prospects and labor-related risks such as poverty or unemployment (Kalleberg 2018). Also in Germany, atypical forms of employment such as minijobs (Beckmann 2020) as well as low-wage employment (Kalina and Weinkopf 2021) have increased since the 1990s, while the number of "multijobbers" has tripled since 2000 (Klinger and Weber 2019). As we have shown, platforms make strategic

use of labor market segmentation and diverging degrees of institutional regulation by externalizing responsibility for labor and social law standards from the digital periphery to the analogue core of the labor market. Such a strategy may not only intensify existing polarization but lead to a general re-definition of social protection on a lower level. Previous research shows that similar outcomes of weak social protection induced by digital labor in the platform economy also occur in non-western parts of the world because, here too, labor is being “disembedded from the cultural and legal norms that would limit its commodification” (Wood et al. 2019: 945).

Second, the deinstitutionalization of social security in the platform economy continues a new path of welfare that contains a re-definition of regulations and culture. The German conservative welfare state has changed radically since the Hartz reforms in 2003 (Hassel and Schiller 2010). In the course of the reforms, welfare state protection has been weakened and labor market liberalization promoted, aiming at redefining social rights. In contrast to prior paradigms of solidarity and collective protection, the ideal of a social investment state highlighted the individual responsibility for labor market participation and social protection. This goes hand in hand with an economization of welfare because “[...] rather than tame, regulate, or marginalize markets so as to ensure human welfare, the idea is to adapt and empower citizens so that they may be far better equipped to satisfy their welfare needs within the market“ (Esping-Andersen 2004: 5). The result is a “subjectification of the social” (Lessenich 2003), making individuals directors of their own employment history and social security. Similar to the trends we have described for the platform economy, the activation policies in the course of the social investment state also combined a conversion of both regulations and cultural narratives.

Although the platform economy disrupts work and hence social security, it is embedded in a long-term trend of a de-collectivization of work and social security. Deinstitutionalization in the platform economy is a dynamic process. Since the early rise of the platform economy, there has been a cat-and-mouse game between the platforms and the legislator. While platforms make strategic use of actual or supposed regulatory loopholes, governments, parliaments and courts try to react to the challenges resulting from “[...] outdated labor law and the legal grey zones of the Internet” (Scholz 2017: 132). We have shown that the effects of the platform economy on work are indeed disruptive as the forms of work organization and the technologies used not only continue capitalist rationalization on a new level but have a strong structuring function for the way platform workers act in this economic field.

These deliberately chosen bypasses of established institutions have proven to be a problem for the collective organization of workers' interests. Since the majority of platform workers are self-employed and platforms defy previous sectoral classifications, the traditionally strong German trade unions have long had difficulty with activities in the area of platform work (Hoose et al. 2019). Instead, some bottom-up initiatives by platform workers have emerged, which have been successful in improving working conditions, especially in delivery services. Particularly where these initiatives proved to be compatible with existing interest representation structures, they were able to have an impact. Examples of this are the works council elections for food delivery services supported by the union NGG<sup>3</sup> (Heiland 2021) or the establishment of an ombudsman's office for

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<sup>3</sup> The NGG (Gewerkschaft Nahrung-Genuss-Gaststätten) is a trade union in the sectors of food, beverages, tobacco, hotels and catering.



crowdwork, which grew out of IG Metall's<sup>4</sup> activities for fair platform work (Vandaele 2021). Overall, however, the picture of these initiatives has so far been characterized by heterogeneity. The institutional disembeddedness of work in the platform economy is also proving to be a major challenge for interest representation, whether this is organized 'from below' by platform workers or triggered from outside by established trade unions.

While the qualitative change of work and employment caused by platforms is disruptive, its effects on established social security institutions remain contingent. As we have discussed referring to Streeck and Thelen (2005b), disruptive change does not necessarily lead to a path-breaking development of institutions. Rather, it may also result in a path-dependent continuity of institutions. The future scope of the deinstitutionalization processes of social security in the platform economy is hard to predict. So far, the social security institutions in the German welfare state are stable and remain surprisingly resistant to change – be it with respect to demographic challenges or pressure resulting from the spread of non-standard forms of employment. However, they are increasingly under pressure with platform work pushing a further flexibilization of work, especially “increasingly blurred boundaries between dependent, semi-dependent, and self-employed workers, interspersed with family-related breaks in employment” (Busemeyer et al. 2022b: 376). In case these trends gain even more in importance in the future, it is not unlikely that the German social insurance scheme will face a state Streeck and Thelen (2005b) refer to as institutional exhaustion.

Still, since institutional change can often only be evaluated in retrospect, future paths remain contingent. Platform work may further intensify the trend towards privatization and individualization of social security. Just like in the past of the German model, this may be accompanied by institutional closure and a segmentation of a well-protected labor market core and a precarious, poorly protected (digital) periphery.

This first future path can be considered a scenario Streeck and Thelen (2005) refer to as *survival and return* of an institution. Its realization is not unlikely. As we have discussed, the Federal legislator in Germany has not brought forward a reform for a better social protection of platform workers yet, although the Federal Ministry of Labour and Social Affairs has emphasized the need for political reform and proposed ideas for regulatory instruments. The reasons for this mismatch between talk and action are manifold: *first*, platform work is still of relatively small size in Germany. From institutional theory approaches to path dependencies, it is known that often a critical mass is needed in order to bring forward activities to change an institution (Beyer 2006). *Second*, the importance of the European Union for regulatory policies in this transnational digital labor market (Garben 2021) bears the risk of a diffusion of competence. The important role of the EU may also be used strategically by players on the national level in order to delay activities and delegate responsibilities. *Third*, the pressure for political action may be small insofar as platforms' externalization strategies may actually be relatively successful. As long as social protection is successfully externalized to employers in the old economy or family members of the platform workers, the problem of insufficient social protection derived from platform work will be in disguise.

*Fourth*, necessary political reforms of regulating platform work may also be postponed because the current German government has already implemented two major social policy reforms in the present election period: the minimum wage has increased to 12 Euros/ hour on 1 October 2022 and the system of basic security benefits

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<sup>4</sup> The IG Metall is a trade union in the areas of metals and electricals, iron and steel, textiles and clothing, wood and plastics, crafts and services and information and communication technology.

for job seekers will undergo a great reform in 2023 (Beckmann et al. 2022). Hence, another major social policy reform with a wide scope of institutional change is rather unlikely, especially given the challenges resulting from the multiple crises in issues of climate and energy policies. *Fifth*, we have discussed that there are several initiatives, often supported by trade unions, trying to push a mobilization of platform workers from below. These initiatives help to bring forward poor working conditions and a lack of social protection of platform workers to the public. However, they are still small in size and only cover few segments of the platform economy. Moreover, many associations of the self-employed in Germany criticize current proposals for regulatory policies such as the proposal for a directive of the European parliament and the council on improving working conditions in platform work (European Commission 2021). Associations like the Verband der Gründer und Selbstständigen Deutschland (VGSD, “Association of Entrepreneurs and Self-Employed in Germany”) fear that future regulations will expand the definition of bogus self-employment and by that, enforce self-employed platform workers to become employees against their own will (VGSD Online). Hence, both regulatory policies as well as attempts to mobilize platform workers face the challenge of a heterogenous group of workers with heterogenous interests. These interests do not necessarily need to be consistent with proposals for regulation.

In the long run, however, the deinstitutionalization processes described will increase political pressure for a structural reform of the institutionalized social security in the German welfare state. It remains to be seen whether such reforms will require only minor adjustments within the existing system or if institutions will have to develop into more universal protection schemes (for a discussion see contributions in Busemeyer et al. 2022a; for a new form of digital social security, see Weber 2019). As Natali and Raitano (2022) argue, pension schemes based on a basic public pillar will be much more resilient to the changes resulting from the digital transformation of the labor market than Bismarckian security schemes based on contributions from (regular) employment. While such guaranteed basic pillars which are not linked to individual labor market participation are one option, there is also a renaissance of debates about a universal basic income (UBI), the second possible future path of institutionalized social security. The reasons for these renewed discourses are manifold (see Beckmann and Spohr 2022 for detail), but the digital transformation and its effects on “traditional” labor are without doubt of major importance for the interest in a radical change of social protection by the welfare state (Roosma and van Oorschot 2020). The hope is to better protect those workers who are negatively affected by digitalization, be it with respect to the loss of the workplace or precarious employment. In such a scenario, the changes deriving from the rise of platform work could foster a *breakdown and replacement* (Streeck and Thelen 2005) of Bismarckian insurance schemes.

In contrast to these future paths resulting either in institutional continuity (“survival and return”) or radical institutional change (“breakdown and replacement”), other scholars emphasize the adaptability of established (Bismarckian) social insurance schemes in the digital age. According to Nullmeier’s optimistic outlook, the “adoptability of Bismarckian systems is often underestimated. In their basic construction, they certainly do not meet the normative demands of an inclusive and just social security system. But this does not mean that they cannot gradually evolve in that direction” (Nullmeier 2022: 300). Here, the potential for gradual enhancements of the existing schemes – e.g. by integrating universalistic elements into the social insurance scheme and hence using a strategy of institutional layering (Mahoney and Thelen 2010) – is stressed (also see Heinze and Schupp 2022 for a similar perspective). As Busemeyer et al. (2022b) stress, such a *gradual transformation* (Streeck and Thelen 2005) of the existing institutional setting “could be politically viable given the strong popular support for the social insurance principle” (ibid.: 376). However, Nullmeier (2022) also points to the fact that

the *potential* for institutional change is not to be mistaken for the *political will* to support such policies. As we have discussed above, to date there are only tentative approaches for regulatory policies of platform work in Germany, with the social insurance scheme still offering selective protection and individualizing social risks for the majority of the self-employed.

With respect to regulating social security in the platform economy in the future, not only regulatory adjustments regarding existing loopholes in labor and social law will be important, but also counter-narratives that question the positive storytelling of sharing and entrepreneurship. Such counter-narratives also need to address the disadvantages of highly individualized social security. What will be important for future research on this is the view of the platforms workers themselves. To date, it is not known whether platform workers internalize such narratives, to what extent they have individualistic security orientations and whether they also play a part in free-riding on other security sources. Despite the social risks discussed in this article, warnings about precarity may come to naught when a digital avant-garde defines itself as a pioneer of flexible work. Hence, regulatory policies also face the challenge to address the huge heterogeneity of platforms and their business models as well as platform workers' financial conditions, social backgrounds, individual motivations and phases of life, making one size fits all-solutions more complicated.

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