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How the Online Gig Economy Challenges the Education-Income Paradigm

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Summary

It is a well-established finding in the social sciences that workers with higher educational qualifications have higher average incomes. The 'gig economy' – a new labour market in which workers are hired via internet platforms to complete a one-time service (a 'gig') – challenges this paradigm. Rather than by higher educational degrees, the hourly earnings of online gig workers are influenced by the gig workers' assessment scores, their work experience outside and on the platform. This not only casts doubt on the importance of higher educational qualifications for full-time, long-term gig workers, but it also raises the question of how policymakers can ensure that this extremely competitive labour market becomes a place of fair work.

Is the education-income paradigm applicable in the online gig economy?

Research in labour economics and the sociology of work largely agrees that higher education leads to greater labour market success, often expressed in a higher hourly income (Bills 2003). In traditional labour markets, this applies to dependent employment, freelancing, and entrepreneurship alike. That is, employees, freelancers, and entrepreneurs with a higher (e.g. master or PhD) degree earn more on average than their counterparts with a lower (e.g. bachelor or secondary) degree. This education-income paradigm has led policymakers around the globe to incentivise an ever-increasing share of adolescents to pursue tertiary education.

The 'gig economy' – a new labour market in which workers are hired via internet platforms to complete a one-time service (a 'gig') – challenges this long-established paradigm. To apply for gig jobs, workers simply need to create a profile on a labour platform of their choice, whereby they can but do not need to provide information about their formal educational qualifications. The platform then uses an algorithm to match gig workers with service requesters. Given that gig platforms substantially intervene in the work transaction process (e.g. by algorithmically matching the supply and demand of gig work, by monitoring work quality through their rating and review systems, and by administering the payment process), the gig economy is not simply a blackboard on the internet but a new labour market governed by distinct rules.

Since gig workers are, by default, not required to possess any formal educational qualifications, the question arises whether the education-income paradigm established for traditional labour markets also applies to the gig economy. Do gig workers with higher educational qualifications have higher hourly earnings than gig workers with lower educational

qualifications? This question is particularly acute for the online gig economy, requiring high skills, because services (such as translation, programming, or design tasks) are done on computers. Onsite gig work, done at the customer's locations (such as taxi, delivery, or cleaning jobs), typically requires only low skills, meaning that higher educational qualifications are, by definition, unlikely to affect earning levels.

Platform ratings rather than educational qualifications drive income levels of gig workers

A recent study of 1607 workers active on one of the largest platforms for online gig services casts doubt on the applicability of the education-income nexus to the online gig economy (Herrmann et al. 2023). Rather than by higher educational degrees, the hourly earnings of online gig workers are influenced by the workers' assessment scores, their work experience outside and on the platform. The higher their ratings and the longer their work experience (in traditional jobs and on the platform), the higher the hourly wage that online gig workers can ask for. Contrary to the expectations of the education-income paradigm, educational qualifications do not significantly affect the earnings of online gig workers (see Table below).

Average Hourly Income of Online Gig Workers Grouped by Educational Qualification

Variable	Category	Average income in US\$
Education attainment	High School	23.02
	Vocational Training	29.86
	Bachelor	27.19
	Master	26.72
	PhD	27.73

Source: Own analyses based on 1607 gig worker profiles

To better understand these quantitative findings and to find out where gig workers get their skills from, a subset of workers was interviewed qualitatively. These interviews revealed that only 25% of online gig workers deemed the skills acquired during their formal education useful for their gig jobs, while 75% shared the view that their studies were hardly relevant to this end. Instead, all interviewees indicated that, rather than through formal education, they had acquired the skills needed for completing online gig jobs chiefly in an autodidactic manner through trial-and-error and learning-by-doing processes. “It was kind of self-training, if you will. I have not gotten any formal training in graphic design, and I went into YouTube, into Shaw Academy, edX. (...) And another one is W3Schools.” explained one graphic designer (Herrmann et al. 2023: 10). Autodidactic learning also proved essential for online gig work because no two gig jobs are alike and have slightly different skill requirements.

Implications

Does this mean that formal higher education has become obsolete for online gig workers? Despite the massive growth of the online gig economy over the past decade, the answer still is: no! In 2018, about 8.6 % of the adult population in Europe were estimated to regularly earn an income from online platform work (ILO 2021: 49), with only 30% of online gig workers reporting that working on web-based platforms was their primary source of income (ILO 2021: 154). The vast majority of workers thus perform gig work part-time. For them, formal qualifications in higher education continue to have a significant impact on their income levels in traditional labour markets. Only if the online gig economy continues to grow into a major labour market might those who perform gig services full-time and over the long term reconsider the added value of formal education to their gig income.

At the same time, the low importance of formal higher qualifications also represents an opportunity for the unemployed and people without (recognised) educational qualifications, such as school dropouts and migrants. It can enable these workers to earn a living and find – even demanding – gig work without first investing in higher educational qualifications. And since online gig workers are typically paid in dollars, access to a hard currency is an additional benefit that motivates workers from the Global South, in particular, to do gig work.

Given the limited impact of higher educational qualifications on gig income, what can policymakers do to support online gig workers? Next to informing about gig work and its associated opportunities and risks as part of existing education programmes, national governments can prevent precarious gig work by regulating platforms. Importantly, global accessibility and high price transparency make the online gig economy an unprecedentedly competitive labour

market – especially because gig-supply exceeds gig demand. This creates the risk that workers sell their services below value, without building up retirement savings or insuring themselves against illness or work disability.

This unprecedented competitive pressure also creates a power imbalance between platforms and gig workers because platforms can unilaterally set the terms of online gig work. More concretely, online gig platforms charge up to 20% (even 40%) of commission fees without any obligations to insure their freelancing gig workers (ILO 2021: 80). To better balance the profits of platforms and risks of gig workers, national governments could legally require platforms to pay social security contributions on the gig revenues generated in their economy, taking the German “Künstlersozialkasse” as an example (see also ILO).

It is furthermore problematic that the matching, payment, and rating algorithms, which essentially determine who gets a gig and at what pay, are designed unilaterally by platforms – without any disclosure requirements of the criteria on which these algorithms are based. This seems inappropriate if one considers how comparable mechanisms that influence career progression in traditional labour markets (such as accreditation of formal education or reference letter writing by employers) are strictly regulated in most Western economies. National governments may therefore consider regulating the algorithms on which platforms build their business model in such a way as to ensure fair work.

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