

# **Abstract:** New forms of self-employment: an attempt at classification

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October 20, 2022

The changing nature of self-employment has become evident in recent years. While traditional forms of self-employment associated with entrepreneurship and autonomy are becoming rarer, the share of (solo) self-employed in the service sector is rising (Vermeulen et al., 2017). These new forms of self-employment are often associated with precarious employment relationships and low income, which naturally creates inequalities within the self-employed (Bögenhold, 2019). New digital technologies additionally enable new forms of self-employment, as jobs can be split in numerous mini-tasks provided by an online global workforce (Graham et al., 2017). Therefore, we attempt to shed light on the diversity of self-employment and try to categorise different forms of self-employment. We use Latent Class Analysis (LCA) (Masyn, 2013) to identify different classes of self-employment both in the European Working Conditions Survey (EWCS) and in the EU-Labour Force Survey (EU-LFS).

Based on an extensive literature review and specifically using the literature on different job quality indicators (Warhurst, Wight, and Lyonette, 2017) we first define multiple dimensions of job quality, which are especially relevant for the self-employed: time and task autonomy, client dependency, social security protection, meaningfulness, decent pay, development & training, skills, auxiliary skills, health, work intensity, working time, and work-life balance. These dimensions are then quantified using the extensive variable universe in the 6th wave of the EWCS. Subsequently, we will apply LCA in three different populations. The first only focuses on self-employed in firms with less than 10 employees to exclude managers in bigger firms and focus on more precarious or dependent forms of self-employment. The LCA can capture the diversity of this new and growing group on the labour market. Second, we run a LCA on all self-employed and check, whether self-employed with employees, i.e. managers, emerge as a distinct class separate from the others. Eventually, we run a LCA on self-employed and employees together to shed light on blurring boundaries and identify groups where this classic distinction is less straightforward (Bozzon and Murgia, 2022). Having defined these classes, we can then run logit models with the class indicator as dependent variable and socio-demographic information as well as job-related measures (not yet used in the LCA) to characterise these classes in more detail. This can further help to identify vulnerable groups within the self-employed.

The EWCS, however, has some problems with measuring income reliably and suffers from relatively low sample sizes, which make country-level analyses impossible. Therefore, we additionally use the EU-LFS, which does not suffer from these problems, but has less variables at disposal. We, thus, use a two-step procedure. We identify the most important dimensions for identifying the classes in the LCA based on the EWCS, as described above. Then, we quantify

these important dimensions using the more limited set of variables in the EU-LFS and run a first LCA to assess the robustness of the classes in this alternative dataset. Additionally, we can then do LCAs for each country separately to carve out important cross-country differences in the importance of these categories. Again, the emerging classes can be described in more detail using logit models.

First results with the EWCS show that income and social security protection on the one hand, and work intensity (for example stress and time pressure) in combination with work-life balance are important dimensions to separate self-employed into four distinct classes. Interestingly, autonomy in terms of time management as well as tasks does not play an important role in separating classes, as most self-employed indicate high levels of autonomy. This holds whether we exclude self-employed in bigger firms or not. The emerging classes are further relatively different in terms of socio-demographics, but also job characteristics. The two classes with relatively higher income and better career advancement possibilities differ in terms of work intensity and work-life balance, as do the two classes with lower income and worse job prospects. It further seems that age is related to the work intensity of the jobs, i.e. older respondents are more concentrated in classes with lower work intensity and better work-life balance. Further, education and the type of occupation (ISCO-08) is clearly related to decent pay, as is income necessity. The latter follows directly from the literature: those who are self-employed due to lack of other opportunities and who need the income are generally those who are less well paid. Interestingly, the migration background does not seem to play a role in terms of which class respondents belong to. Future analyses will provide further insights into these classes and analyses with the LFS will allow us to interpret the resulting classes on a country-level and potentially identify country patterns.

Our contribution to the literature is two-fold. On the one hand, this analysis can shed light on growing diversities within the group of self-employed, but also on the so-called 'blurring boundaries' between employees and self-employed. On the other hand, the combination of two datasets in the analysis can help inform data collection efforts by statistical offices and international institutions to be better able to capture these new forms of self-employed in future surveys.

## References

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