

5. The economic situation of higher education graduates in the labour market in Poland

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INTRODUCTION

For a long time, the expansion of higher education (HE) was accompanied by moderate enthusiasm, which eventually was transformed into disappointment due to the questionable quality of education and limited access of graduates to high positions in the labour market (Zajac et al., 2018). Despite the prosperity and dynamic economic development, the public discourse around transformation into mass higher education is losing its initial enthusiasm and gradually evolving into arguments questioning the social and economic contribution of HE expansion (Stankiewicz, 2015). The criticism was additionally fuelled by the state's policy-of-nonpolicy and lack of oversight over the falling quality of education, especially in the rapidly blossoming private sector (NIK, 2000). This is the case even though education is undeniably a pivotal factor reducing the risk of unemployment among young people.

The long-term economic impact of HE expansion has failed to attract systematic research attention despite the abundance of literature examining changes in both its size and structure (e.g. Pinheiro & Antonowicz, 2015; Kwiek, 2014; Krawczyk et al., 2023; Dobbins & Knill, 2009). A review of the literature shows a prime interest in the internal sectoral consequences of the transformation of higher education for the academic profession (Kwiek, 2003), institutional identity (Antonowicz, 2020), development of the private sector (Duczmal & Jongbloed 2007; Kwiek, 2003), higher education policy (Antonowicz et al., 2020; Dziedziczak-Foltyn, 2017) and most recently academic publication practices (Kulczycki et al., 2019). However, after three decades of transformation driven by skyrocketing aspiration and facilitated by the growth of new institutions, modes of studies and programmes offered by higher education institutions (HEIs), it is high time to examine in depth how

the HE expansion has affected graduates. The impact of HE expansion on the Polish labour market has not been systematically (empirically) analysed. Those who have attempted to examine it tend to rely on the old (generic) categories of graduates dividing their level of educational attainment into primary, vocational, secondary and higher education. Such a methodological approach largely rests on the assumption that graduates represent a homogeneous analytical category. We have reason to believe that this is no longer true due to horizontal differentiation (Czarnecki, 2015; Zawistowska, 2012) and vertical stratification of HE (Antonowicz et al., 2018) that significantly affects the situation of graduates.

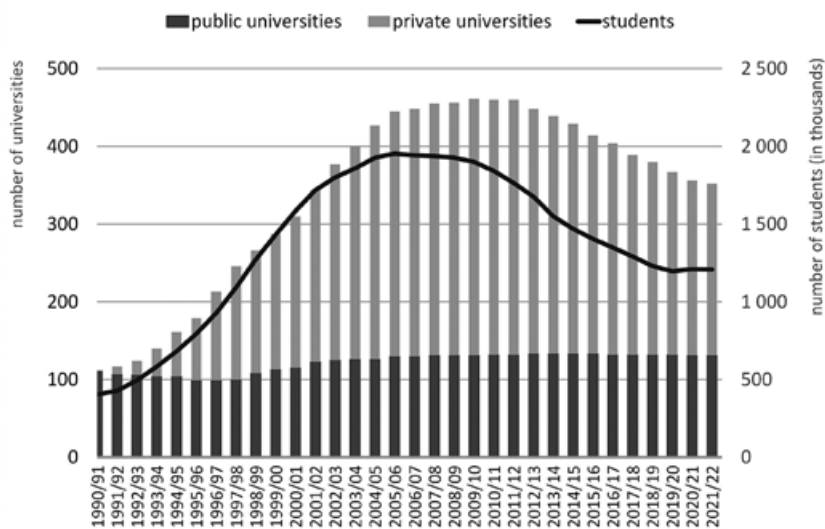
The chapter sets itself two main objectives. Empirically, the aim of the study is to present the dimensions and scale of the diversity in the labour market situation of graduates based on data on earnings, employment conditions and the form of unemployment. The chapter addresses the problem of graduates in the labour market, taking into account three independent variables: (a) the type of HEI, (b) the level of study (MA/BA/UM) and (c) the field of study. Conceptually, the chapter aims to show that 30 years after the beginning of the HE expansion in Poland, using a unitary category for 'HE graduates' is too generic to capture the full complexity of the labour market. In order to achieve these goals, the study is based on the Polish Graduate Tracking System (ELA), which is a public tool unique to Europe for monitoring the situation of HE graduates in the labour market.

THE EXPANSION OF HE IN POLAND

Since the 1990s, Polish HE has gone through turbulent decades of spontaneous changes and governmental reforms, most of which have been examined in depth and are well documented in the literature (Simonová & Antonowicz, 2006; Shaw, 2019; Krawczyk et al., 2023; Kwiek, 2014; Dobbins, 2015). Shortly before the political and economic revolution in 1989, Poland was characterized by its low gross enrolment rate (slightly below 10 per cent) which translated into 380,000 students and around 60,000 annual graduates. Their professional career development was formally determined as higher positions in public administration and large public companies were often formally restricted to those with HE degrees. However, as in the most authoritarian countries, the close connection to the political regime opens the door to attractive positions in both the state apparatus and economy. Also in Poland, university credentials played a more symbolic role as a cultural ticket to the middle class that did not translate into remuneration (Borowicz, 1983; Domański, 2018). This changed with the Polish political and economic transformation of 1989 that produced a stunning ideological shift in the approach to education. It was spurred by the arrival of capitalism, glorification of individualistic values

and embrace of meritocratic beliefs (Churski & Kaczmarek, 2022). In the new neoliberal narrative, ‘education’ became a form of individual investment in human capital and therefore many of those entering HE did so to leverage their employment opportunity.

The new HE law of 1990 lifted ideological control over enrolment (*numerus clausus*) and provided the conditions for uncontrolled expansion, mostly through fee-paying programmes in the private sector and part-time education across the public sector (see Kwiek, 2014; Duczmal & Jongbloed, 2007). The hallmark of those changes is the unprecedented expansion of the HE marked by the rapidly growing number of students. During this period, the prevalent policy logic was to expand the capacity of the domestic HE system to address the rising demand for HE (credentials) resulting from skills and credential shortages. This change was phenomenal and made a substantial contribution to the transformation of the HE system from elite to almost universal (Pinheiro & Antonowicz, 2015). More specifically, during the first two decades of transformation (1990–2010), student numbers grew by more than five times, reaching 2 million (GUS, 2012) (Figure 5.1).



Source: Own elaboration based on Central Statistical Office (CSO) data.

Figure 5.1 Student numbers and HEIs (1990–2021)

The HE law (1990) also marked the withdrawal of the government from higher education policy, resulting in the so-called ‘policy-of-nonpolicy model’

(Kwiek, 2009). This had neither political authority nor financial resources to steer the HE system. The heavily underfunded HEIs sought to balance their books through external and internal privatization (Kwiek, 2017) and provided fee-based education for anyone who was willing to pay. In a situation of structural underfunding and deep austerity measures, many HEIs turned into so-called ‘degree mills’ prioritizing income over quality of education (Antonowicz, Kwiek et al., 2017). The government responded with weak attempts to impose at least some control through a multitude of detailed bureaucratic regulations which it failed to execute.

Overall, Polish HEIs stand out by the scope of autonomy with almost unlimited freedom to run their own admission policy, including opening and closing educational programmes (Dobbins, 2015). The HE law stipulates only several ‘input’ criteria for opening new programmes, all of which refer to the number of academic staff and infrastructure. In fact, the central government has never implemented any policy measures regarding HE admission,¹ leaving it completely to the jurisdiction of individual institutions. It should be noted that Polish HEIs are exceptional in their scope of self-governance and collegiality (Kwiek, 2015). Bearing that in mind, it is safe to say that institutional policy regarding education has been driven by ‘supply’ rather than ‘demand’. It is fair to conclude that at least in public HEIs, for a long time the institutional interests as well as the well-being of academic staff have been prioritized over students. What is even more important, policy discussion about HE both at the policy and institutional level has always been dominated by the perspective of internal actors (institutions, staff and to a lesser extent students).

The focus on internal stakeholders, prioritizing their needs and interests, is also reflected in studies on HE in Poland. In the mainstream academic literature there are very few systematic studies addressing the economic returns to HE (Kwiek, 2013; Jasiński et al., 2017; Rocki, 2018) or the impact of diploma brand on employability (Antonowicz et al., 2011). Those works have had little if any impact on the mainstream debates within the realms of HE and also resonated little in the broader academic discussion. Instead, over 30 years, the dynamics and consequences of the reform changes were studied in depth and well documented, with a particular focus on the rapid growth of the private sector (Duczmal & Jongbloed, 2007; Kwiek, 2013), HE policy (Antonowicz et al., 2020; Kulczycki et al., 2019), the Bologna Process (Wasielewski & Antonowicz, 2021), and structural reforms of both external and internal HE governance (Shaw, 2019; Dobbins, 2015; Donina et al., 2022; Kwiek, 2015). More recently, inquiries are increasingly focused on the outcomes of changes and reforms in the academic profession (Krawczyk et al., 2023), the university research mission (Kwiek, 2012) and the consequences of demographic decline (Kwiek, 2013; Antonowicz et al., 2022).

However, the analyses have been primarily and almost exclusively conducted from the perspective of internal stakeholders such as students (Antonowicz et al., 2014), academic staff (Kwiek 2003), rectors and university senior administrators (Donina et al., 2022). Consequently, the discussions about changes in HE have been largely de-coupled from developments in labour market as these two realms are unrelated. As a result, there is a paucity of scholarly systematic studies that discuss the situation of HE graduates, their earnings and employment opportunities across the sector, and their impact on the economy. The expansion of HE only occasionally garners media attention, which generally raises the popular but also critical assumption of the ‘overeducation’ of Polish society (e.g. Żywiołek-Szeja, 2020). However, the problem of students and indirectly graduates has recently intensified with an observable decline in student numbers caused by demographic decline, lack of continuity in the MA programmes and lowering educational aspiration. Since the peak of expansion (2008), the number of students dropped to 1.2 million (GUS, 2022), causing concerns because they are the key variables of the financial algorithm of public HEIs. This shows that the instrumental perspective is sidelined in the public discourse, though the bigger and more expensive HE becomes for the public purse, the more questions it raises about the situation of graduates in the labour market.

There is a growing awareness that in the mass HE system one cannot ignore its economic impact, but also that the situation of different categories of graduates may vary substantially. Nevertheless, it has rather a small impact on the policy debate which is largely structured by major statistical categories. The Central Statistical Office (GUS) provides lenses through which major policy actors assess the outcomes of HE. It recognizes only three traditional levels of education (primarily, secondary and higher education), failing to recognize that in the mass system of HE such classification – at least for HE – is outdated and no longer relevant.

DIVERSIFICATION OF HE

The small and elite model of HE prevalingly performed a selective role for the middle class (Marginson, 2017). Mass HE has been one of the predominant research venues since the mid-20th century (e.g. Trow, 1973; McConnell, 1973; Neave, 1985; Teichler, 1998). Martin Trow (1973) set out early thinking on how the system evolved, pointing out the robust consequences this would have for HEIs, but since then a large part of the literature has focused on unfolding policies being applied in national systems in order to achieve massification.

As ‘mass higher education has become the international norm at the end of the 20th century’ (Altbach, 1999, p. 107), research interest has gradually

moved into studying the consequences of expanding the HE system (see Marginson, 2016a, 2016b). It produced not only 'more' but also 'different' HE (Kaiser & Huisman, 2003), leading primarily to diversification of the HE systems broadly understood as varieties of structural arrangements (Huisman, 1995). As Ziegele and van Vught (2020) point out, institutional diversity can be both horizontal and vertical. The former refers to differences in institutional mission and profiles (Teichler, 2007), recognizing similar or different HEIs, but the latter is more controversial because it is a normative approach with a distinction between so-called 'better' and 'worse' institutions based on reputation and performance (Ziegele, 2013).

The mass system has become more horizontally diversified with a large number of new HEIs as well as vertically stratified with political pressure on selecting and supporting centres of excellence (Palfreyman & Tapper, 2012; Antonowicz, Kohoutek et al., 2017). In addition, the high participation systems (HPS) (Cantwell et al., 2018) clearly perform a pivotal role for the post-industrial economy by providing a considerable number of graduates to the labour market. For many national systems, this meant new policy challenges that would accommodate both the need for mass demand for higher learning and establishing (fostering) elite institutions (Palfreyman & Tapper, 2012).

The consequences of the expansion extend beyond mere structural aspects and affect virtually all aspects of HE. The dynamic growth of the enrolment shed light on the outcomes of education, setting the scene for a transformation of demand for a new type of knowledge and graduate skills and the emergence of new employment profiles (Figueiredo et al., 2017). Such tectonic change has not passed unnoticed by many sceptics who argue that increasing enrolment has negatively affected traditional academic institutions and worsened the economic situation of graduates. More specifically, it has raised concerns about the impact on the employability of a new generation of graduates and the potential mismatches between their skills and the competences required by the job structure (Figueiredo et al., 2017). The biggest critics of HE expansion warn that they are being left out with no option but to accept jobs below their level of education which neither financially nor prestigiously reward their educational investments (e.g. Ware, 2015). Such an unfortunate occurrence may undermine the concept of higher learning and educational institutions. However, many studies present empirical evidence that the graduate premium is not as high as it was in the past but also that it is not true that a vast majority of graduates earn no more than nongraduates and do jobs that do not require a higher degree. The increasing volume of research suggests that some economies are simply not able to absorb and utilize such a great number of graduates but they are gradually restructuring to become more graduate-focused. Studies in the UK (Elias & Purcell, 2004), Finland (Kivinen et al., 2007) and Portugal

(Figueiredo et al., 2017) provide solid evidence that it is not the graduate status that matters but other assets such as social capital (connections) or attitudes that affect career opportunities and employment conditions. The elite education system was more about earning social status than acquiring practical knowledge while in the higher participation systems the prime focus is on graduate employment and their situation in the labour market (Cantwell et al., 2018). Such an approach gives more attention to the plight of graduates in the labour market and their financial and reputational reward for educational investment. Growing diversities of the mass HE system reveal also that 'while all students would receive an education at higher level, they would be getting different sorts of higher education' (Tight, 2019, p. 95).

Similar problems were raised regarding Polish HE that, after the political and economic transformation (1989), returned to its historical Humboldt-based governance model with restoration of institutional autonomy, considerable scope for self-governance and shielding from the interference of external environment (Dobbins, 2015). But the dynamic system expansion that produced a skyrocketing number of HEIs, students, alumni and various educational programmes radically changed the landscape of HE in Poland. Traditional universities called for policy measures to regulate the legal status of newly established and fast-growing HEIs and to distinguish these two sectors.

The most obvious systematic is based on the status of HEIs, dividing them into mutually exclusive categories: public and private. They feature completely different financial models which directly translate into distinct political interests given the dominant business strategy of the private sector. However, the public-private nexus did not reflect the whole spectrum of diversity in the HE sector. In addition, the most prestigious traditional universities expressed their requests to acknowledge formally their exceptional status. Thus, the government responded by adding another layer of formal categories: academic and vocational HEIs. However, this political initiative largely failed due to political lobbying from the private sector which managed to lower the requirements for academic status (Antonowicz, Kwiek et al., 2017). As a result, any HEI that offers at least an MA programme is awarded academic status, which led to a vast majority of HEIs being awarded academic status.

Another attempt to re-organize the HE sector was undertaken in the HE law (2005) which introduced three categories of HEIs: universities, specialized universities and universities of applied sciences. This categorization was based mostly on academic input (mostly the number of professors). Since 2005 this categorization has been slightly modified and rebranded several times; also, requirements for the prestigious status of (full) university were temporarily suspended because several HEIs failed to meet them. All of this contributed to erratic and rather confusing systematics of HEIs, and mostly for these reasons it has not settled into the public discourse or in public policy. Such

fluid categories of HEIs only added confusion to understanding the system by external actors. Nevertheless, the pressure for restructuring mass HE was looming and the growing transnational competition in the field of science and HE gave rise to excellence initiatives in several countries (Hazelkorn, 2015; Geschwind & Pinheiro, 2017) that aimed to restructure mass HE with a special role for elite institutions (Palfreyman & Tapper, 2012). The hegemonic idea of academic excellence was enhanced and/or are laden with external support or legitimacy (Czarniawska-Joerges & Sevón, 2005; Deephouse & Suchman, 2008) and spread across national contexts and policy portfolios. In Poland, the turn towards excellence took place only in 2018 with the introduction of the excellence initiative known as the IDUB (Inicjatywa Doskonałości Uczelnia Badawcze) programme. It awarded ten public HEIs the special status of 'research university' and provided them extra funding as block grants for research for six years. After the evaluation, at least two out of 10 HEIs will be dropped from the programme, replaced by two other institutions. The programme is focused on research only and the status of 'research university' is temporary so it only adds another layer of complexity to HE and it does not help to capture the diversity in educational outcomes.

In sum, it is worth acknowledging several top-down attempts to restructure mass HE in Poland. Those largely unsuccessful attempts were characterized by the following features: (a) they have been focused on institutional features and (b) they have been driven by 'input factors' such as academic staff and research infrastructure. Neither in the public policy nor in the public discourse has an alternative 'framing' to capture the diversity of mass HE been established. This sheds light on the inward-orientated and input-driven policy in HE in Poland. This might not be surprising given the scale of HE expansion and the fact that HEIs were awarded significant autonomy in opening and closing educational programmes. In addition, Poland joined the Bologna Process which introduced a three-tier structure (BA, MA, PhD) and gave HEIs leeway to organize the learning process as long as they achieve learning outcomes. This obviously has had a tremendous impact on the organization of the teaching process which affects the trajectory of graduates' careers. Thus, HE graduates have become a very diverse population even though the dominant policy discussion continuously fails to acknowledge the very diverse employment condition of HE graduates. Some HEIs used data about graduates' employability and earnings for marketing purposes but that information is only selectively publicized. At the same time, they are seldom and reluctantly used by major policy actors to outline a more systematic view of the economic value of education.

The public discourse about higher education has been historically determined and it largely ignores its links with the labour market. It particularly applies to universities which are generally considered as primarily academic institutions that perform more dignified and less instrumental roles in society.

The narrative around universities that has spilled over into other academic institutions suggests that they are meant for bigger things than preparing students for the labour market. Thus, they shall not be assessed (and differentiated) through the lenses of the labour market. To the contrary, there is a deeply held assumption (in the academic community) that universities shall not even take into account the needs of the labour market while designing their institutional and educational policy. There is no tradition of using an instrumental perspective while thinking about HEIs and consequently expecting them to contribute to economic development by supplying well-qualified graduates for the labour market. Therefore, the issue of graduate employability and their earnings has hardly been discussed as a key variable in HE. Instead, the public discourse is framed in three levels of education (elementary, secondary, tertiary) as a key statistical framework of analysis of the labour market.

This chapter takes critical stock of the historical thinking about the role of HE in society and points out that in the expanded HE system graduates are a highly diverse group and also critical for economic development. We claim that the use of traditional statistical categories referring to the major levels of educational attainment (primary, secondary and tertiary education) are outdated and largely fail to provide meaningful assessment of their situation in the labour market. Therefore, this study aims to offer an in-depth analysis of the employment situation of different categories of higher education graduates.

ELA: THE POLISH GRADUATE TRACKING SYSTEM

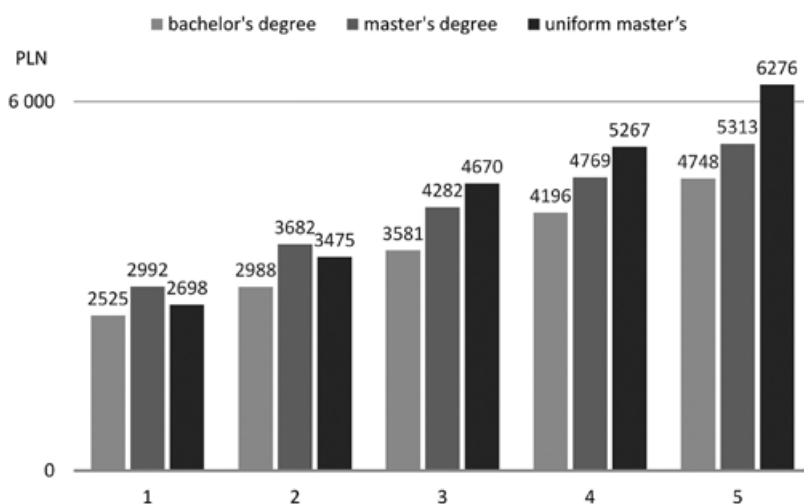
The basis for this analysis is data collected by the Polish Graduate Tracking System (ELA) introduced in 2014.² ELA was introduced by the Ministry of Science and Higher Education with little enthusiasm from the academic community who generally saw it as a step reducing ‘higher learning’ to monetary values. ELA draws information from the Social Insurance Institution (ZUS) which collects data about employment (or unemployment) in Poland. It is the most reliable source of information. For the sake of this study, we examined data on those who graduated in 2016 because ELA tracks graduates only for five years after graduation. So, the study has a full five-year track of HE graduates in the labour market and it takes into account a population of 343,088 graduates registered by ZUS. Depending on the type of studies (BA, MA or UM), it covers between 93 and 97 per cent of graduates, which is a substantial number. Those absent in the ZUS database and uncovered by our study (a) are formally unemployed and unregistered as unemployed, (b) work on the basis of civil contracts, (c) are employed illegally or (d) are insured by The Agricultural Social Insurance Fund. We have legitimate reasons to believe that the ZUS database is the most reliable source of information about graduates’ situation in the labour market because it collects economic information about

every employed and unemployed person in the country with the use of standardized methodology.

RESEARCH FINDINGS

Type of Programmes

In Polish HE, bachelor and engineering studies are defined as the intermediary period of education followed by MA level; 71.7 per cent of BA graduates continue education into the MA level, though only 57 per cent manage to complete it. On a methodological note, those BA graduates who complete the MA automatically become (three years after finishing the BA programme) MA graduates.



Source: Own elaboration based on Polish Graduate Tracking System data.

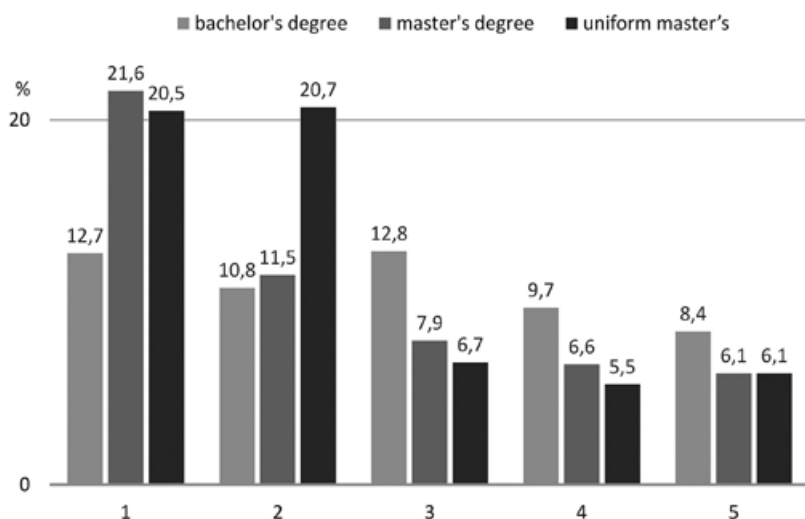
Figure 5.2 The average earnings (in Polish zloty (PLN)) of HE graduates over a five-year period

Figure 5.2 presents the average HE graduate's earnings regardless of the source of income (could be one or more) over the period of five years since graduation. Regardless of the type of programme (BA/MA/UM), the average income keeps increasing with every year in the labour market. This rise can be explained by several factors, likely among them the experience that pays

out in the labour market; also the development of the economy has driven up earnings.

What really draws the attention is the dynamics of the growth of income. The lowest income (relative to the average income in the economy which in 2017 was 427,151 PLN) reported BA graduates (59.1 per cent), then UM graduates (63.1 per cent) and then the highest-earning MA graduates (70 per cent). Interestingly, in the third year after graduation the earning order has changed and UM graduates were at the top of the earning ladder, only to increase the gap in the next few years. This intriguing shift is relatively easy to explain. The UM programmes are rare in Polish HE and they generally cover three types of programmes: medical studies, law and psychology. Each of them is regarded as elitist because they are highly selective (despite the demographic low) because of the potential financial benefits and high prestige.

In the fifth year after graduation, UM graduates earn a salary around 111 per cent of the average salary in the economy, MA graduates 94 per cent and BA 84 per cent. This means that the premium for longer (and also more demanding) education is present but it is deferred in time. The extra educational effort that provides a higher monetary return that begins to emerge in the second and third year after completion of studies is also reflected in employability.



Source: Own elaboration based on Polish Graduate Tracking System data.

Figure 5.3 *The proportion of graduates who are unemployed in the five years since graduation by type of programme*

Figure 5.3 presents the proportion of graduates who have experienced unemployment in the five years after completion of their studies. The experience of unemployment among the different categories of graduates varies, with the smallest proportion of BA graduates registered as unemployed in the first year after leaving HEIs. The experience of being unemployed during the first year after graduation was reported by every fifth MA and UM graduate but only 13 per cent of BA graduates. After that period, the situation of MA and UM graduates in the labour market gradually improves and they less frequently (than BA graduates) experience unemployment. We assume that the relatively low level of unemployed BA graduates as they entered the labour market could be the result of the fact that around 72 per cent of them continue education at the MA level.

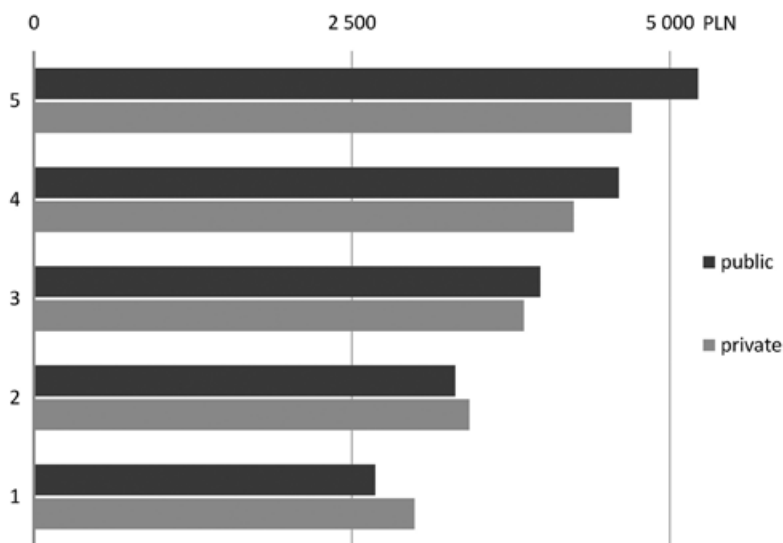
Interestingly, there are also other factors that differentiate the trajectory of the labour market situation of the population of the HE graduates. Shortly after graduation, graduates of private HEIs report higher earnings (by the 10 per cent) than alumni of public ones, but this proportion alters with time. ELA also shows in the third year the proportion alters with graduates of public HEIs demonstrating higher earnings, and the gap extends in the fourth year. In the fifth year after graduation the earning gap has reversed (in comparison with the first year) in the advantage of public graduates.

This changing disproportion is probably affected by previous working experience. Unfortunately, ELA does not recognize different modes of studies (full-time and part-time) and a vast majority of students (80 per cent) in private HEIs study part-time (most frequently during weekends), sharing time between work and study. As both categories of graduates are well settled in the labour market, the financial premium swings in favour of graduates in public HE. Beyond any doubt, it remains intriguing to learn whether this trend will continue as graduates progress their professional career, but ELA does not provide such information. We have reason to believe that graduates of public HEIs are highly rewarded by the market.

Types of HEIs

It should be noted that such uneven earnings between graduates of public and private HEIs span across different types of studies. The biggest change is reported among UM graduates and the smallest among MA graduates. Zooming in on UM graduates from public HEIs, we can see that initially they earn only 82 per cent of the earnings of peers from private HEIs and in the fifth year they earn as much as 127 per cent of their peers (Figure 5.4).

But it is not only the public–private nexus that demonstrates the diversity of the population of HE graduates. Another axis of outlining variations between the HE graduates is the size of city of their *alma mater*. For the sake of this



Note: Because of the data available, the average salary is weighted by the number of HE graduates who have any work experience after they graduated.

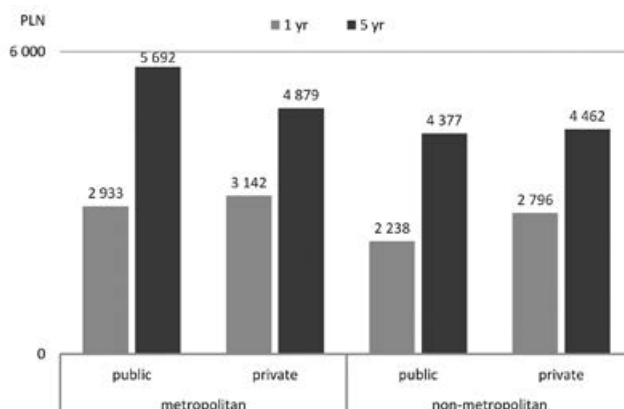
Source: Own elaboration based on Polish Graduate Tracking System data.

Figure 5.4 The average graduate earnings (in PLN) regardless of the source of income over the five years since graduation by type of HEI

study, we distinguish two categories of cities depending on the size: metropolitan (over 500,000 inhabitants) and non-metropolitan.

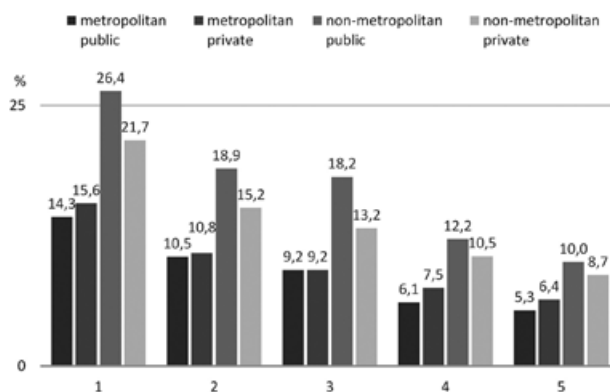
Figure 5.5 shows that in metropolitan HEIs the earnings of public and private graduates are on a similar level until the fifth year, when graduates of public HEIs earn significantly more than those from private HEIs. In non-metropolitan cities this change is less spectacular. The graduates of public HEIs report a more dynamic rise of earnings than graduates of private HEIs and after five years from graduation they have the same level. We assume that this is largely because the metropolitan cities are characterized by greater spread in the level of salaries than the non-metropolitan ones.

The size of the city also differs between HE graduates regarding unemployment. As expected, those who graduated from metropolitan HEIs less frequently experienced unemployment. However, it should be noted that with time divergences between metropolitan and non-metropolitan graduates regarding the experience of unemployment decreased (Figure 5.6).



Source: Own elaboration based on Polish Graduate Tracking System data.

Figure 5.5 The average graduate earnings (in PLN) in the first and fifth years since graduation by type of HEI and categories of cities



Source: Own elaboration based on Polish Graduate Tracking System data.

Figure 5.6 The proportion of graduates who registered as unemployed in the five years since graduation by type of HEI and categories of cities

Overall, the metropolitan graduates seldom experience unemployment regardless of the type of HEIs. Under the circumstances of the fast-developing Polish economy and general prosperity, the demand for an educated workforce was considerable. It was particularly observable in the metropolitan cities

that have been major drivers for economic development and stand out from non-metropolitan cities where employment conditions are less attractive for highly skilled workers.

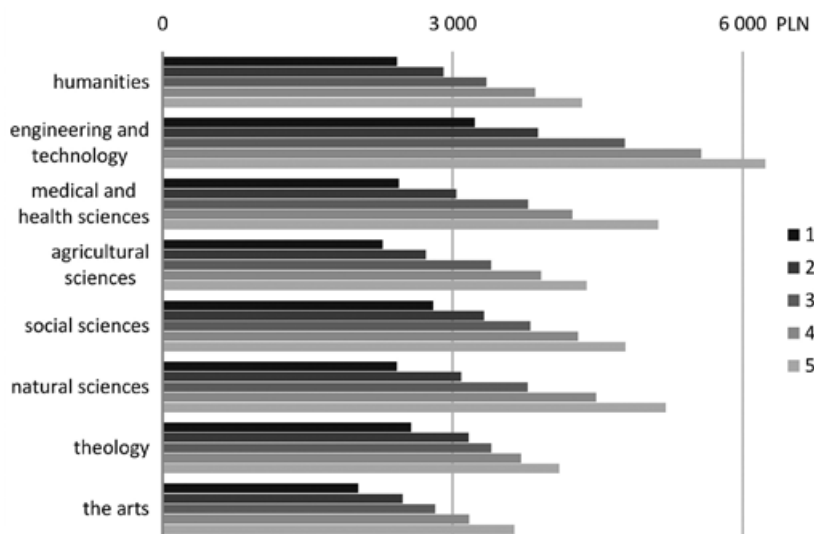
The question remains open why more than 25 per cent of graduates of public non-metropolitan HEIs experienced unemployment. We assume that they might have higher expectations as to the level of earnings and types of employment (permanent rather than temporary) and they do not accept the first available offer. Since there are fewer employment opportunities, it takes longer to find a good one than in metropolitan areas.

The graduates of private HEIs more frequently share studying with some professional work. The data shows that 70 per cent of graduates of private HEIs have some work experience compared to only 34 per cent of graduates of public HEIs. Graduates of private HEIs experience smoother entry into the labour market than their peers from public HEIs but this becomes more equal with time. In addition, after examination of the level of earnings it is safe to say that the labour market values working experience over a particular category of HEIs.

Fields of Study

The factor that most significantly influences the situation of HE graduates in the labour market is the studied programme. There is a wealth of diversity of educational programmes offered by Polish HEIs. Except very few professional programmes (e.g. law or medicine), they frequently exist under numerous (fancy) names and offer very different content depending on the institution. Despite the great diversity of educational programmes, typically they are embedded in a single *field of science*. So, for the purpose of the study we use the field of science as a common ground for comparative analysis of the situation of graduates on the labour programme.

Let us first acknowledge that the level of earnings significantly differs between different fields of study. The graduates of engineering and technology programmes receive the highest remuneration and graduates in art programmes receive the lowest. However, the examination over five years reveals some interesting findings. As a benchmark, we use a popular indicator – the average salary in the economy. While Figure 5.6 presents the earnings in PLN, we recalculated this to better clarify how they really change over time. In the first year of graduation the lowest earnings reported are for art graduates (47 per cent of the average salary) and agriculture graduates (53 per cent), while the highest are engineering and technology (76 per cent) and social sciences (66 per cent). This generally reflects a widespread public assumption about graduates in social sciences who are generally perceived as those whom the market does not reward financially.



Source: Own elaboration based on Polish Graduate Tracking System data.

Figure 5.7 The average graduate earnings (in PLN) over the five years since graduation by fields of science and the arts

Over the last five years the salary of graduates rises regardless of the field of studies but unequally. In the fifth year after graduation the highest earnings reported are for graduates of engineering and technological programmes (110 per cent of the average salary in the economy), natural sciences (92 per cent) and medical and health-related programmes (91 per cent). The lowest salaries reported are for graduates of agricultural (77 per cent), theological (72 per cent) and art programmes (64 per cent) (Figure 5.7).

DISCUSSION

This study attempted to demonstrate the diverse situation of HE graduates in the labour market in Poland. They are certainly unequal regarding both the level of earnings and experience of being unemployed. Unsurprisingly, the findings also show different trajectories of employment conditions in the labour market over the studied period of five years.

Such findings are not surprising when taking into account that HE expansion produces annually over 300,000 graduates from 400 HEIs. However, for historical reasons, HE is still primarily defined as a device distributing social prestige aligned to educational attainments. Such thinking originates from the

elite model of HE and in Poland still prevails despite the HE expansion and structural transformation. It frames HE graduates as a large homogenic (cultural) category as a proxy of the middle class without taking into account their situation in the labour market, despite the fact that they play a central role in the post-industrial economy.

This study provides compelling evidence that HE graduates are a diverse cohort and should not be treated as a single unit. It largely aligns with earlier studies about British (Elias & Purcell, 2004), Finnish (Kivinen et al., 2007) and Portuguese (Figueiredo et al., 2017) graduates, which underscores the pivotal role of system diversity in graduates' situation in the labour market. Furthermore, we attempted to point out growing diversities within the mass HE system which impact higher learning. We could not agree more with the prudent statement by Tight (2019, p. 95) that although 'all students would receive an education at higher level, they would be getting a different sort of higher education'. In addition, we suggest that graduate employment conditions should be given greater policy attention while both setting the agenda for HE policy and designing institutional strategy. The general public is paying increasing attention to the instrumental aspect of HE, but unfortunately the discussion about the economic value of education is controversial due to the paramount legacy of the Humboldtian tradition. Many university leaders simply do not want to consider the level of earnings and unemployment of graduates as factors influencing institutional policy. Instead, they emphasize that academic institutions are not training centres and should not use shallow and trivial measures of the value of education. They make a good point, but society is fully entitled to have different expectations from the educational institutions in the mass HE systems.

Other types of HEIs seem to be far more comfortable with considering graduates' employment conditions as one of the key factors setting their educational agenda. In the long run, graduates' employment will only become more prominent in setting educational policy. However, it is worth mentioning some concerns among the academic community that were sparked by the introduction of ELA. It was the first step to re-frame the discussion about the HE graduates by seeing them in a wider economic context and acknowledging their contribution to the economy. This study asserts that the historical category of 'higher education' is no longer applicable against the backdrop of the post-industrial economy as it fails to produce a meaningful description of the highly diversified group of HE graduates. However, moving away from a single category of 'HE graduates' inherently challenges the concept of educational attainment (elementary, secondary, higher) as a measure of social prestige and undermines the myth of HE as a cultural initiation to the middle class. With more than four out of ten young people enrolling in HEIs, it is hard to ignore the employment situation of different categories of graduates. This

automatically raises two major questions about whether the level of earnings and experience of unemployment will attract more attention, particularly for those enrolling in HEIs. Perhaps also institutional policy regarding enrolment should be more mindful of the prospects of graduates in the labour market. This does not mean that it should be the major factor influencing the size of enrolment, but it cannot be simply ignored.

ELA is a publicly accessible device but its use for systematic analysis is unpopular among policy actors because it breaks with the prevailing myth of the cultural value of education. Understandably, among all types of HEIs, universities are the most sensitive and also reluctant to see education through economic lenses. We claim that by taking a more economic perspective, HE would get more credit for its contribution to economic development. Meanwhile, the main focus is on social prestige with the notion that HE graduates make no impact on the economy. Oddly enough, the only occasion when the topic of graduates emerges is directly related to 'overeducation', which could be alarming given the needs of the knowledge economy. Thus, we argue that the demographic decline, decreasing educational aspiration and growing popularity of studying in other European countries (mainly within the European Union) might become a problem for the Polish economy. The Polish health system has already suffered heavy blows from the mass migration of well-qualified doctors and nurses. But it could be only the tip of the iceberg and the deficit of a well-educated workforce might slow down economic development. Regardless, there are critical voices questioning the concept of mass HE and suggesting the restoration of the 'elite' model of HE. They are based on the assumption that higher learning has zero impact on the economy, and HE contributes to society only by distributing credentials and prestige in society based on educational attainments. This concept remains largely at odds with the idea of a knowledge economy and society.

This study contributes to the state of knowledge in simple ways by presenting the substantial diversity picture of HE graduates thanks to the use of a graduate tracking system which is at odds with a prevailing policy narrative of HE graduates being a single and uniform category. It also argues that such an approach is a direct outcome of traditional statistical categories of educational attainment, but it represents a significant difference in defining the role of HE in society and the economy. We assert that such a traditional approach comes from misunderstanding and underestimation of the contribution of HE to the knowledge economy. If there is a widespread assumption that the economy does not benefit from HE graduates, there is little chance that HEIs will attract major public investments.

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NOTES

1. With the only exception of medical programmes that are under the jurisdiction of the Ministry of Health, which controls admission.
2. ELA is publicly available and open for individual calculations: <https://ela.nauka.gov.pl/en>.

REFERENCES

- Altbach, P. G. (1999). The logic of mass higher education. *Tertiary Education and Management*, 5(2), 107–124. <https://doi.org/10.1080/13583883.1999.9966985>.
- Antonowicz, D. (2020). Understanding the development of technical universities in Poland. In L. Geschwind, A. Broström & K. Larsen (Eds.), *Technical Universities: Past, Present and Future* (vol. 56, pp. 61–77). Springer International Publishing. https://doi.org/10.1007/978-3-030-50555-4_5.
- Antonowicz, D., Krawczyk, M., & Walczak, D. (2011). Rola Marki Dyplomu W Perspektywie Niżu Demograficznego W Polsce (2010–2020). *Nauka i Szkolnictwo Wyższe*, 37, 87–106. <https://pressto.amu.edu.pl/index.php/nsw/article/view/3230/3239>.
- Antonowicz, D., Pinheiro, R., & Smużewska, M. (2014). The changing role of students’ representation in Poland: An historical appraisal. *Studies in Higher Education*, 39(3), 470–484. <https://doi.org/10.1080/03075079.2014.896182>.
- Antonowicz, D., Kohoutek, J., Pinheiro, R., & Hladchenko, M. (2017). The roads of ‘excellence’ in Central and Eastern Europe. *European Educational Research Journal*, 16(5), 547–567. <https://doi.org/10.1177/1474904116683186>.
- Antonowicz, D., Kwiek, M., & Westerheijden, D. F. (2017). The government response to the private sector expansion in Poland. In H. De Boer, J. File, J. Huisman, M. Seeber, M. Vukasovic, & D. F. Westerheijden, *Policy Analysis of Structural Reforms in Higher Education* (pp. 119–138). Springer International Publishing. https://doi.org/10.1007/978-3-319-42237-4_6.
- Antonowicz, D., Cantwell, B., Froumin, I., Jones, G. A., Marginson, S., & Pinheiro, R. (2018). *High Participation Systems of Higher Education* (pp. 94–124). Oxford University Press. <https://doi.org/10.1093/oso/9780198828877.003.0004>.
- Antonowicz, D., Kulczycki, E., & Budzanowska, A. (2020). Breaking the deadlock of mistrust? A participative model of the structural reforms in higher education in Poland. *Higher Education Quarterly*, 74(4), 391–409. <https://doi.org/10.1111/hequ.12254>.
- Antonowicz, D., Wasielewski, K., & Domalewski, J. (2022). The impact of system contraction on the rural youth access to higher education in Poland. *Tertiary Education and Management*, 28(3), 209–222. <https://doi.org/10.1007/s11233-022-09095-7>.

- Borowicz, R. (1983). Zakres i mechanizmy selekcji w szkolnictwie. Kształtowanie się zbiorowości studentów. Państwowe Wydaw. Naukowe.
- Cantwell, B., Marginson, S., & Smolentseva, A. (Eds.). (2018). *Higher Participation Systems of Higher Education*. Oxford University Press.
- Churski, P., & Kaczmarek, T. (Eds.). (2022). *Three Decades of Polish Socio-Economic Transformations: Geographical Perspectives*. Springer International Publishing. <https://doi.org/10.1007/978-3-031-06108-0>.
- Czarnecki, K. (2015). Uwarunkowania nierówności horyzontalnych w dostępie do szkolnictwa wyższego w Polsce. *Nauka i Szkolnictwo Wyższe*, 1(45), 161–189. <https://doi.org/10.14746/nsw.2015.1.7>.
- Czarniawska-Joerges, B., & Sevón, G. (Eds.). (2005). *Global Ideas: How Ideas, Objects and Practices Travel in a Global Economy*. CBS Press.
- Deephouse, D. L., & Suchman, M. (2008). Legitimacy in organizational institutionalism. In R. Greenwood, C. Oliver, R. Suddaby & K. Sahlin (Eds.), *The SAGE Handbook of Organizational Institutionalism*. SAGE Publications Ltd. <https://doi.org/10.4135/9781849200387>.
- Dobbins, M. (2015). Exploring the governance of Polish public higher education: Balancing restored historical legacies with Europeanization and market pressures. *European Journal of Higher Education*, 5(1), 18–33. <https://doi.org/10.1080/21568235.2014.969289>.
- Dobbins, M., & Knill, C. (2009). Higher education policies in Central and Eastern Europe: Convergence toward a common model? *Governance*, 22(3), 397–430. <https://doi.org/10.1111/j.1468-0491.2009.01445.x>.
- Domanski, H. (2018). Wpływ wykształcenia na rozkład zarobków w Polsce w latach 1988–2013. *Ekonomista*, nr 1, 8–24.
- Donina, D., Pokorska, A., Antonowicz, D., & Jaworska, M. (2022). A cultural perspective of higher education governance reform in Poland: Divergent interpretations by rectors across distinct categories of universities. *Journal of Higher Education Policy and Management*, 1–17. <https://doi.org/10.1080/1360080X.2022.2103940>.
- Duczmal, W., & Jongbloed, B. (2007). Private higher education in Poland: A case of public-private dynamics. In *Public-Private Dynamics in Higher Education* (pp. 415–442). Transcript Verlag. <https://doi.org/10.1515/9783839407523-016>.
- Dziedziczak-Foltyn, A. (2017). *Reforma szkolnictwa wyższego w Polsce w debacie publicznej. Bilans dyskusji o uniwersytetach (1990–2015)*. UŁ.
- Elias, P., & Purcell, K. (2004). Is mass higher education working? Evidence from the labour market experiences of recent graduates. *National Institute Economic Review*, 190, 60–74. <https://doi.org/10.1177/002795010419000107>.
- Figueiredo, H., Biscaia, R., Rocha, V., & Teixeira, P. (2017). Should we start worrying? Mass higher education, skill demand and the increasingly complex landscape of young graduates' employment. *Studies in Higher Education*, 42(8), 1401–1420. <https://doi.org/10.1080/03075079.2015.1101754>.
- Geschwind, L., & Pinheiro, R. M. (2017). Raising the summit or flattening the agora? The elitist turn in science policy in Northern Europe. *Journal of Baltic Studies*, 48(4), 513–528. <https://doi.org/10.1080/01629778.2017.1305178>.
- GUS. (2012). *Szkoły wyższe i ich finanse w 2012 r.* Warszawa: Główny Urząd Statystyczny.
- GUS. (2022). *Szkolnictwo wyższe w roku akademickim 2021/2022*. Warszawa: Główny Urząd Statystyczny.
- Hazelkorn, E. (2015). *Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence*. Springer. <https://books.google.com/books?hl=en&lr=&id=>

- rMW_BwAAQBAJ&oi=fnd&pg=PP1&ots=6nQV7T5VMh&sig=bGULizoibiSOPc_lQoi2z0Vkemg.
- Huisman, J. (1995). Differentiation, diversity and dependency in higher education. University of Twente.
- Jasiński, M., Bożykowski, M., Chłoń-Domińczak, A., Zając, T., & Żołątk, M. (2017). Who gets a job after graduation? Factors affecting the early career employment chances of higher education graduates in Poland. *Edukacja*, 143(4). <https://doi.org/10.24131/3724.170402>.
- Kaiser, F., & Huisman, J. (2003). Expansion and diversification in higher education. In R. Begg (Ed.), *The Dialogue between Higher Education Research and Practice* (pp. 135–145). Springer Netherlands. https://doi.org/10.1007/978-0-306-48368-4_11.
- Kivinen, O., Hedman, J., & Kaipainen, P. (2007). From elite university to mass higher education: Educational expansion, equality of opportunity and returns to university education. *Acta Sociologica*, 50(3), 231–247. <https://doi.org/10.1177/0001699307080929>.
- Krawczyk, S., Szadkowski, K., & Kulczycki, E. (2023). Identifying top researchers in highly metricized academia: Two discursive strategies of senior officials in Poland. *Discourse: Studies in the Cultural Politics of Education*, 44(2), 269–280. <https://doi.org/10.1080/01596306.2021.1993792>.
- Kulczycki, E., Rozkosz, E. A., & Drabek, A. (2019). Internationalization of polish journals in the social sciences and humanities: Transformative role of the research evaluation system. *Canadian Journal of Sociology*, 44(1), 9–38. <https://doi.org/10.29173/CJS28794>.
- Kwiek, M. (2003). Academe in transition: Transformations in the Polish academic profession. *Higher Education*, 45(4), 455–476. <https://doi.org/10.1023/A:1023986406792>.
- Kwiek, M. (2009). The two decades of privatization in Polish higher education. In *Financing Access and Equity in Higher Education* (pp. 149–167). Brill. https://doi.org/10.1163/9789087907686_010.
- Kwiek, M. (2012). Changing higher education policies: From the deinstitutionalization to the reinstitutionalization of the research mission in Polish universities. *Science and Public Policy*, 39(5), 641–654. <https://doi.org/10.1093/scipol/scs042>.
- Kwiek, M. (2013). From system expansion to system contraction: Access to higher education in Poland. *Comparative Education Review*, 57(3), 553–576. <https://doi.org/10.1086/670662>.
- Kwiek, M. (2014). Structural changes in the Polish higher education system (1990–2010): A synthetic view. *European Journal of Higher Education*, 4(3), 266–280. <https://doi.org/10.1080/21568235.2014.905965>.
- Kwiek, M. (2015). The unfading power of collegiality? University governance in Poland in a European comparative and quantitative perspective. *International Journal of Educational Development*, 43, 77–89. <https://doi.org/10.1016/j.ijedudev.2015.05.002>.
- Kwiek, M. (2017). De-privatization in higher education: A conceptual approach. *Higher Education*, 74(2), 259–281. <https://doi.org/10.1007/s10734-016-0047-3>.
- Marginson, S. (2016a). High participation systems of higher education. *The Journal of Higher Education*, 87(2), 243–271. <https://doi.org/10.1080/00221546.2016.11777401>.

- Marginson, S. (2016b). The worldwide trend to high participation higher education: Dynamics of social stratification in inclusive systems. *Higher Education*, 72(4), 413–434. <https://doi.org/10.1007/s10734-016-0016-x>.
- Marginson, S. (2017). Elite, mass, and high-participation higher education. In J. C. Shin & P. Teixeira (Eds.), *Encyclopedia of International Higher Education Systems and Institutions* (pp. 1–9). Springer Netherlands. https://doi.org/10.1007/978-94-017-9553-1_50-1.
- McConnell, T. R. (1973). Beyond the universities: The movement towards mass higher education in Britain. *Higher Education*, 2(2), 160–171. <https://doi.org/10.1007/BF00137746>.
- Neave, G. R. (1985). Elite and mass higher education in Britain: A regressive model? *Comparative Education Review*, 29(3), 347–361. <https://doi.org/10.1086/446526>.
- NIK. (2000). Informacja O Wynikach Kontroli Funkcjonowania Nadzoru Państwa Nad Niepaństwowymi Szkołami Wyższymi I Wyższymi.
- Palfreyman, D., & Tapper, T. (2012). Structuring mass higher education: The role of elite institutions. In *Structuring Mass Higher Education: The Role of Elite Institutions*. Taylor and Francis. <https://doi.org/10.4324/9780203889725>.
- Pinheiro, R., & Antonowicz, D. (2015). Opening the gates or coping with the flow? Governing access to higher education in Northern and Central Europe. *Higher Education*, 70(3), 299–313. <https://doi.org/10.1007/s10734-014-9830-1>.
- Rocki, M. (2018). Rynkowa wycena absolwentów studiów ekonomicznych w Polsce. *Ekonomista*, nr 1, 89–102.
- Shaw, M. A. (2019). Public accountability versus academic independence: Tensions of public higher education governance in Poland. *Studies in Higher Education*, 44(12), 2235–2248. <https://doi.org/10.1080/03075079.2018.1483910>.
- Simonová, N., & Antonowicz, D. (2006). Czech and Polish higher education: From bureaucracy to market competition. *Czech Sociological Review*, 42(3), 517–536. <https://doi.org/10.13060/00380288.2006.42.3.03>.
- Stankiewicz, Ł. (2015). Pułapka umasowienia – o sprawczości jednostek w umasowionym systemie szkolnictwa wyższego. *Nauka i Szkolnictwo Wyższe*, 1(45), 191–213. <https://doi.org/10.14746/nsw.2015.1.8>.
- Teichler, U. (1998). Massification: A challenge for institutions of higher education. *Tertiary Education and Management*, 4(1), 17–27. <https://doi.org/10.1080/13583883.1998.9966942>.
- Teichler, U. (2007). *Higher Education Systems: Conceptual Frameworks, Comparative Perspectives, Empirical Findings*. SensePublishers.
- Tight, M. (2019). Mass higher education and massification. *Higher Education Policy*, 32(1), 93–108. <https://doi.org/10.1057/s41307-017-0075-3>.
- Trow, M. (1973). *Problems in the Transition from Elite to Mass Higher Education*. Carnegie Commission on Higher Education.
- Ware, A. (2015). The great British education ‘fraud’ of the twentieth and twenty-first centuries. *The Political Quarterly*, 86(4), 475–484. <https://doi.org/10.1111/1467-923X.12180>.
- Wasielowski, K., & Antonowicz, D. (2021). Proces boloński a socjalizacja studentów do akademickich wspólnot plemiennych. Analiza wzorów mobilności między I i II stopniem kształcenia. *Studia Socjologiczne*, 2(241), 147–175. DOI: 10.24425/sts.2021.137292.
- Zajac, T., Jasiński, M., & Bożykowski, M. (2018). Early careers of tertiary graduates in Poland: Employability, earnings, and differences between public and private

- higher education. *Polish Sociological Review*, 202(187–208). www.jstor.org/stable/26531091.
- Zawistowska, A. (2012). *Horyzontalne nierówności edukacyjne we współczesnej Polsce*. Warszawa: Wydawnictwo Naukowe Scholar.
- Ziegele, F. (2013). Classification of higher education institutions: The European case. Pensamiento Educativo. *Revista Des Investigación Educacional Latinoamericana (PEL)*, 50(1), 76–95.
- Ziegele, F., & van Vught, F. (2020). Understanding institutional diversity. In P. N. Teixeira & J. C. Shin (Eds.), *The International Encyclopedia of Higher Education Systems and Institutions* (pp. 2673–2681). Springer Netherlands. https://doi.org/10.1007/978-94-017-8905-9_538.
- Żywiołek-Szeja, M. (2020). *Overeducation in Poland: The Growing Competency Mismatch in the Labour Market*. XIII International Scientific Conference Analysis of International Relations 2020. Methods and Models of Regional Development. Winter Edition. https://air.ue.katowice.pl/pdf/2020a/24_Zywiolek-Szeja.pdf.