

Supplementary File 1

Table 1. Career structures and pathways of ECRs in selected countries.

Country	Career structures and pathways of ECRs
Portugal	ERCs must participate in a competition for entry-level positions through public examinations. Early career researchers typically navigate a phase of temporary or fixed-term contracts—frequently as postdoctoral researchers, junior lecturers or part-time teaching staff—before they can secure permanent appointments. The emphasis is on formal evaluation procedures, with performance measured in research output and teaching, reflecting Musselin’s market model (2009). The career pathway here is highly structured, with clear benchmarks and external review panels acting as gatekeepers.
Croatia	Croatia’s academic system carries the imprint of its Yugoslav past, where bureaucratic processes and centralised controls were the norm. Early career academics in Croatia face significant hurdles, including complex promotion procedures and limited research funding. The early career phase is characterised by temporary positions and a slow, often opaque progression toward permanent roles. This system reflects a more constrained academic market, where competition is fierce and the career pathway is less fluid, necessitating persistent effort to overcome systemic barriers.
Germany	Germany presents a distinctive model with its tradition of the <i>Wissenschaftlicher Mitarbeiter</i> (research associate) and the more recent introduction of the <i>Juniorprofessor</i> track. ECRs in Germany often face a dual challenge: they must accumulate a robust research portfolio while also preparing for additional qualifications, such as the <i>habilitation</i> , which remains an important step in many fields. This system illustrates Finkelstein and Jones’s pathway model (2019), where the early career phase is a well-defined period of probation and skill development, albeit one that has evolved towards more flexible, tenure-track-like arrangements in recent years. However, tenure-track positions remain rare (Vatansever, 2025).
Lithuania	Lithuania’s academic system, transitioning from its Soviet legacy towards integration with the European Higher Education Area, shows a hybrid structure. Early career academics are often employed on fixed-term contracts and must demonstrate their competence through competitive research funding and publication records. Although formalised career steps exist, there is a residual influence of bureaucratic and centrally administered practices. This environment reflects both a market pressure—where research outputs are increasingly important—and a traditional pathway model with rigid criteria for promotion.

Türkiye	The academic career structure involves a series of clearly delineated stages. ECRs typically begin in positions that include a probationary period, where success is measured through both research and teaching performance. The evaluation processes are increasingly aligned with international standards, yet they still retain elements of national accountability and public oversight. Turkish early career academics must navigate a system that demands high performance in a competitive market, where progression is contingent on meeting specific institutional benchmarks as outlined in Finkelstein and Jones's (2019) framework.
Israel	The higher education system in Israel tends to favour a flexible tenure-track model. ECRs typically begin as lecturers or assistant professors, and the pathway to permanent status is punctuated by rigorous yet transparent evaluation criteria. Emphasis is placed on research productivity and international collaboration, reflecting a market-oriented approach. At the same time, clear milestones—such as achieving research grants and publishing in high-impact journals—structure the pathway, aligning well with the framework proposed by Finkelstein and Jones (2019).
Cyprus	Cyprus, with its smaller academic community and historical ties to British educational traditions, offers a slightly different picture. Early career academics often enter the system through temporary positions that serve as stepping stones to permanent posts. The scale of the academic market here is relatively limited, which can reduce some competitive pressures; however, the pathway remains clearly marked by formal evaluations and performance criteria. The dual influence of European market dynamics and localised institutional cultures shapes the early career experience on the island.