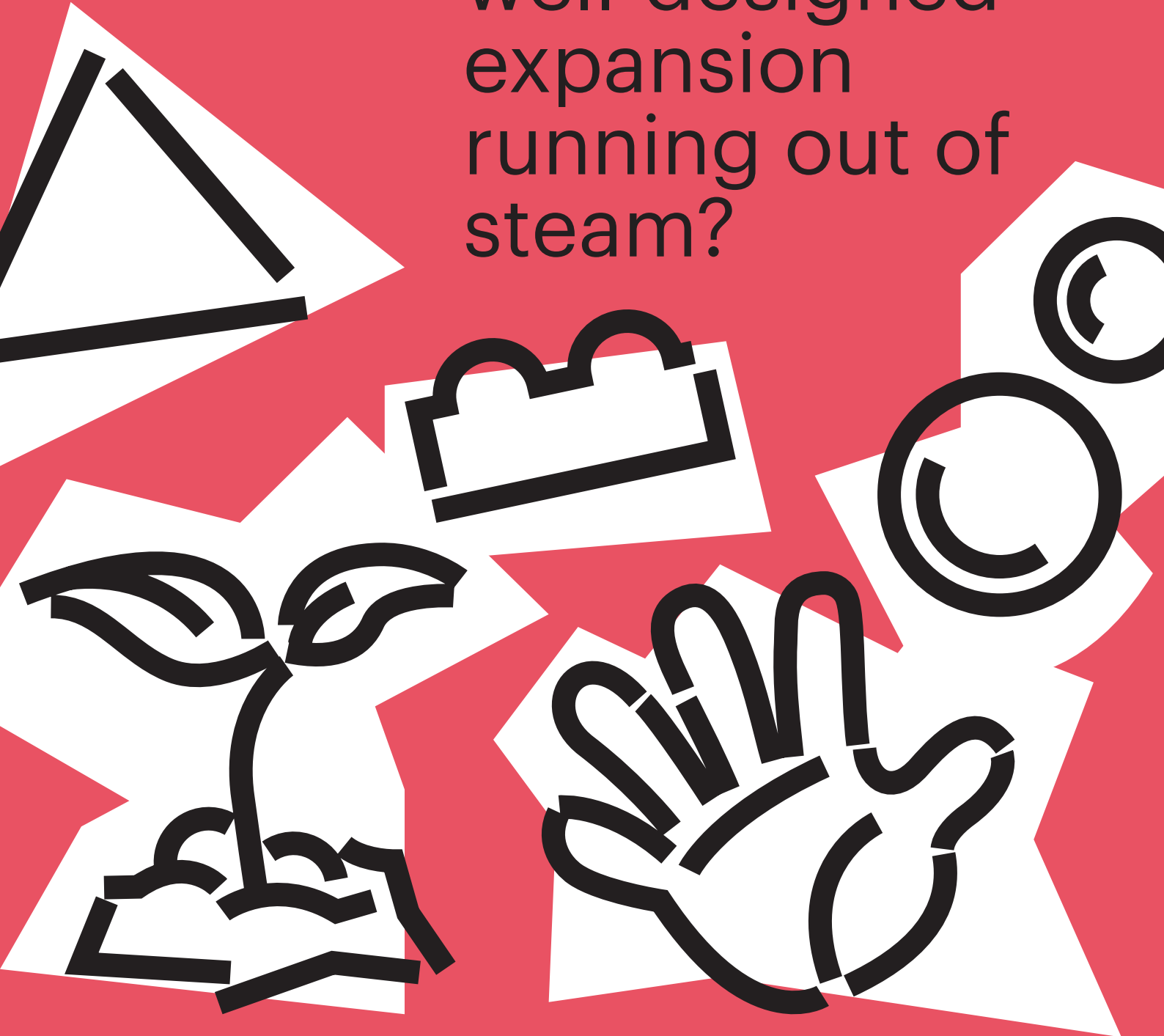


ECEC in **Germany**: the well-designed expansion running out of steam?



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Abstract

This paper examines what an equitable and high-quality early childhood education and care (ECEC) system could look like and the policies that underpin it, using Germany as a case study. Germany is often cited as a success story of the “social investment” strategy, having significantly expanded ECEC since the early 2000s. Once among Europe’s laggards, Germany’s provision now approaches that of some Nordic countries. Yet, demand still exceeds supply in many regions, particularly affecting disadvantaged families. The system also relies heavily on part-time maternal employment, which limits women’s lifetime earnings and constrains gender equality both at home and in the labour market.

Drawing on two decades of reform and stark regional differences in funding, regulation, and service provision, the paper provides a nuanced analysis of Germany’s ECEC landscape and the challenges that persist. Four key policy lessons emerge. First, investment must extend beyond ECEC places to the education and training infrastructure for staff, an often-overlooked area spanning vocational and higher education. Second, significant regional disparities highlight the need for local policy solutions and administrative capacity. As geographic polarisation and demographic shifts grow, public investment in ECEC must be designed to shape equitable opportunities across regions. Third, inequities in access persist even in highly subsidised and universal systems. Barriers such as complex application procedures, hidden fees, discrimination, and non-inclusive services mean targeted interventions are essential to achieve greater equity. Finally, an inclusive ECEC system cannot fully resolve conflicting incentives in the labour market created by taxation, benefits, and employment structures. Achieving broader social objectives may require rethinking normative assumptions about how and by whom young children should be cared for.

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About the paper

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1. Introduction

Early childhood education and care (ECEC) in Germany is provided through a universal and strongly subsidised system, almost exclusively operated by non-profit organisations and, to a lesser extent, directly by municipalities. The service is considered and referred to either as childcare (*Kinderbetreuung*) or early childhood education (*Frühkindliche Bildung*) or both, and indeed the goals of ECEC policy in Germany are generally defined by law as facilitating parental employment and promoting children's development. Notwithstanding the prominence of educational objectives, ECEC services are completely separate from the school system in all respects – from the actual buildings to the occupational classification of ECEC staff, their training and pedagogical approach, including ECEC governance¹. The ECEC system consists of ECEC centres (*Kindertageseinrichtungen*) and of childminders (*Tagespflege*). Childminders however cater for a minority of children only, almost exclusively under three years of age. In 2023, approximately one fourth of children aged one year and attending ECEC were with a childminder; among those aged two, less than one in six was (*Autor:innengruppe Bildungsberichterstattung*, 2024: Tab. C4-4web). Moreover, the number of childminders has been declining since the Covid-19 pandemic, making it unlikely that this type of provision will become of greater significance in the years to come. Thus, with the partial exception of services for children aged one, in Germany ECEC takes the form of centre-based provision catering for children from their first birthday to their school entry, usually the summer after their turning six.

This apparent simplicity in terms of organisation-type is offset by a highly decentralised governance structure, whereby individual states retain the larger responsibility for funding and regulating ECEC services, and municipalities for organising actual provision, which is then delivered by non-profit organisations or, as last resort, directly by municipalities. This governance structure creates substantial geographical variations in the number of places available, admission criteria, fees charged, and quality regulation (Schober, 2020). A further layer of complexity is given by the lasting differences between eastern and western states – a legacy of the divergent family policies pursued in West and East Germany (e.g. Rosenfeld, Trappe & Gornick, 2004). Historically, the level of publicly subsidised early childhood education and care had been low in West Germany under the assumption that mothers would be homemakers, available to take care of children either full-time in the first years of life or in the

¹ This singles out Germany from the other countries case studies, where school-based provision is either common or prevalent for children aged three and above.

afternoon once children turned three or four and entered kindergarten or turned six and entered primary school (Leitner et al., 2008). By contrast, in East Germany a long-standing tradition of full-time working mothers meant that the supply of formal childcare services was much higher and so was their normative acceptance (Leitner et al., 2008).

Against this background, the last twenty-five years have been characterised by a series of federal laws aimed at expanding early childhood education and care services. These have resulted in a system whereby children spend their first year of life with their parents, mostly their mother. At the age of one, children have been entitled since 2013 to an ECEC place, which corresponds to a minimum of 20 hours per week; actual enrolment occurs, in the main, in the subsequent 18 months, depending on local availability of places, parents' preferences and opportunity costs. Places are not necessarily free, but fees do not appear to be the major obstacle to enrolment, as they are waived for a large share of families and often based on income.² In 2023, 38% of children aged one, 66% those aged two and 87% of the three year-olds were enrolled in ECEC. This stands in stark contrast with the situation in 2006, when 12% of one year-olds and 27% of two year-olds were enrolled in ECEC, and the participation rate of three year olds, although much more common, was at 77%. Moreover, the hours spent by children in ECEC has also expanded, with the proportion of children attending for longer than a morning session increasing from 75% in 2006 to 85% in 2019, especially among children aged three and over (*Autorengruppe Bildungsberichterstattung*, 2020).

To better understand the context and the drivers of this substantial policy change, three issues need to be considered. First, maternal employment. Among couples with children, the most common arrangement to share paid and unpaid work is for the father to be full-time in paid work and for the mother to be in paid work part-time, on average for 20 hours a week (Gambaro et al. 2024; OECD 2017). Part-time employment has long been *the* way to reconcile caring responsibilities with paid work in West Germany (e.g. Lewis et al., 2008) but it is also practiced and supported by younger cohorts in the eastern part of the country, albeit mostly when children are very young (Barth et al., 2020; Gambaro et al., 2023).³ The prevalence of the one-and-a-half-earner model is also encouraged by the tax and benefit system. The joint taxation of married couples with full income splitting, combined with free dependents' health insurance,

² For example, in North Rhine-Westphalia, where approximately 22% of children aged zero to five live (*Statistische Ämter des Bundes und der Länder, Deutschland*, 2024: Census Table 1000A-1002), 48% of families in 2021 did not pay fees, according to a large representative survey of parents conducted to monitor the availability, quality and affordability of ECEC in Germany (BMFSFJ, 2022: p. 493).

³ There is also a small but visible group of parents aspiring to, and to a lesser extent practicing, a "dual-carer dual-earner model", whereby both fathers and mothers work long part-time, sharing paid and unpaid work more equally (Gambaro et al., 2024).

makes it generally unattractive for mothers to work additional hours (Gambaro et al. 2024), especially in a context where the (unadjusted) gender pay gap – at 18% – is among the highest across the European Union (Eurostat, 2024).⁴ In sum, the fact that only a minority of parents of young children follow the adult-worker-model has so far lessened the pressure on childcare services, especially for toddlers. But trends in the division of paid work among couples with children point to some change: while fathers still spent 119 per cent more time in employment than mothers in 2012, the gap was 84 per cent in 2022 (BMFSFJ, 2025: pp. 212-213). It remains the case that demand for ECEC places outstrips supply, with the unmet need gap equal to 13 percentage points in 2021 (BMFSFJ, 2024: Figure IV-1-2).

The second important driver of the recent reforms concerns education achievement and education inequalities. Since 2001, Germany's students' mediocre performance in the first and subsequent rounds of PISA (Programme for International Students Assessment), the so-called "PISA-shock", brought the entire education system under scrutiny and spurred a raft of education policy initiatives. One specific concern related to the years preceding school entry and established the notion that the acquisition of early literacy and numeracy skills prior to school can have a positive influence on later educational outcomes. PISA results and also TIMSS (Trends in International Mathematics and Science Study) results for primary school children have been and continue to be crucial in generating greater awareness about the educational disadvantage of children of immigrants, prompting a greater focus on their participation in early education.

The last issue behind the extensive ECEC policy shift in Germany regards population change. Two aspects are especially relevant. The first is low fertility and the corresponding population ageing. Total fertility rate has hovered around 1,3 since the turn of the millennium, albeit peaking to 1,6 in 2016. The second is increasing population diversity. (West) Germany has long been a country of immigration, yet the country has started to acknowledge the presence of immigrants and their descendants only more recently. Although policy debates around ECEC services rarely consider them in relation to the integration of recently arrived migrants, it remains the case these services cater for increasingly diverse cohorts, with one ever fourth child having at least one immigrant parent (Straub et al., 2024). The 2016 and 2022 large inflows of refugees, from Syrian and Afghanistan first, and from Ukraine more recently, have

⁴ In 2011 the contribution of mothers relative to fathers to total earnings (from labour) was 22% in Germany, among the lowest across OECD countries. In Italy, in comparison, it was 25% and in Denmark 42% (OECD 2017: Figure 4.11).

further put the spotlight on the strain or at least the increased demands on services that immigration creates.

Germany's paradigmatic family policy change and the ECEC expansion in particular need also to be understood in relation to the social security system supporting families with children and patterns of informal childcare provision. Germany is one of the few countries that pays a generous universal child benefit (*Kindergeld*). Although technically a tax allowance, it operates as a benefit for most families: it is paid monthly for every child at least until they reach 18 years of age. In 2023 the *Kindergeld* amounted to 250 Euro per month, with no differentiation by parity or age and was received by 17,5 million children or 10,4 million households (*Bundesagentur der Arbeit*, 2024).⁵ This universal benefit is responsible for almost half of poverty reduction among families with children (Bastagli et al. 2020). The centrality of cash transfers as a mean to support families with children is in line with a welfare tradition that has historically invested much more in the benefit system than in service provision. It also partly explains why ECEC in Germany has been rarely considered from an anti-poverty perspective, in contrast to English-speaking countries. However, the European Child Guarantee with its idea that ECEC is a policy tool to reduce poverty may be changing policy perspectives in Germany too.

Lastly, ECEC services need to be understood in relation to the overall “childcare packages” that families use, which include informal childcare. Although it is very common for children in Germany to be cared for informally, this type of childcare is mainly provided by grandparents on a regular but not extensive basis – on average 6 hours per week (Gambaro et al. 2024). Paid informal childcare, such as babysitters or au pair, are not common. Because informal provision was not used to enable maternal employment, the expansion of ECEC has shifted childcare responsibilities from mothers to public services, without altering patterns of informal care.

The rest of the chapter is organised in the following way. Section 2 describes the federal reforms that have been introduced in the last 25 years. The subsequent sections present evidence and discuss ECEC services in relation to access (Section 3), quality (Section 4) and costs (Section 5). The last section concludes with some policy reflections.

⁵ As a reference, approximately 15,3 million people below the age of 20 lived in Germany as per May 2022, according to the Census (Table 1000A-1001, available at <https://ergebnisse.zensus2022.de/datenbank/online/>).

2. Institutional background and federal reforms of ECEC services

Federalism and subsidiarity are the key governance principles underpinning ECEC provision, funding and regulation in Germany. Federalism means that at the federal level (*Bund*), the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth has a “stimulatory competence” only. In practice, it can influence ECEC policy by funding specific initiatives or by introducing individual rights across the entire country. The 16 federal states (*Länder*) are responsible for adapting federal legislation into state-specific laws and for providing the regulatory and financing framework for ECEC provision. Municipalities are responsible for securing the funding and organising actual provision.

Provision itself is guided by the subsidiarity principle, whereby direct provision by the local administration exists only where no other non-governmental organisation is available. Around two thirds of all centre-based provision is run by non-profit organisations (*Frei Träger der Jugendhilfe*)⁶, with for-profit-providers having a negligible role.⁷ Differently from other countries, non-profit providers are clustered into six main providers (*Freie Träger*), with their own institutional structure, so that pedagogical approach, professional development training or quality monitoring is often organised and implemented by each provider. Given this multi-layered and multi-actor governance structure, with distribution of authority across three governance levels and involvement of six non-state actors, reforms of ECEC across the entire country have been difficult to design, fund, implement and monitor. Yet the first decade of the millennium has been distinctively a period of substantial reforms, encompassing not only ECEC services but also parental leave. The overarching policy goal has been to facilitate reconciliation of caring responsibilities and paid employment, effectively trying to encourage mothers to take up (more) paid work. Hereafter I outline the main changes.

⁶ This split has remained fairly constant over time. Moreover, there is hardly any difference between number of centres and number of places provided. So, in 2019, 34 percent of children aged between three and six were in state-provided ECEC-centres, whereas 66% were catered for by non-state providers. Among children under three, the split was 31% and 69%. There was hardly any difference between East and West. However, for historical reasons, the presence of church-affiliated providers is much stronger in the West, where they cater for 44% of children over three and 36% of under three, compared to 14% and 12% in the East (Autorengruppe Bildungsberichterstattung, 2020: Tables C2-6web and C2-7web).

⁷ For this reason, in Germany, the terms “non-state” and “non-profit” providers can be used almost interchangeably, although conceptually they are very distinct. The strongest presence of private providers (that is: non-state and non-not-for-profit) was in West Germany, where in 2019 they catered for 5% of children under three in centre-based provision.

Parental leave: Since 1992 parents in Germany have had a job protection right (*Elternzeit*) of three years.⁸ In 2007 a new parental leave benefit (*Elterngeld*), set at 67% of former job earnings and paid for 12 months, replaced a means-tested flat-rate benefit paid for two years, with the explicit objective of accelerating mothers' return to employment (Huebener et al., 2019).⁹ The parental leave reform was used to also introduce a "partner bonus": the entitlement period is extended from 12 months to 14 if the second parent also takes parental leave for at least two months, analogous to the Swedish "daddy quota". In practice, 12 to 14 months of leave has become the norm, which is also why only very few children under the age of one (1,6% in 2023) are in ECEC. The reform also made it possible to receive parental leave benefits for up to 24 or 28 months, with monthly payments cut in half. A further reform in 2015 (*Elterngeld Plus*) has increased flexibility, so that both parents can work part-time well into the child's second year of life and receive (a reduced) benefit for a longer duration. The reform appears to have hastened the return to employment of a small share of, mainly high-earning, mothers (around 10%), but it remains unclear how their childcare demand has been met, given that fathers do not appear to make use of the leave (Bärtsch & Sandner 2024). In sum, parental leave reforms have had the explicit objective of encouraging couples to share child care duties more evenly and have led a higher share of mothers to anticipate to the child's second year of life their return to paid employment.

ECEC services: The parental leave reform was complemented by the expansion of formal childcare for children aged one and over. In 2005, a federal law (*Tagesbetreuungsbaugesetz – TAG*) stipulated that children under the age of three should have access to formal childcare if parents were in employment, education or training, or actively looking for work (Spieß et al, 2008; Stahl & Schober 2018). For children aged three, who had been entitled to a minimum of half-day ECEC place since 1996, the 2005 reform recommended an extension to full-time places, which were and remain the norm in Eastern German states. A subsequent federal law from 2008 (*Kinderförderungsgesetz – KiföG*) funded a further expansion of services both in terms of places and hours and entitled children to formal childcare after their first birthday starting from August 2013. To contribute to the investment costs, the federal government set up a special fund and reorganised the way income from taxation was divided between federal and state governments. Substantial funding was thus made available to states and municipalities to create new provision and cover its running costs,

⁸ These three years can be used fairly flexibly until the child turns eight years old, with a maximum of 24 months usable between the child's third and eighth birthday.

⁹ The benefit is capped at 1800 Euros per month, and is withheld completely for couples whose joint taxable income is over 250'000 Euros and, in case of lone-parents, when taxable income is over 175'000 (until March 2024 the respective thresholds were 300'000 and 250'000 Euros).

while the universal entitlement to an ECEC place from the age of one created a strong incentive to expand provision (Spieß et al. 2008). ECEC growth has been rapid from 2005 to 2013 and has slowed since. The expansion has also blurred the historical distinction between, on the one hand, centres catering for children from age 0 to three, called *Kinderkrippen* or just *Krippen* which had historically existed only in the East, and, on the other hand, centres for children from age three to six – *Kindergarten*. The latter have increasingly expanded their services to younger children so that already by the end of the first decade of the millennium most ECEC centres were offering child care and education in mainly age-mixed groups (Lindberg et al. 2013).

In 2019 a further federal law was passed, this time centred not only on increasing participation but also on quality (*KiTa-Qualitäts- und -Teilhabeverbesserungsgesetz – KiQuTG*). The law put forward an idea of quality as intrinsically multidimensional and including aspects that are in fact related to access and affordability. In practice it proposed ten different “domains” ranging from availability to recruitment of qualified workers, from improvement of facilities and learning material to stronger support of language development. Each state could choose which domains to concentrate on and spend the funding made available by the federal government accordingly.

All these reforms have been accompanied by improvements in data collection specifically on early education and childcare. Since 2006 a yearly census of all ECEC centres in Germany takes place every March, detailing centre-characteristics, information on each child attending, as well as each person employed.¹⁰ Information on ECEC based on this administrative data and additional sources are regularly included in the biannual national report on education, underlining how early education (*Frühkindliche Bildung*) is also part of the wider education system.¹¹ The 2008 reform included funding to monitor ECEC expansion, and led to the launch of an annual survey specifically on childcare conducted by the German Youth Institute and which currently surveys approximately 33,000 parents of children up to age 10 (hereafter KiBS

¹⁰ Similarly, information on all publicly funding family-based-care (i.e. childminders) is collected every year, including information on the children attending this form of provision.

¹¹ Hereafter the main surveys used to assess ECEC supply. Within the National Education Panel Study, two cohorts of children born in 2006/7 and in 2012 have been followed since they were 4/5 and 9 month old respectively, bringing further insights into how ECEC attendance influence children’s development and educational trajectories. The German Socio-Economic Panel (SOEP) has also been an important source of information on childcare, especially since 2009 with the inception and later integration of the Families in Germany (*Familien in Deutschland, FiD*) study which resulted in an oversampling of families with children. Likewise, AID:A also known as “Growing up in Germany” by the has been extensively used to assess the living conditions of families with children in Germany, including their ECEC usage.

data).¹² Finally, the 2019 reform also envisaged the collection of data on the entire ECEC system, including a survey of providers, local administrators, ECEC centres staff and leaders, parents, and also children. This monitoring system is now in its third round and has produced extremely valuable and detailed information on different aspects of the ECEC system.¹³

In sum, Germany has seen unprecedented changes in its ECEC and has developed a fairly coherent system, whereby parental leave entitlements align with the entitlement to an ECEC place. While the prevalence of part-time maternal employment eases the transition from maternal care to centre-based one, and remains fundamental to meet the care needs that arise when places are neither available nor full-time, the ECEC system currently in place is far more developed than it was at the turn of the millennium. The reforms have also been coherent in creating a data infrastructure through which progress can be monitored. Such database makes it rather straightforward to report on the entire country, while differentiating across states or regions and across different demographic groups.

In what follows, I describe in greater detail the extent to which the German ECEC system ensures availability, quality and affordability. The discussion will refer to the entire country and differentiates geographically or by socio-demographic group when relevant. The examples of two cities, Dortmund, in North Rhine-Westphalia (NRW), and Dresden, in Saxony, will be used to illustrate differences in relation to the costs faced by parents, whereas references to their respective states will be made in relation to access and quality. The choice of a city in NRW and one in Saxony was dictated by the need to have one example from the west and one from the east as they represent two different traditions of ECEC provision in a country with lasting East-West disparities in patterns of usage, especially among younger children. Within the respective part of the country, NRW and Saxony are the most populous states and Dresden and Dortmund are similar in relevant population size, with approximately 33 and 35 thousand children below the age of 6 respectively.¹⁴ It is important to note however that approximately 82% of children in Germany live in West Germany, so that patterns of provision there are relevant to a much larger proportion of families than those in the East.

¹² Originally conceived as an evaluation of the 2008 reform, the KiföG Study has subsequently become the DJI Childcare Study (KiBS), see <https://www.dji.de/en/about-us/projects/projekte/dji-childcare-study-kibs.html>

¹³ See <https://www.dji.de/en/about-us/projects/projekte/an-indicatorbased-monitoring-of-structural-quality-in-the-german-early-childhood-education-and-care-system-erik.html>

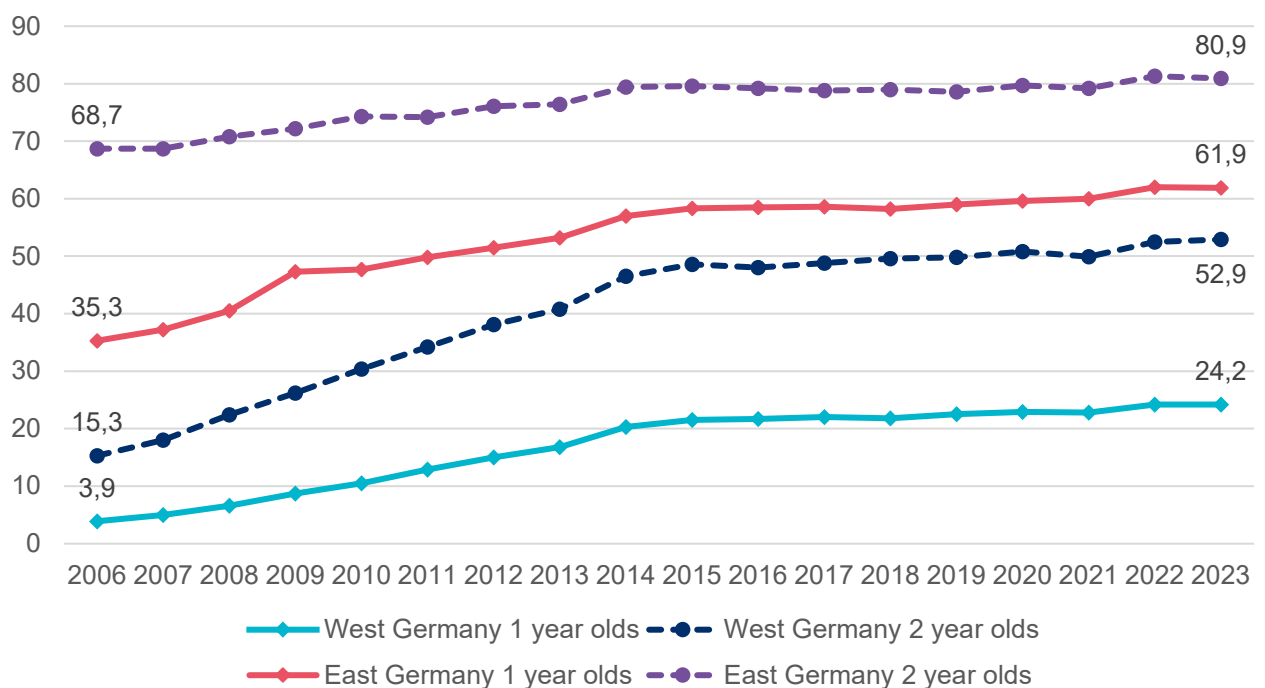
¹⁴ Destatis, 2024 “Ergebnisse des Zensus 2022 – Demografie” available at: https://www.zensus2022.de/DE/Aktuelles/Demografie_VOE.html

3. Availability, access to and use of services

Access and use of ECEC services have increased substantially since 2006. Expansion has been of two kinds: new places for children under the age of three, and more hours for children aged three to six. More recent cohorts enter ECEC at a younger age and spend more time in ECEC than was the case among previous cohorts. I focus first on the increased availability of places for younger children and then examine hours of attendance.

Figure 2 reports enrolment rates of children aged 1 and aged 2 year in West and East Germany, from 2006 to 2023, as measured in March of each year. Four points are clear. First, in eastern states, enrolment rates were and remain much higher than in the western part of the country. Second, there are huge differences in enrolment rates between one- and two-year olds, and these are particularly large in West Germany, where they are almost 30 percentage points. Third, change has been most rapid between 2006 and 2014, whereas growth in enrolment has started to flatten for all groups since August 2013 when the universal entitlement to an ECEC place took effect. Finally, enrolment rates have gone up for all children in both parts of the country, but the increase has been much steeper for two year olds in West Germany and for one year olds in East Germany.

Figure 1. Enrolment Rates of 1- and 2-year olds, over time and by East and West



Source: Autor: *innengruppe Bildungsberichterstattung*, 2024: Tab. C4-4.

Note: Figure created by the author based on data from the above-cited source.

Enrolment rates reflect both supply and demand and make it hard to ascertain whether the increased availability has met demand. Unlike administrative data, the annual representative survey on child care (KiBS) allows assessing parents’ needs irrespective of whether their child is enrolled. After asking parents about the reasons why their child is not enrolled either in an ECEC centre or with a childminder, they survey asks «Based only on your needs, would you currently like to have a place in an ECEC centre or with a childminder, irrespective of whether your child is currently cared for? », with three answers included: (i) «Yes, I would like to have a place for my child, but currently do not have a place»; (ii) «Yes, I would like to have a place for my child and currently use one»; (iii) «No, I would not like to have a place».¹⁵ In 2023, demand for an ECEC place for children under three outstripped supply by 16 percentage points in West Germany, and by 9 percentage points in East Germany (Autor:innengruppe Bildungsberichterstattung, 2024: Tab. C4-2).¹⁶ It seems thus that demand has grown together with supply, possibly because the greater availability of services has broadened their normative acceptance (Zoch and Schober, 2018).

Table 1. ECEC Attendance rates by age, parental education and migration background

	Parental Education				Migrant background			
	1-year-olds		2-year-olds		1-year-olds		2-year-olds	
	At least one parent with HE degree	No parent with HE degree	At least one parent with HE degree	No parent with HE degree	Mainly German spoken at home	Not only German spoken	Mainly German spoken at home	Not only German spoken
Attendance Rate	43	28	73	51	39	20	66	40
Unmet Need	24	28	12	22	25	40	14	38

Source: Hübener et al., 2023: Figure 2 and Figure 3, based on KiBS data 2018-2022.
 Note: Table created by the author based on data from the above-cited source.

Enrolment rates of children vary by family background (for example: Ghirardi et al. 2023). The size of the gap is generally larger among younger children but the actual size depends on

¹⁵ See also Supplementary Material A1 in Jessen et al. 2020, and their analysis of how reasons for not using a place are associated with reporting an unmet need.
¹⁶ The unmet demand is calculated taking into account attendance at childminding services.

individual and family background, as a comprehensive report by Hübener et al. (2023) has recently shown using KiBS data from 2018 to 2020. Here I discuss parental education and migrant background (Table 1). When looking at parental education, among 1 year olds who did not have a parent with a high education degree 28 percent attended an ECEC centre, compared to 43 percent of their peers with a parent holding a degree (Hübener et al., 2023: Figure 2). This difference of 15 percentage points narrowed only slightly among 2 year olds, who had enrolment rates of 73 percent and of 51 percent respectively. Interestingly, the difference by parental education in unmet need was much higher among parents of two year olds than among those with a child aged one.¹⁷ Whereas only 12 percent of parents with a higher education degree reported that they would have liked a place in an ECEC centre and did not have one¹⁸, the percentage rose to 22 percent among those without a higher education degree. Among children aged one, the percentage of parents with or without a higher education degree who reported an unmet ECEC need were 24 and 28 percent respectively (Hübener et al., 2023: Figure 3).

The gaps in enrolment rates appear to be persistent: they emerged in the early years of ECEC expansion when take-up was more rapid among more highly educated mothers and when employment was an important criterion for access (Stahl & Schober 2018) and have remained rather constant since the universal entitlement was introduced in summer 2013 (Gambaro et al. 2023). In practice, this means that children of more educated mothers are enrolled during their second year of life, whereas those of less educated mothers during their third or fourth. Analyses of NEPS data point to the role of opportunity costs: return to employment is more attractive for more qualified mothers than for those with lower qualifications whose potential earnings are likely to be lower, whereas considerations about the direct monetary costs of ECEC are unimportant (Steinberg & Kleinert, 2022).

ECEC attendance is also stratified by immigrant background, with gaps that tend to be wide, enduring and not necessarily confined to younger age groups. Hübener et al (2023), again using KiBS data, group children on the basis of whether German is the main language spoken at home. In 2018-2020, among 1 year olds, 39 percent of those who spoke German at home were enrolled, whereas only 20 percent of those who did not speak German were. Among two year-olds, attendance rates were 66 percent and 40 percent respectively. Unmet need was not only higher among families with a migrant background, but did not abate as children turned 2.

¹⁷ Unmet need is based on the KiBS questions reported earlier.

¹⁸ The authors consider only those parents who have applied for a place in at least one centre.

Thus, immigrant families appear to be especially at risk of not accessing ECEC places. There are a few studies that help understand the factors at play. First, additional places appear to do little to dent the enrolment gaps, most likely because other families benefit from them before migrant families are successful in accessing (Jessen, Schmitz & Waights, 2020). Indeed, there is evidence that migrant families struggle to navigate the admission system (Hermes et al. 2025), which works differently in each municipality. Second, migrant families encounter discrimination, whereby their application for a place is less likely to receive a positive answer than those by a native family; and positive answers are generally less encouraging (Hermes et al. 2024). Tackling the administrative burden and recommending providers to be more inclusive appear to be key necessary measures but widely overlooked at federal level.

As already mentioned, maternal part-time employment has historically been and continues to be the main way families in Germany (and in West Germany in particular) reconcile the need to care and to provide for children. Among mothers of children aged one or two, approximately one in ten was employed for more than 36 hours a week in 2018 (BMFSFJ, 2020). Yet the expansion of ECEC services since 2005 has resulted in more children aged three and over to spend the full day in an ECEC centre. Whereas in 2006 in West Germany only 18 percent of children older than three were in ECEC for more than 7 hours a day, by 2023 46 percent were (*Autor:innengruppe Bildungsberichterstattung, 2024: Table C4-7web*). Differences in hours of attendance by age are almost non-existent, but there are large geographical disparities, as reported in Table 2. These, however, are official contractual hours, which indicate how long children can stay in a centre and are linked to funding (more on this point later). Actual hours of attendance tend to be lower, especially for younger children. Generally, children in West Germany tend to be enrolled for 5 to 7 hours per day, whereas in East Germany the majority of children are enrolled for more than 8 hours per day. In North Rhine Westphalia children were split almost equally between enrolment for less than 7 hours per day on the one hand, and more on the other. In Saxony, by contrast, slightly more than 80 per cent of children were enrolled for 8 hours per day.

ECEC centres opening hours allow full-time attendance, with centres opened, on average, for 9 hours in West Germany and for 11 hours in East Germany.¹⁹ Unsurprisingly, opening hours are mentioned only rarely as a reason why parents do not use ECEC (*Autor:innengruppe Bildungsberichterstattung, 2024: Tab. C4-6web*). Because ECEC centres are not part of the school system, they do not close during the school holidays. In 2023 the average ECEC centre

¹⁹ Hamburg is an exception, as ECEC centres are opened on average 11 hours a day.

was closed for four weeks, including unplanned closures. In comparison to schools, which are open 38 weeks per year, ECEC centres offer a much more continuous service.

Table 2. Hours of ECEC enrolment, by age and federal region/state, 2023

	Children attending ECEC ¹	Of whom, with contractual enrolment hours ...			
		...up to 25 per week	between 25 and 35 per week	between 35 and 45 per week	more than 45 hours per week
	Total number	in %			
Children aged below 3 year					
Germany	856584	12.7	34.8	40.8	11.7
West	639448	16.3	39.3	36.3	8.2
East	217136	2.2	21.6	53.9	22.2
North Rhine Westphalia	161026	8.9	41.9	48.4	0.8
Saxony	53288	2.9	11.8	81.1	4.2
Children aged three and above (up to school entry)					
Deutschland	2690925	8.1	39.5	41.5	10.8
Westdeutschland	2173545	9.7	44.1	38.4	7.8
Ostdeutschland	517380	1.4	20.4	54.4	23.7
North Rhine Westphalia	559201	3.9	40.4	55.4	0.2
Saxony	133948	2.0	10.2	82.3	5.5

1) Includes childminders.

Source: Tab. C4-7web in Autor:innengruppe Bildungsberichterstattung, 2024, based on 2023 data from the Statistical Offices of the Federation and the Länder, “Child and youth welfare statistics”. Note: Table created by the author based on the above-mentioned source.

Overall, ECEC provision has expanded significantly in the last twenty years, albeit growth has stalled in the last decade so that disparities in attendance rates between children of different backgrounds persist. Disparities emerge along different dimensions. One is age: as almost in all other European countries, children under the age of three are less likely to attend ECEC than their older peers. Another is geography: the East/West divide is still amply visible, with children living in Eastern states entering ECEC Eastern states in their second year of life whereas their peers in the West do so one year later. Also patterns of attendance vary by geography – part-time attendance tends to be the exception in the East whereas is common in West Germany. But attendance is also stratified within places and across ages. Children from families with fewer resources, whether educational qualifications or familiarity with the majority language, are less likely to attend ECEC than their peers. A number of factors appear to be at play, including weak financial and normative incentives towards (full-time) employment

for mothers and practical barriers to access, such as overly complex and fragmented application processes as well as discrimination towards immigrants.²⁰

4. Quality

ECEC services are conceived, in the law and more generally, as providing “upbringing, education and care” (*Erziehung, Bildung und Betreuung*) in order to (i). foster children’s development so that they become independent and responsible member of society; (ii). to support and the extent the education and upbringing in the family; iii. to help the parents to combine employment with child-raising and child-caring responsibilities (my translation, from the *Kinder- und Jugendhilfe Gesetz – KJHG*, §22, at 2 and 3). Unlike scholarly discourses on ECEC quality, or public debates on day care centre quality in other countries, in Germany quality is generally understood with reference to the broad aims of these services. Because quality is about supporting child development in the most general terms as well as facilitating reconciliation, it is not discussed as a separate policy objective; instead quality comprises issues related to access and affordability too. A good illustration of this different perspective on quality is given by the 2019 federal initiative – so-called “Good ECEC-centre law” (*Gute Kita Gesetz*) – which provided 5,5 billion for three years to improve quality. The starting point was that because quality has many dimensions, policy tools need to be wide-ranging, so the law proposed the following 10 domains of intervention²¹:

1. Provision that matches needs
2. Good children to staff ratios
3. Recruitment and retention of qualified staff
4. Strong ECEC centres leaders
5. Child-friendly spaces
6. Healthy growth
7. Language development
8. Strong childminding
9. Stakeholders networks for more quality
10. Diversity and inclusion in pedagogical work
11. and additionally, as stand-alone eleventh domain:

²⁰ Financial incentives differ between couple households and single parent ones. For the former group, second-earners taxation discourages full-time employment. For lone mothers, who are at the centre of the last Family Report, the tax and benefit system interact in a perverse way discouraging additional hours in paid work (BMFSFJ 2025).

²¹ See <https://www.bmfsfj.de/resource/blob/141660/06d3127cd5f80e5b9fde1772db180ab2/gute-kita-gesetz-fruehe-bildung-gemeinsam-weiterentwickeln-data.pdf>

12. Reduced fees.

As mentioned earlier, each state was free to choose the domains on which to spend the federal funds. One state, for example, decided to focus exclusively on affordability, using all the available funds to abolish any remaining fee and making ECEC provision free²². Funding has been renewed in two subsequent rounds stretching till the end of 2026. In the second round, the domains of intervention have been ranked into two tiers, with states allowed to spend federal money in the lower tier domains only once 50% of funds were dedicated to the upper tier domains, which included: provision that matches needs, good child to staff ratios, recruitment and retention of qualified staff, strong ECEC-centres leaders, healthy growth, language development, and strong childminding. In the most recent iteration of the law, passed in October 2024, the Länder have been allowed to spend federal fund on those same upper tier domains only, and in fact required to spend in any case in the domains of recruitment and retention of qualified staff and of language development. The narrowing of the domains reflects the attempt by the federal government to gain more steering power relative to the 16 states and should not be read as an evolution of what quality is about. In policy terms quality remains an all-encompassing concept, whose legal translation has been adapted to the existing governance structure.

Within practice, the notion that learning, care and upbringing are inseparable activities has been the guiding principle of work with children. Likewise, the prevailing quality orientation is based on holistic approaches, which emphasise interactional and situational aspects of the work with children, rather than the “pre-primary” approach that prevails in France and many Southern European countries (Tazouti et al. 2011).²³ The theme of school-readiness has gained visibility only since the late 1990s and in response to the “PISA-shock” in particular, but it remains interpreted in its broadest sense, so that the physical, social, emotional and cognitive competences are all considered fundamental not only in preparation to school entry but for children’s development. Thus, both in policy and practice, quality remains a multidimensional and generic construct (Urban et al. 2012).

²² Mecklenburg–Western Pomerania, where approximately 1,6% of the children under 5 year of age residing in Germany lived, according to the 2022 Census; see <https://ergebnisse.zensus2022.de/datenbank/online/statistic/1000A/table/1000A-1004>.

²³ The prevailing pedagogical approach in ECEC centres in Germany has historically been the “situation approach” (*Situationsansatz*), which emphasises how learning arise from the spontaneous interaction between child and the environment. The approach makes more used of child-led, play-based activities than structured and teaching situations.

Absent from this tradition is a notion of quality based on children's screening and assessment, which is much more common in the English-speaking countries. In the year preceding school entry, children in Germany do undergo a medical visit by local authorities' general paediatricians who assess whether the five or six years old is ready for school (*Einschulungsuntersuchung*). They check children's health, including hearing and sight tests, language development, fine- and gross-motoric skills. The visit records whether the child attends an ECEC centre, yet is completely separate from the ECEC system and sits instead in the tradition of a series of standard developmental checks that children undergo from birth till adolescence with their own paediatrician. However, what is currently debated is whether ECEC centres should carry out a language and development assessment of all four year-olds, and the emphasis on language is important as it partly reflects the goal of assimilating children of immigrants. Some analysts fear that such measure would herald a turn towards a more instrumental – managerial and technical – approach to young children and ECEC services, with an emphasis on governing children to achieve predetermined and measurable outcomes. It remains unclear whether the incoming government (as per spring 2025) will fund such measure, how the *Länder* will implement it, and what financial support, if any, will be attached to or follow from such assessment.

For the rest of the section, I concentrate on two aspects of quality: first, structural conditions, including staff to children ratios, workers' qualification and employment conditions, and space requirements; second, system of evaluation and monitoring. The first – structural conditions – can be thought of as the inputs of the service; evaluation and monitoring, on the other hand, concern the outputs and outcomes of the service.

4.1 Staff qualifications and training, ratios, and working conditions

The main route to become an ECEC practitioner consists in a three year full-time training in a vocational school, the successful completion of which leads to the job title of educator (*Erzieher/in*), which allows to work in an ECEC-centre as well as in afternoon-programmes in schools or within social care. Access to training is possible after completing secondary technical school (in NRW generally called *Mittlerer Schulabschluss*; in Saxony, *Realschulabschluss*), which is usually done at age 16, and after completing a shorter vocational training in a related occupation, such as childcare assistant (*Kinderpfleger/in*). The exact pathways and training length vary slightly across national states²⁴, but overall the training

²⁴ The state of Bayern is however an outlier, as childcare assistants have had a slightly longer training and have traditionally been a much larger group than elsewhere.

as educator is an occupation-specific and fully qualifying training, leading to a nationally recognised certificate. In 2022 80% of ECEC staff held this type of vocational qualification (*Autorengruppe Fachkräftebarometer* 2023), with an additional 7% still pursuing vocational training. As such, ECEC is very similar to other intermediate-level white-collar, mainly female-dominated occupations in sectors such as health, social work, or media, access to which occurs through qualifying school-based vocational education programmes (Solga, et al. 2012). Besides this well-established vocational training route, universities of applied sciences offer a Bachelor qualification in early childhood education (0–6) or childhood education (0–12). These degree courses have opened up mostly since the early 2000s as a result of the Bologna process, but their number has remained stable in the second decade of the millennium (*Autorengruppe Fachkräftebarometer*, 2023: Figure 7.10). In 2023 only 6% of ECEC staff held one of these degrees or one in social work or educational studies, a percentage that has been fairly stable over time. Among the reasons why academic qualifications have not expanded within the ECEC sector is the decision to place the bachelor degree on the same level as the traditional vocational qualification within the National/European Qualifications Framework, and the fact that degrees are not recognised in the prevailing pay scales negotiated by trade unions (Oberheumer 2014). Finally, there is a small proportion (5%) of staff who hold relevant academic or vocational qualifications in related fields, mostly within the broad subject areas of medicine and psychology.

Overall then the qualification profile of ECEC staff is fairly homogenous and well-rooted in the traditional German occupational training system. Yet, within this institutional arrangement, it is difficult to quickly expand provision: any increase in ECEC places requires some scaling up of the training system, namely public-funded school-based vocational education programmes (Morgan 2005). To accelerate the training pathway, recent initiatives have promoted a system of training whereby school-based programmes are complemented by ECEC-centre-based training (Praxisintegrierte Ausbildung or PiA).²⁵ This arrangement has several advantages: it is less demanding in terms of teaching workforce in vocational schools; it increases labour supply within the ECEC system through apprentices; makes the occupation more attractive as apprentices, unlike students in vocational schools, are paid while in training (Ref). The initiative, despite being considered successful, remains marginal with only 10% of those training to become an educator in the school-year 2021/22 following this pathway. Discussions about the training and qualifications of ECEC educators are currently dominated by the problem of staff shortages. The question of higher education training for ECEC education,

²⁵ In fact, this model originated in 2012 in Baden-Württemberg but has recently expanded to other states, although its adoption remains uneven and therefore geographically concentrated.

while never influential, is now absolutely off the table; instead, the main issues revolve around ways to create a wider and more flexible range of training pathways without weakening the current system.

Unlike initial training pathways and requirements, regulation of continuous professional development and training is highly varied across German federal states. In NRW ECEC employees are entitled to five days of training leave per year; in Saxony there is no statutory right to training leave. In 2022, 67% of pedagogical staff in NRW reported to have attended at least one training course in the preceding twelve months, in Saxony the share was lower, at 62%, which is also lower than the overall percentage (66%) across the whole country (BMFSFJ 2024: Figure IV-3-4). The most common training attended concerned child protection, children's socio-emotional development, and media, with demand about these themes increasing during the pandemic. Participation in further training is overall common, but nonetheless in slight decline, and staff shortages are often reported as the main obstacle to participation (BMFSFJ 2024).

Staff to children ratios are regulated by each federal state, making the actual practice very different from one place to the other. So, for example, in NRW the prevailing staff to children ratio for children under three is 1 to 3.7, whereas in Saxony it is 1 to 5.5. For the 3 to 6 age group, differences are also noticeable: 1 to 7.6 in NRW and 1 to 10.8 in Saxony. More generally, eastern states have more unfavourable ratios than western ones. Nevertheless, staff to children ratios in Germany remain much lower to those in countries with school-based provision for children aged three and over, where one teacher for approximately 25 children is the norm.

Staff to children ratios are central to ECEC services in many respects. First of all, they are a marker of quality, because which pedagogical approach can be applied depends on the number of children per educator. In groups with children aged between one and two, a ratio of one to five results in fewer language interactions and lower individualised support than in groups with one educator in charge of three toddlers. Second, staff to children ratios affect working conditions, as more favourable ratios make it more feasible to cope when colleagues are on sick or annual leave. On the other hand, staff shortages are felt more acutely in the Western part of the country, precisely because services are required to be staffed much more favourably.

The problem of staff shortages therefore is more acute in some parts of the country than in others and should not be addressed at national level. It is indeed, in the main, a demographic problem, which plays out differently depending on local demographic factors, such as birth

rates, age profile of current workforce, internal and international migration flows, and commuting patterns. So, in eastern states, including Berlin, birth rates have been going down, so that there are more ECEC places than children. Yet the age profile of the workforce is also slightly older in eastern states, with a third of staff above fifty and slightly less than a fifth younger than thirty. At the same time, there has been a movement out of large cities, as housing costs in large cities have increased dramatically (Stawarz et al. 2021), so that young families have increasingly opted for less densely populated areas, where the supply of ECEC places is often less developed, with potential repercussions also in terms of equity, if lower income families increasingly opt to live in areas with less infrastructure for children.

Notwithstanding this geographically highly variable context, how acute is the problem of staff shortages? Estimates vary depending on how many places and what kind of places are desired. The starting point is the following: in 2023, in centre-based provision, there were approximately 700 thousand pedagogical staff for 3,4 million children, which is roughly equivalent to one educator for every five children (*Autor:innengruppe Bildungsberichterstattung*, 2024: Tables C4-1web and C3-1web). Recruitment into the profession between 2013 and 2023 has hovered around a yearly growth rate of 4% (*Autor:innengruppe Bildungsberichterstattung*, 2024: Figure C3-1). The 2023 biannual report on staff in ECEC reports an annual average of almost 15,000 reported vacancies in the sector, with around 2% of vacant positions going unfilled. The German Youth Institute has also taken other policy factors into account. Specifically, the universal entitlement to an after-school place, which will come into force with the 2026/27 school year (*Ganztagsförderungsgesetz – GaFöG*), will intensify staff shortages, as afternoon services operating from lunchtime onwards are to be staffed by educators, the same occupational category that works in ECEC centres.²⁶ It is estimated that roughly 33,000 educators will thus be in demand to care for primary school children (Warning 2020). Detailed analysis of administrative data from 2013 to 2018 on vacancies in ECEC and after-school services point to increasing difficulties in filling in positions, mostly due to lack of applicants (Warning 2020). Similar problems emerge from the latest report on the *Gute Kita Gesetz*, according to which in two thirds of ECEC centres there had been a job quit, mostly for another job within the ECEC sector; furthermore, one third of centres heads reported it had taken them more than six months to fill any vacancy (BMFSFJ, 2024). In sum, staff-shortages are already noticeable. Moreover, the Bertelsmann Foundation has calculated that to achieve everywhere a staff to children ratio of 1 to 4 for children under

²⁶ In German primary school lessons generally do not take place in the afternoon, so that teachers' contact hours are concentrated in the morning. In Western states, the majority of children returns home at lunch time as all-day schooling have started expanding in the second decade of the millennium.

three and 1 to 10 for children aged three and above, 100,000 more educators would be needed (Bock-Famulla et al. 2020). By the same token, if more places are to be created so that supply meets demand, more staff will be needed. The Organisation for Economic Co-operation and Development (OECD) in a 2019 report on staff recruitment put forward the suggestion that Germany would have needed as many as 372'000 more staff by 2025 (OECD 2019), something which has clearly not materialised.²⁷ What remains clear however is that any further improvement, either in terms of number of places available or of their quality, hinges on recruiting more staff, which leads to the issue of how attractive jobs in ECEC are.

When examining pay and working conditions, some comparisons with other occupations are helpful. ECEC staff earn considerably less than primary school teachers: in 2023 among those working full-time, the median monthly gross pay was 3'749 € compared to 4'694 € of a primary teacher. As further references, the median monthly gross pay of specialised metal worker, whose entry training is of the same length of that of an ECEC educator, was 3'993 €, whereas the median pay across all occupations was 3.796 €. ²⁸ Clearly ECEC workers do not belong to the 15% of the workers who are on low pay, defined as earning less than a 2/3 of the median worker.²⁹ Yet actual monthly earnings among ECEC staff are much lower, as 60% work less than 38,5 hours. This reflects not only the fact that 92% of workers are women, but there is also indication that working part-time is a coping strategy to occupational stress and job strain. Studies on working conditions in the ECEC sector repeatedly found that staff are satisfied with their job, but nonetheless feel their work is undervalued both financially and in general (Gambaro et al. 2021). This feeling of undervaluation can be perhaps better understood in light of the increasing professional demands places on ECEC educators, partly driven by immigration and language barriers, inclusion efforts, and generally a much greater heterogeneity of children, coupled with growing expectations that ECEC centre prepare children for school (*Autorengruppe Fachkräftebarometer*, 2023).

Besides staff, the other important input of ECEC services concerns space and equipment. In 2022 the average ECEC centre in Germany afforded each child a space of 7 m² indoors and 17 m² outdoors, with generally more spacious centres in eastern states especially in relation

²⁷ Interestingly the report was funded by the German Ministry of Family Affairs (BMFSFJ), which is indicative of the prominence of the topic for policy makers in Germany.

²⁸ See Arbeitsmarktmonitor, Bundesagentur für Arbeit:

<https://web.arbeitsagentur.de/entgeltatlas/>

<https://arbeitsmarktmonitor.arbeitsagentur.de/faktencheck/regionalstruktur/tabelle/515/2023/durchschnittslohn/?r=>

²⁹ The percentage of workers on low pay is calculated with reference to the median monthly gross pay in East and West respectively, see Arbeitsmarktmonitor, Bundesagentur für Arbeit:

<https://arbeitsmarktmonitor.arbeitsagentur.de/faktencheck/regionalstruktur/tabelle/515/2023/geringverdiener/?r=>

to outdoor space (BMFSFJ 2024: p. 156). In 2022 staff reported general satisfaction with rooms and equipment. There were two exceptions. First, sleep rooms were on average considered less suitable than other rooms, highlighting the challenges of ensuring a quiet and large enough environment for toddlers to nap in the afternoon. Second, staff rooms were also rated less positively. This goes together with the low rating afforded to adult-size furniture, which is however fundamental to minimise physical strain. Staff also reported discontent with noise protection – this is noticeable given the much higher incidence of hearing problems among ECEC staff relative to the general population (Fredriksson et al. 2019) and the lack of regulation to ensure soundproofing (BMFSFJ 2024: p. 156).

Overall, the factors that contribute to structural quality in Germany are the following. First, a solid system of vocational training, which – despite regional differences – is recognised and reflected in pay scales. This system is based on a well-developed, mostly public, system of vocational schools. Attempts to accelerate the training have, so far, been rather small-scale and have not diluted its quality; they have helped forge a closer link between vocational schools and ECEC centres. Second, Germany has, in comparison to other countries, fairly favourable staff to children ratios. The only exceptions are ECEC centres catering for one- and two-year-olds in eastern states, which operate with a 1 to 5 ratio. Yet all eastern federal states – with the exception of Mecklenburg–Western Pomerania – have decided to invest the federal funds of the *Gute-Kita-Gesetz* to achieve “Good children to staff ratios”, and improvements have been, albeit small, noticeable. Third, ECEC centres are generally spacious, purpose-built buildings with access to outdoor space. This fits with a pedagogical approach which does not entail teacher-led structured learning or prescribed whole-class activities, as it is instead the case in school-based settings. In the remaining part of the section, I will move to describe in greater detail the outputs of these structural factors.

4.2 System of evaluation and monitoring

The German ECEC system is undoubtedly tilted in favour of ensuring inputs rather than evaluating outputs or outcomes. The – rather conspicuous – monitoring in place is centred on structural measures or indicators designed to capture aspects of provision that are subject to legislative reform. And the reporting on the basis of these indicators is ample, with regular official reports on ECEC. By contrast, systems of evaluation whereby the actual practice is observed and rated are non-existent and absent from the institutional reporting. The only exception is the state of Berlin, where, since 2010, each ECEC centre is required to undergo an external evaluation every five years. Depending on the size of the centre, one or more evaluators spend a few days in the centre, observing the pedagogical practice, and

interviewing staff, centre-head and parents. The system creates an opportunity for ECEC staff to reflect on the work done. But the resulting assessment is not public and, as a result, cannot be used for monitoring or evaluation purposes by local administrators or parents. Moreover, there are only a handful of accredited organisations that can carry out the evaluations: not only are they paid on the basis of the number of evaluations they do, but they are chosen by the ECEC centre. This could create an incentive for evaluators to be nice to the evaluated centre, in order to be chosen again at the subsequent round. In short, there is very little in terms of public and institutional system of evaluation based on direct observation.

This institutional state of things has been partly compensated by a series of research projects that have explicitly examined the quality of interactions taking place in ECEC centres and their associations with later developmental outcomes. A prominent strand of (international) research of this kind has originated in the University of Bamberg, albeit it is not exclusively confined to it.³⁰ These studies underline two findings in particular. First, both overall and subject-specific process quality tends to be mediocre. When using rating scales derived from the Early Childhood Environment Ratings Scales (ECERS) adapted to the German context or to the specific domains of emerging literacy and numeracy, findings underscore how children's skills and abilities are promoted only moderately (Anders et al. 2012; Kuger et al. 2013; Tietze et al. 1998). Second, there is no strong selection along socio-economic lines into higher or lower quality ECEC centres (Stahl et al. 2018). The factor that appears to be most strongly correlated with family background is intake composition, which is in partly related to residential patterns and in part with the tendency to choose ECEC centres also on the basis of personal social networks.

In sum, ECEC quality in Germany is defined in relation to the multiple goals that these services have: to foster children's development in its broadest sense; to support parents in their role to bring children up; to help parents reconcile caring and earning responsibilities. Checking whether ECEC services fulfil these goals is the task of a fairly extensive monitoring system based on administrative data. The extent to which process quality can be inferred through structural indicators remains an important question. There is some indication that provision is

³⁰ Two large research projects and related datasets underpin this strand of research. First, the BiKS (BiKS: *Bildungsprozesse, Kompetenzentwicklung und Selektionsentscheidungen im Vorschul- und Schulalter*), which for its pre-school strand, collected longitudinal data from approximately 550 families with children attending 100 ECEC centres in the states of Bayern and Hessen starting from Autumn 2005. Second, the NEPS (National Educational Panel Study), a multi-cohort longitudinal study (see Lindberg et al. 2013). In relation to ECEC two cohorts have been used: the *Kindergarten* cohort, which started in 2010 and included 3,000 children aged around four year and their parents; and the Newborns cohort, which started in 2012 and included 3,400 seven-month-old infants and their parents.

sensitive and stimulating when the underlying structural conditions are rated as good, and yet we know less about the combination of different factors and the heterogeneity of these associations depending on centres' intakes. What is clear is that interest in process quality and its effects on children's and families' outcomes remains confined to academic research. Current policy debates on quality are grappling with the problem of staff shortages, although the discourse is neither sufficiently nuanced to differentiate across geographical regions with different demographic dynamics nor sufficiently ample to include the theme of vocational colleges, their funding and their geographical distribution.

5. Cost and financing

This section distinguished between costs for parents using the service and costs for the state – what I refer to financing or funding. A recent representative survey of non-state providers (Frei Träger der Jugendhilfe) conducted by the Office of National Statistics (Brackmann et al. 2024) shows that a place for children under three costed 18600 Euros per year, whereas one for children aged over three costed 10'900. Given that personnel make up 80% of total costs and given the differences in staff to child ratios between East and West, the national average hides stark geographical disparities, as reported in Table 3. In 2022, public funding covered approximately 80% of the cost, for both children under 3 and children over 3, with parents contributing a further 15%³¹, and remaining costs covered by providers themselves.³²

Table 3. Costs of ECEC places and funding sources, 2022 (euros / year)

	Whole country	West	East	City States
Children under three	18 600	19 800	14 200	19 900
<i>Of which, % funded by:</i>				
Municipalities	44	47	65	
Bundesland	32	31	-	
Other public	2	2	-	
Parents	-	14	15	
Children over three	10 900	11 300	8 400	12 000
<i>Of which, % funded by:</i>				
Municipalities	46	48	65	
Bundesland	31	30	-	
Other public	2	2	-	
Parents	-	15	15	

³¹ In fact, other agencies estimated parental contribution at 10% (Eurostat 2024; Bertelsmann Stiftung 2025).

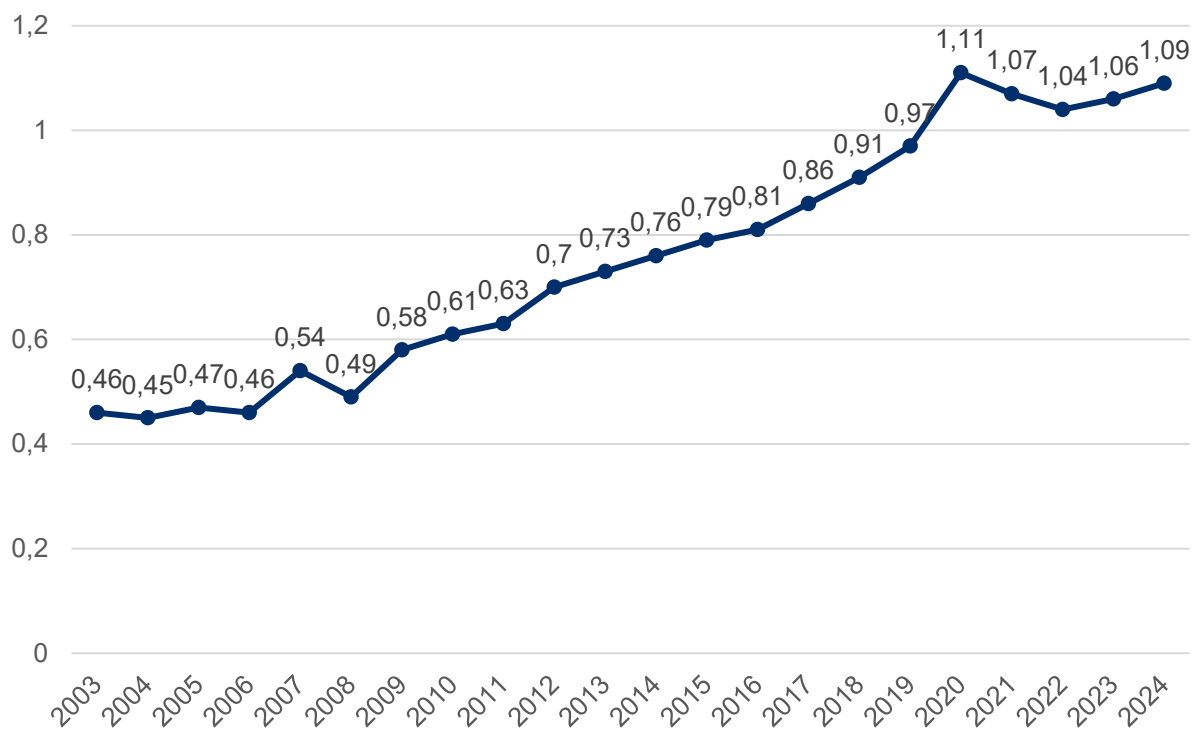
³² The financial contribution of providers is more difficult to trace, and they are also likely to vary by type of provider. Catholic and Protestant church-affiliated providers tend to contribute slightly more than other type of providers, partly because those two Christian churches benefit from taxpayers' money, in that church members are liable to mandatory "church tax" levied with their income taxation.

Source: author's elaboration based on Table 6 and Table 7 in Brackmann et al. 2024; the data were obtained through a bespoke representative survey of non-state providers conducted by Destatis in 2022 and described in Brackmann et al. 2024.

Notes: Costs are the ones reported by non-state providers. City states include: Bremen, Hamburg and Berlin.

I start from funding, because it gives the context in which parents' expenditures can be understood. Figure 2 reports expenditures in ECEC as a share of GDP, which have grown from being less than half percentage point to slightly above 1 percent of GDP.

Figure 2. Public expenditure on early childhood education and care as % of Gross Domestic Product

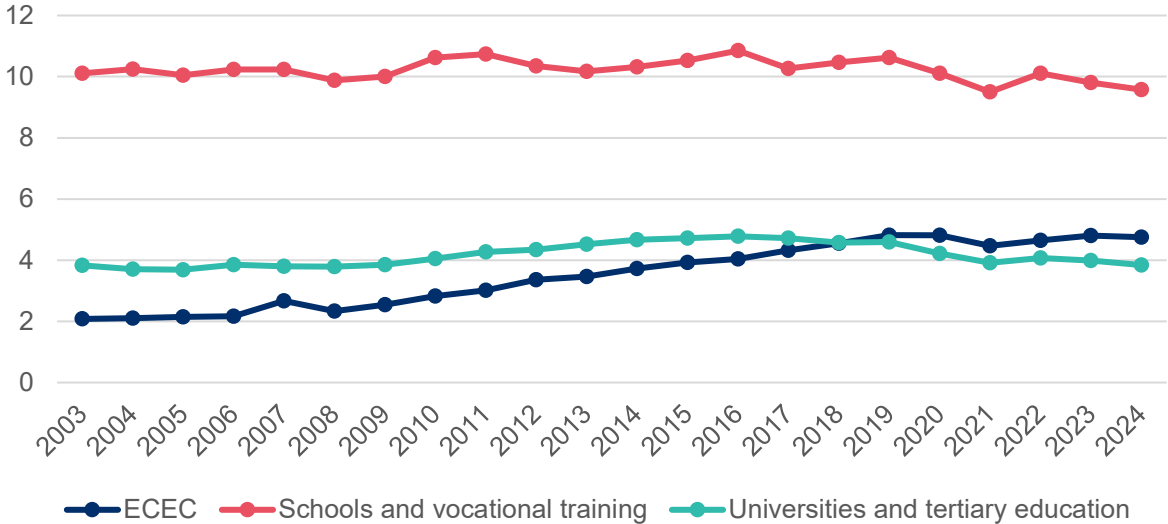


Source: Destatis 2024 - Statistical series "Public expenditure on education by education level and governance level, as % GDP" [21711 - Anteil d.Ausgaben d. öff. Haushalte f.Bild. am BIP (Prozent); Körperschaftsgruppen: Insgesamt; Aufgabenbereiche der öffentlichen Haushalte: Kindertagesbetreuung]

Figure 3 reports expenditures in three different education sectors: ECEC, primary and secondary education, and tertiary education. Both figures underscore how the expansion described so far has been possible because of considerable and continuing public investment. Of course, the trends reported also capture transient demographic dynamics and the size of

individual cohorts, as they go through the education system.³³ Unfortunately, data on expenditure per child are not available.³⁴

Figure 3. Public spending on education as % of public spending, by educational level



Source: Destatis 2025 - Statistical series "Public expenditure on education by education level and governance level, as % Public Expenditures" [21711 - Anteil d.Ausgaben d. öff. HH f.Bild. am GesamtHH (Prozent); Körperschaftsgruppen: Insgesamt; Aufgabenbereiche der öffentlichen Haushalte: Kindertagesbetreuung, Allgemeinbildende und berufliche Schulen, Hochschulen]

Against this background, providers receive public money directly from the municipalities. Funding formulas vary across Länder, which may establish general guidelines, and across municipalities, which ultimately determine the exact amounts providers receive. Funding is generally based on place occupied, with higher funding given to places for younger children to mirror the higher cost. Besides this, funding is also based on number of hours, with full-time places attracting higher funding. Supplements for disability are also common and in some states children who are not monolingual German are also funded more generously, although this type of measure is often dependent on time-limited initiatives.

Moving to parents and their out-of-pocket expenses, a few observations are in order. First, unlike compulsory education or higher education, ECEC has not, historically, been free. Two thirds of the ECEC fees are tax deductible up to 4000 Euros per year for each child, a measure

³³ For example, the relative larger birth cohort of 2016 relative to slightly older ones.
³⁴ The Bertelsmann Foundation regularly reports an indicator of "public expenditure per child under the age of six" from 2012 to 2020, again based on population count rather than on the number of children in ECEC. It is reassuring however to see that even this indicator has grown, although the relevant age group has remained rather stable or increased during that decade. See <https://www.laendermonitor.de/de/vergleich-bundeslaender-daten/uebersicht-aller-indikatoren-1/bundeslaender> (last accessed January 2025)

that disproportionately favours higher income households. On the other hand, the federal law requires to waive fees when families are in receipt of means-tested benefits, including child allowance, housing benefit, unemployment benefit or other social assistance benefits. Refugees entitled to protection also have fees waived. All these exemptions are in place throughout the country. Moreover, in the last decade, fees have been progressively abolished, albeit not uniformly across Germany (see Table IV-11-1 in BMFSFJ 2023). As per 2023, in Berlin and Mecklenburg-Western Pomerania provision is completely free; in Rhineland-Palatinate it is free once children have turned two; in Lower Saxony and NRW the last three and two years before school entry are respectively free; in Thuringia and Brandenburg the last year is free; in Hamburg provision for 5 hours a day is free irrespective of age. Baden-Württemberg, where approximately 14% of children under 6 in Germany live, is exceptional in its reluctance to improve affordability, given that also Bayern has introduced fee reductions. According to 2022 data from KiBS, 36 percent of parents benefitted from a free ECEC place. The second general observation regards fees' amount. These are not high in international comparison, but, once again, tend to vary greatly. Variations in fees partly reflect the different costs of provision, as reported in Table 4. In 2022 the median monthly expenses for a child under the age of 3 was 200 Euros, whereas that for children over the age of three were 49 Euros³⁵. But much of the variation in fees is due the federal legal requirement that fees must be scaled. In practice, the exact criteria are set at state level, and often further delegated to municipalities. Beside age of child and number of hours in ECEC, common criteria to account for parents' different ability to pay are number of children in ECEC and household income.

Table 4. Monthly financial contributions by parents, by type of ECEC place and age of child, 2022

	Under age 3			Age 3 to school entry		
	Median	P25-P75	n	Median	P25-P75	n
Half-day place (up to 25 hours a week)	170	106-230	347	0	0-102	1260
Long half-day place (25-35 hours)	220	123-300	821	58	0-139	3124
All-day place (35+ hours)	200	40-314	2033	55	0-161	7066

Source: Table IV-11-2 in BMFSFJ 2024; Data source: DJI-Kinderbetreuungsstudie (KiBS) 2022, weighted data, calculations by DJI. Question asked: "How much do you pay monthly for the childcare place of your child?"

³⁵ These can include regular payments that families make for specific activities, for example sport or organic food. Parents indeed reported expenses also when their child attended an ECEC centre in Berlin, where places are nominally free of charge. The figures reported in Table 4 thus can be considered an upper bound, with nominal fees for a place possibly lower.

To illustrate the variability and also, partly, the arbitrariness, with which fees are scaled, I report the fees that parents who were not fee-exempt had to pay in Dresden in Saxony and in Dortmund in NRW for the school year 2024-25. In Dresden the following criteria were used: age of child, whether one, two or three children from the same family were enrolled in ECEC, number of hours ECEC was attended, and partnership status of parent, resulting in the fees reported in Table 5. Considering a place for 8 hours a day, the greatest reduction in fees occurs when more than one child is enrolled, as the second child would pay roughly 40% less than their peers without older siblings. By the child’s third birthday, fees become 27% lower. Single-parents, on the other hand, tend to pay 15% less than couples for a full-time place. In Dresden thus fees are not designed to accommodate different disposable income, other than by offering a discount to lone-parents and to guarantee free provision to those receiving means-tested benefits. The fees structure in Dresden appears to be to lower disincentives to enrol a younger sibling in ECEC.

Table 5. Monthly fees for an ECEC place in Dresden (in €), 2024-25

Number of hours per day:	11	10	9	8	7	6	4,5
Children below age 3							
<i>Couple Parents</i>							
1st Child	296,83	269,84	242,86	215,88	188,89	161,91	121,43
2nd Child	178,10	161,90	145,72	129,53	113,33	97,15	72,86
<i>Single parents</i>							
1st Child	252,31	229,36	206,43	183,50	160,56	137,62	103,22
2nd Child	133,57	121,43	109,29	97,15	85,00	72,86	54,64
Children above age 3							
<i>Couple Parents</i>							
1st Child	216,44	196,77	177,09	157,41	137,74	118,06	88,55
2nd Child	129,86	118,06	106,25	94,45	82,64	70,84	53,13
<i>Single parents</i>							
1st Child	183,97	167,25	150,53	133,80	117,08	100,35	75,27
2nd Child	97,40	88,55	79,69	70,83	61,98	53,13	39,85

Source: <https://www.dresden.de/de/leben/kinder/tagesbetreuung/anmeldung/elternbeitraege.php>
 Notes: Sibship refers to children living in the same household; the third child in ECEC can attend without paying any fee. Couple/single parents refer to whether parents are cohabiting or not.

Unlike Saxony, in NRW the last and second-last year of ECEC before school entry are free for everyone. Moreover, across NRW fees need to vary by household income, although the actual fees and income bands are set by individual municipalities. In Dortmund variations in fees

depend on presence of siblings, age of child, income and number of hours in ECEC. When more than one child from the same household is enrolled, only the one paying the higher fees needs to pay. However, if one sibling is attending for free because it is their second-last or last year in ECEC, all registered children can attend for free.

Besides that, fees are set as per Table 6. Two things are noticeable, income thresholds are set without any regard to family size. So, a single-parent family with one child and a taxable income below 42,000 Euros is fee-exempt, whereas a couple with child just above that threshold has to pay more than 200 Euros a month for a full-time place for a toddler. Second, ECEC places for more than 7 hours a day are much more expensive, resulting in a 33% increase compared to places for up to 35 hours a week. This creates a strong disincentive to work full-time. More generally, fees are structured in a way that creates several spikes by birth spacing and gross household income, possibly discouraging enrolment among families with low- and medium incomes.

Table 6. Monthly fees for an ECEC place in Dortmund (in €), 2024-25

Yearly income	CHILDREN BELOW AGE 3			CHILDREN ABOVE AGE 3		
	Up to 25 h/week	Up to 35 h/week	Up to 45 h/week	Up to 25 h/week	Up to 35 h/week	Up to 45 h/week
Up to 42'000	0.00	0.00	0.00	0.00	0.00	0.00
Up to 48'000	134.17	161.00	214.67	90.13	108.15	144.20
Up to 54'000	154.67	185.60	247.47	107.67	129.20	172.27
Up to 60'000	175.50	210.60	280.80	126.37	151.65	202.20
Up to 70'000	196.67	236.00	314.67	146.25	175.50	234.00
Up to 80'000	231.39	277.67	370.22	177.43	212.92	283.89
Up to 90'000	266.67	320.00	426.67	210.55	252.67	336.89
Up to 100'000	302.50	363.00	484.00	245.63	294.75	393.00
Up to 125'000	338.89	406.67	542.23	282.64	339.17	452.23
Up to 150'000	427.08	512.50	683.33	365.45	438.54	584.72
Above 150'000	516.66	620.00	826.66	453.13	543.75	725.00

Source: <https://www.dortmund.de/dortmund/projekte/rathaus/verwaltung/jugendamt/downloads/betreuung/elternbeitraege/elternbeitragstabelle-2024-25.pdf>

In sum, Germany has a strongly subsidised ECEC system, whereby approximately 80 percent of the cost of provision are covered by the state, mostly at individual state level but often, albeit indirectly, also by the federal budget. Funding is channelled directly to providers, and is, in the main, set on the basis of child's age, reflecting the higher personnel costs of provision for babies and toddlers relative to pre-schoolers. Providers do not have financial incentives nor resources to improve quality or to cater for children who may require more resources, with the exception of children with disabilities. Parents contribute to with 10 or 15 percent of costs,

however it is difficult to understand whether this financial burden is distributed in an equitable way. Fees exemption operates both in a progressive and in potentially regressive ways. Progressive because families on means-tested benefit do not pay fees. Two examples of families entitled to child allowance can help here. First, a single mother with one child, who works in an ECEC centre part-time with gross monthly earnings between 1440 and 3040 euros and housing costs of 490 Euros. Second, a couple with two children where the father has a full-time job in waste and recycling collection and the mother a “mini-job” so that their joint gross monthly earnings are below 4400 euros and their housing cost 790 euros. For both these families, ECEC could be free. Yet fees are also waived on the basis of child’s age. This affordability difference is built-in two-tier ECEC systems with free school-based provision for children over three. However, it was not necessary in an integrated system such as the German one, where it risks creating all sorts of disincentives to the enrolment of one and two year olds among families on middle incomes. Finally, fees exemptions are unfair insofar as they benefit high-income families living in *Länder* where exemptions are in place relative to middle-income families living where ECEC fees are charged. What remains to be seen is whether fees will be progressively eliminated everywhere, also for younger children, and the implications for the funding loss that this brings.

6. Policy discussion and conclusion

Germany can be regarded as a success story of the “social investment” strategy. In less than one decade it has expanded its ECEC system moving from being one of the laggards to having provision that is not too dissimilar to that of the Nordic countries. What are the key features that make the system overall effective?

First of all, there is coherence between parental leave and ECEC services, with no gap between the end of leave and place guarantee in ECEC (see Euridyce indicators). The entitlement to an ECEC place exists once a child turns one, with well-paid leave covering children’s first year of life and nudging fathers to take leave so to lengthen the time children spend exclusively with parents (Dobrotić et al. 2024). Although there is no universal guarantee to a free place, places are heavily subsidised, so that more than a third of families do not pay. Enrolment rates among one- and two-year olds in 2023 were 38.4% and 66,4% respectively³⁶. While demand exceeds supply, indicating that availability remains an issue, differences by

³⁶ These figures include childminders. When counting centre-based provision only, the enrolment rates are: 30,6% and 57,8 for one and two year olds respectively (Autor:innengruppe Bildungsberichterstattung, 2024: Tab. C4-4web).

groups in unmet demand suggest that lack of places is only one of many factors, and that adjustments need to be targeted to the specific needs of groups that struggle to secure places.

A second prominent feature of the system is that it is integrated, with centres offering care and education to children of different ages. Although a minority of children is cared for by childminders in their second year of life, most children stay in the same ECEC centre until they enter compulsory school after their sixth birthday, most commonly in age-specific groups within the same centre. Crucially, staff belong, in the main, to one occupational category – educators or Erzieher:in – who share a common, well-established and recognisable training path and official qualification, irrespective of whether they work with toddlers or older children. The expansion could leverage on this uniformity: existing ECEC centres could increasingly cater for younger children whereas new ones could nonetheless rely on the existing training infrastructure.³⁷ From the point of view of ECEC centres it is much easier to sustain provision by covering a larger age span: it allows greater flexibility and reduces dependency on the demand of a very specific group: parents of children aged one and two, whose incentives to be in paid employment are likely to vary depending on their opportunity costs, including normative orientations and financial gains. From the point of view of staff, caring for toddlers has always been an integral part of training. The fact that infants are not covered by the ECEC system also helped, as training about infants, with its stronger medical focus, did not have to be included.

Third: the main contextual factor that insures that the German ECEC system works is the dominance of part-time employment among mothers, who often work very short hours such as 20 hours a week. As ECEC places have become increasingly available, mothers have returned to paid work earlier and/or have scaled up their hours (Müller & Wrolich, 2020), without facing stark binary choices between not being in employment or working full-time with little family support. In a labour market where full-time employment is prevalent and workers have little support – either in terms of rights or workplace culture, expansion is much more difficult to achieve, as ECEC provision needs to lift parents from their caring duties to a much greater extent than it is currently the case in Germany. So while childcare has been significantly “de-

³⁷ Between 2006 and 2023 the increase in number of ECEC centres in West and East Germany has been of 24% and 18% respectively. Over the same period, the increase in the total number of children in ECEC centres has been of 36% and 29% in each part of the country respectively. (Autor:innengruppe Bildungsberichterstattung, 2024: Tab. C2-1web and C4-3web – my calculations).

mothered” (Mathieu, 2016), the current arrangement continues to penalise mothers in terms of earnings, with repercussions on gender equality at home and in the public sphere.³⁸

Within the current system, what hinders further expansion?

Investment: maintaining current levels of investment is unlikely to bring about much change, as any improvement in terms of increasing availability, quality and affordability will require growing public money. Investment needs to flow, first, into vocational schools where educators can be trained, and, second, directly into the ECEC system – I expand on these two points in turn. Any expansion of ECEC places depends on the recruitment of sufficient staff. Given that school-based three year vocation training remains the cornerstone of the ECEC system, these schools need to be promoted and expanded. Staff recruitment outside the mainstream path can be facilitated, but it will remain numerically marginal both because the pool of potential entrants is small and because their integration into the occupation is cumbersome. The example of immigrant workers is illustrative here: in 2023 approximately 2800 applications for the recognition of foreign qualifications in the field of ECEC were filed, 2400 were processed and 600 were granted full-equivalence – these are drops in an ocean of more than 700,000 ECEC workers. Likewise, attempts to water down the standard training requirements for educators will only help in the short-term: easier and shorter training pathways may favour entry into this occupation, but will also make exit less costly and contribute to a feeling of undervaluation that is noticeable among staff. In short, future investment needs to focus squarely on staff’s training infrastructure and expand it. While the current federal law to improve provision is already focusing on staff, vocational colleges do not fall within its remit, and remain a blind spot in current ECEC policy discussion.

Second, what should money flowing directly into the ECEC system prioritise, given the tension between places’ availability, affordability and quality? Here the answer will depend on the local context, as the situation in terms of places available, how much they cost and whether they are of good quality varies too much from one state or region to the other. This geographical heterogeneity makes it increasingly difficult to steer policy from the federal level and requires more granular knowledge of at very local level – in terms of demographic dynamics, labour market opportunities, and families’ needs and preferences. But municipalities lack the administrative capacity to develop effective action plans and manage a reporting and

³⁸ An otherwise highly praising report by the OECD on Germany’s family policy reforms (OECD 2016) shows that among OECD countries Germany together with Mexico is where mothers contribute the least to household income relative to fathers at 22%.

verification system that help allocate resources and design regulation. At the moment, the monitoring system in place occurs at federal level with knowledge sharing at state level. Yet, as the examples of Dresden and Dortmund have highlighted, families are confronted with very different services depending on where they live. Investing in the capacity of municipal administrations to steer provision on the basis of shared guidelines would ensure that money is invested where is most needed. So, for example, in eastern regions experiencing falling birth rates, priority could be given to improve staff to children ratios. By contrast, in areas where staff shortages are most acute, investment in vocational colleges and staff recruitment would be most urgent. By the same token, while fees may discourage participation, their importance is effectively concentrated in states where fees are levied.

While stark geographical variations hamstring one-size-fits-all solutions, everywhere families with lesser resources – because of poverty and/or migration status – are currently less likely to enrol early in ECEC, despite their sizeable unmet demand. In contrast to the expansion between 2005 and 2013, which preceded the universal entitlement, any future investment in the ECEC system needs to prioritise less advantaged families, addressing their needs and removing the specific barriers they face, whether related to burdensome application procedures, deterring fees, discrimination or not inclusive provision. Without more targeted interventions, greater equity in accessing and benefiting from ECEC is unlikely to be achieved. Finally, further expansion of the ECEC is hindered by contextual factors that are likely to affect demand. Prominent among these is the tax and benefit system, which tends to favour the one-and-a-half worker model. In particular, for married mothers with relatively lower earning potential, joint taxation, together with non-contributory dependents' health insurance, sap immediate financial incentives to take up or increase employment, reducing the demand for ECEC and reinforcing normative assumptions about childcaring roles. However, growing awareness about the long-term financial consequences of employment interruptions or reduction, especially in case of partnership breakdown, may slowly increase mothers' labour market attachment and increase their propensity to use ECEC (Büchau et al. 2024). Likewise, rising cost of living are likely to make mothers' long employment breaks financially untenable in households where fathers are on low earnings, especially in areas with soaring housing costs. For these families, ECEC provision is likely to be crucial to avoid falling into poverty. In sum, the prevalence of the one-and-a-half earner model on the one hand facilitates but, on the other, hinders the development and expansion of the ECEC.

More generally, while reforms of the ECEC system have been coherent and well interlock with the parental leave system, there remain contradictions with the overarching system of financial support of families with children. These contradictions reflect incomplete, and partly reluctant,

policy change, with visible traces of the decade-long support for the male bread-winner model. They also reflect governance structure, whereby opportunities to bring about change to achieve greater gender equality in the tax system or the benefit system are much rarer, if they exist at all, than within the traditional remit of family policy. In practice, the current ECEC system, when considered in as a whole, is sufficiently varied to eschew any normative prescription as to how and by whom children under three should be cared for (Saraceno 2000; Himmelweit & Lee 2024). While (West) Germany has surely moved away from the male bread-winner model (Lewis 1992) it has not (yet) embraced the adult worker model. It remains to be seen whether macro forces, such as demographic change, industrial decline and restructuring, transformations in the labour market, will, in the near future, lead more parents – whether mothers or fathers – to work full-time.

References

- Anders, Y., Roßbach, H.-G., Weinert, S., Ebert, S., Kuger, S., Lehl, S., & von Maurice, J. (2012) Home and preschool learning environments and their relations to the development of early numeracy skills. *Early Childhood Research Quarterly*, 27, 231-244.
- Autorengruppe Bildungsberichterstattung. (2020) *Bildung in Deutschland 2020*. W. Bertelsmann Verlag.
- Autorengruppe Fachkräftebarometer (2023) *Fachkräftebarometer Frühe Bildung 2023*. Weiterbildungsinitiative Frühpädagogische Fachkräfte. Bielefeld
- Baertsch, Laurenz and Sandner, Malte (2024) Reducing the Child Penalty by Incentivizing Maternal Part-Time Work?. IZA Discussion Paper No. 17109.
- Bastagli, F., Samman, E., Both, N., Evans, M., Sepúlveda Carmona, M. M., Yang, L., Walker, R., Salomon, H., Orton, I., Overseas Development Institute, & UNICEF. (2020). *Universal child benefits policy issues and options*. UNICEF ODI.
- BIBB (Bundesinstitut für Berufsbildung) (2024) A comparison between school-based and practically integrated nursery school teacher training. Bonn: Franz Steiner Verlag.
- Brachmann, Tim; Mosel, Juliane; Sandforth, Saskia & Stohner, Maximilian (2024) *Finanzen der Kindertageseinrichtungen in Freier Trägerschaft*. Wiesbaden: Statistisches Bundesamt (Destatis).
- Büchau, S., Philipp, M.-F., Schober, P. S., & Spiess, C. K. (2023). Day care availability and awareness of gendered economic risks: How they shape work and care norms. *Journal of European Social Policy*, 34(1), 53-68. <https://doi.org/10.1177/09589287231219215>
- Bundesagentur für Arbeit (BA) (2025) *Kindergeld und Kinderzuschlag - Deutschland und Länder (Jahreszahlen der Familienkasse der BA)* Available at: https://statistik.arbeitsagentur.de/SiteGlobals/Forms/Suche/Einzelheftsuche_Formular.html?sessionId=C6B224F8EF06D2DAC9296872215157D8?nn=20656&topic_f=famka-a-jz
- Bundesministerium für Familie, Senioren, Frauen und Jugend (BMFSFJ) (2020) *(Existenzsichernde) Erwerbstätigkeit von Müttern Konzepte, Entwicklungen und Perspektiven* Available at: <https://www.bmfsfj.de/resource/blob/158744/aa2f911741e48e33f260ce0d12a5dad4/existenzsichernde-erwerbstaetigkeit-von-muettern-data.pdf>
- BMFSFJ (2024) *Monitoringbericht zum KiQuTG 2023*.
- BMFSFJ (2025) *Zehnter Familienbericht*. Available at: <https://www.bmfsfj.de/resource/blob/254524/8aa3c1aeaa2f0076cd6fd08f932b1c4b/zehnter-familienbericht-bundestagsdrucksache-data.pdf>
- Büchau, Silke; Philipp, Marie-Fleur; Schober, Pia S.; Spiess, C. Katharina (2024) Day care availability and awareness of gendered economic risks: How they shape work and care norms. In: *Journal of European Social Policy* 34 (1), S. 53–68. DOI: 10.1177/09589287231219215.
- Dobrotić, Ivana; Blum, Sonja; Kaufman, Gayle; Koslowski, Alison; Moss, Peter; Valentova, Marie (2024) *International Review of Leave Policies and Research 2024*. DOI: 10.31219/osf.io/2frts
- Fredriksson, Sofie; Kim, Jeong-Lim; Torén, Kjell; Magnusson, Lennart; Kähäri, Kim; Söderberg, Mia; Persson Waye, Kerstin (2019) Working in preschool increases the risk of hearing-related symptoms: a cohort study among Swedish women. In: *International*

archives of occupational and environmental health 92 (8), S. 1179–1190. DOI: 10.1007/s00420-019-01453-0.

- Hermes, Henning; Lergetporer, Philipp; Peter, Frauke & Wiederhold Simon (2025) Application Barriers and the Socioeconomic Gap in Child Care Enrollment, *Journal of the European Economic Association*, Volume 23, Issue 3, June 2025, Pages 1133–1172, <https://doi.org/10.1093/jeea/jvae054>
- Gambaro, Ludovica; Gehlen, Annica; Spieß, C. Katharina; Wrohlich, Katharina; Ziege, Elena (2024) Division of Paid and Care Work Between Parents: Reality Often Differs Greatly from the Ideals. DIW Weekly Report 29/30/31 DOI: 10.18723/diw_dwr:2024-29-1
- Gambaro, Ludovica; Spieß, C. Katharina; Westermaier, Franz (2021) Childcare Workers Experience Many Stressors and Little Recognition.
- Ghirardi, Gaia; Baier, Tina; Kleinert, Corinna; Triventi, Moris (2023) Is early formal childcare an equalizer? How attending childcare and education centres affects children's cognitive and socio-emotional skills in Germany. In: *European Sociological Review* 39 (5), S. 692–707. DOI: 10.1093/esr/jcac048.
- Jessen, Jonas; Schmitz, Sophia; Waights, Sevrin (2020) Understanding day care enrolment gaps. In: *Journal of Public Economics* 190, S. 104252. DOI: 10.1016/j.jpubeco.2020.104252.
- Kuger, S., Roßbach, H.-G., & Weinert, S. (2013) Early literacy support in institutional settings - a comparison of quality of support at the classroom level and at the individual child level. In M. Pfost, C. Artelt, & S. Weinert (Eds.), *The development of reading literacy from early childhood to adolescence* (pp. 63-92). University of Bamberg Press.
- Lewis, Jane; Campbell, Mary; Huerta, Carmen (2008) Patterns of paid and unpaid work in Western Europe: gender, commodification, preferences and the implications for policy. In: *Journal of European Social Policy* 18 (1), S. 21–37. DOI: 10.1177/0958928707084450.
- Leitner, S., Ostner, I., & Schmitt, C. (2008) Family policies in Germany. In I. Ostner & C. Schmitt (Eds.), *Family policies in the context of family change* (pp. 175–202). VS Verlag für Sozialwissenschaften.
- Linberg, Tobias; Baeumer, Thomas; Rossbach, Hans-Guenther (2013) Data on Early Child Education and Care Learning Environments in Germany. In: *ICEP* 7 (1), S. 24–42. DOI: 10.1007/2288-6729-7-1-24.
- Mohun Himmelweit, Samuel; Lee, Sung-Hee (2024) Ideas, Coalition Magnets and Policy Change: Comparing Variation in Early Childhood Education and Care Policy Expansion across Four Latecomer Countries. In: *Gov. & oppos.* 59 (1), S. 229–248. DOI: 10.1017/gov.2022.35.
- Morgan K.J. (2005) The 'Production' of Child Care: How Labor Markets Shape Social Policy and Vice Versa, *Social Politics* 12: 243–63
- Müller, Kai-Uwe; Wrohlich, Katharina (2020) Does subsidized care for toddlers increase maternal labor supply? Evidence from a large-scale expansion of early childcare. *Labour Economics* 62, 101776. DOI: 10.1016/j.labeco.2019.101776.
- Nieuwenhuis, Rense; van Lancker, Wim (eds.) (2020) *The Palgrave Handbook of Family Policy*. Palgrave Macmillan. DOI: 10.1007/978-3-030-54618-2
- Oberhuemer, Pamela (2014) Access and quality issues in early childhood education and care: the case of Germany, in Gambaro, L., Stewart, K. & Waldfogel J (eds) *An equal start? Providing quality early education and care for disadvantaged children*. Bristol: Policy Press.

- OECD (2017) *Dare to Share: Germany's Experience Promoting Equal Partnership in Families*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264259157-en>
- OECD (2019) *Good Practice for Good Jobs in Early Childhood Education and Care*, OECD Publishing, Paris, <https://doi.org/10.1787/64562be6-en>
- Rosenfeld, Rachel A.; Trappe, Heike; Gornick, Janet C. (2004) Gender and Work in Germany: Before and After Reunification. *Annu. Rev. Sociol.* 30 (1), S. 103–124. DOI: 10.1146/annurev.soc.30.012703.110531.
- Saraceno, Chiara (2011) Childcare needs and childcare policies: A multidimensional issue. In: *Current Sociology* 59 (1), S. 78–96. DOI: 10.1177/0011392110385971.
- Schober, Pia S. (2020) Going Regional: Local Childcare Provision and Parental Work–Care Choices in Germany. In: Rense Nieuwenhuis und Wim van Lancker (eds): *The Palgrave Handbook of Family Policy*. Palgrave Macmillan, pp. 485–509.
- Solga, Heike; Protsch, Paula; Ebner, Christian; Brzinsky-Fay, Christian (2014) The German vocational education and training system: Its institutional configuration, strengths, and challenges, WZB Discussion Paper, No. SP I 2014-502, Wissenschaftszentrum Berlin für Sozialforschung (WZB), Berlin.
- Spiess, C. K., Berger, E. M. et al. (2008) Overcoming Disparities and Expanding Access to Early Childhood Services in Germany: Policy Considerations and Funding Options. UNICEF Innocenti Research Centre Working Paper IWP-2008-03.
- Stahl, Juliane Frederike; Schober, Pia Sophia (2018) Convergence or Divergence? Educational Discrepancies in Work-Care Arrangements of Mothers with Young Children in Germany. In: *Work, Employment and Society* 32 (4), S. 629–649. DOI: 10.1177/0950017017692503.
- Stahl, Juliane F.; Schober, Pia S.; Spiess, C. Katharina (2018) Parental socio-economic status and childcare quality: Early inequalities in educational opportunity? In: *Early Childhood Research Quarterly* 44, S. 304–317. DOI: 10.1016/j.ecresq.2017.10.011.
- Stawarz, Nico; Sander, Nikola & Sulak, Harun (2021) Internal migration and housing costs—A panel analysis for Germany. In: *Population Space and Place* 27 (4), Artikel e2412. DOI: 10.1002/psp.2412.
- Steinberg, Hannah Sinja & Kleinert, Corinna (2022) Timing of early childcare take-up in Germany: An application of rational choice theory. In: *J of Marriage and Family* 84 (3), S. 840–859. DOI: 10.1111/jomf.12825.
- Straub, Sophie; Sulak, Harun; Sander, Nikola; Milewski, Nadja & Spieß, C.Katharina. (2024) Die Bevölkerung mit Migrationshintergrund neu entdecken. Wiesbaden: Bundesinstitut für Bevölkerungsforschung (BiB). DOI: 10.12765/bro-2024-01
- Tazouti, Youssef; Viriot-Goeldel, Caroline; Matter, Cornélie; Geiger-Jaillet, Anémone; Carol, Rita; Deviterne, Dominique (2011) French nursery schools and German kindergartens: effects of individual and contextual variables on early learning. In: *Eur J Psychol Educ* 26 (2), S. 199–213. DOI: 10.1007/s10212-010-0043-4.
- Tietze, W., Meischner, T., Gänsfuß, R., Grenner, K., Schuster, K. M., Völkel, P., & Roßbach, H. G. (1998). *Wie gut sind unsere Kindergärten. Eine Untersuchung zur pädagogischen Qualität in deutschen Kindergärten*. Neuwied: Luchterhand.
- Urban, Mathias; Vandenbroeck, Michel; van Laere, Katrien; Lazzari, Arianna; Peeters, Jan (2012) Towards Competent Systems in Early Childhood Education and Care. Implications for Policy and Practice. *European Journal of Education* 47 (4), S. 508–526. DOI: 10.1111/ejed.12010.

- Warning, Anja (2020): Rekrutierungssituation im Beruf der Erzieherin/des Erziehers: Engpässe werden immer stärker sichtbar. (IAB-Kurzbericht 02/2020), Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung (IAB) der Bundesagentur für Arbeit.
- Zoch, Gundula; Schober, Pia S. (2018) Public Child-Care Expansion and Changing Gender Ideologies of Parents in Germany. *Journal of Marriage and Family* 80 (4), S. 1020–1039. DOI: 10.1111/jomf.12486.



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