SOWELL

Social dialogue in welfare services

Employment relations, labour market and social actors in the care services

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The Governance and the Labour Market in the Care Services at the National Level. A comparative overview.

COMPARATIVE REPORT WP1

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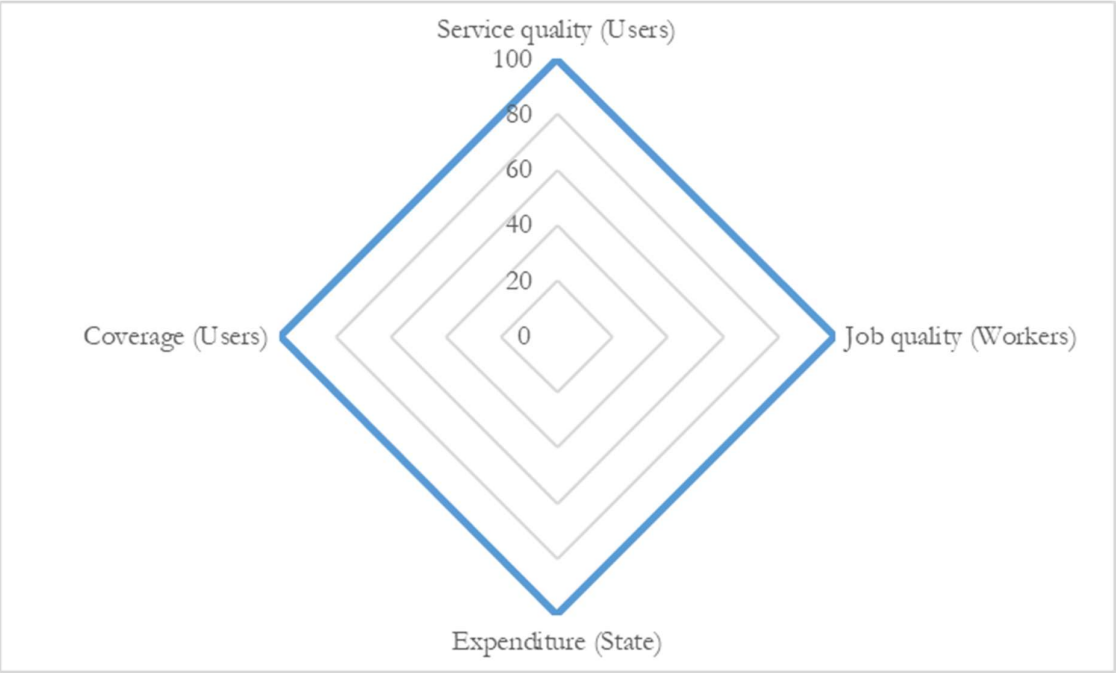
1. Introduction

The Covid-19 pandemic has confirmed the relevance and the vulnerability of the care services and the need to develop a robust formal care system in the whole Europe Union. The pandemic has highlighted the pre-existing structural weaknesses of the care system in the majority of the European countries.

In the last two decades, several changes took place within European care systems. The implementation of austerity measures and budget constraints, the growth of required educational attainments to access several care occupations, the growth of female employment, the labour shortages in many care services, the increase of outsourcing services from the public to the private services or hybrid solutions are among such changes that have affected many countries.

Of course, there have been key cross-country differences that determined heterogenous choices of service regulations, working conditions, and service and employment quality.

Figure 1. The care quadrilemma



The SOWELL project has the goal to disentangle the main characteristics of the social dialogue in the welfare services, observing the main issues about the employment relations, the labour market and the main actors involved in seven countries: Italy, Spain, Denmark, Germany, The Netherlands, Hungary and Slovakia, with a European perspective given by Fese and Epsu.

This project aims at assessing what we have defined as a "*care quadrilemma*" built upon four poles representing different pressures/goals that need to be balanced within every country-specific setting (Figure 1). First, the *public budget constraints*: in an age of "permanent austerity", governments have to carefully consider how to spend very limited resources to respond to increasing social needs. Second, the *service coverage*: the coverage should be as broad and universal as possible, given the salience of the care and education services also within the social investment strategy and European Pillar of Social Rights. Third, the *quality of services*, defined in terms such as intensity of care (hours), personnel qualification, and ratio between number of carers and of beneficiaries, is essential and it is usually, together with coverage, the main issue requested by beneficiaries and their families. Fourth, the *job quality*, related to the working conditions (including pay) in the different labour market segments involved in this sector, which is usually what those employed in the sector look at. Tensions

and trade-offs might arise between these different goals and pressures. For instance, for the sake of expanding coverage and keeping budgets as tight as possible, quality, both in terms of jobs (working conditions) and of services, might be partially sacrificed.
The present contribution reports our main empirical findings following the care quadrilemma scheme for each policy (ECEC and LTC). Therefore, after having briefly described how LTC and ECEC are organised in each country, we then look at the four corners of the quadrilemma and how they have changed over time: expenditure, coverage, service quality, and job quality.
The present report relies to a very large extent on the country reports written by Wesley Hansen and Mailand (2022) for Denmark, Tros and Kuijpers (2022) for the Netherlands, Gottschall and Abramowski (2022) for Germany, Molina et al. (2022) for Spain, Breuker et al. (2022) for Italy, Bors and Kahancova (2022a) for Hungary, and Bors and Kahancova (2022b) for Slovakia.

2. The structure and the characteristics of Early Childhood Education Care services in Europe

2.1 Governance, regulation and type of services provided

The seven countries in the SOWELL project have partially different settings for governing, regulating, and providing services.
In particular, ECEC services in Denmark are characterised by universalism and encompassing public funding. According to legislation, all children below school age (i.e. age 0-5) are guaranteed equal access to an ECEC service. The governance structure of ECEC services is relatively decentralised in that the legislations leave large part of the decision-making to the municipalities in accordance with what is labelled municipal self-governance. Hence, the municipalities could be seen as the main actors. The Ministry of Children and Education develops policy and administers the framework for ECEC services. ECEC services for children aged 0-5 years broadly includes four forms of daycare services: Day care institutions either fully or partly publicly funded, subsidised in-home daycare, subsidies for hiring formally approved private home care, or subsidised home caring of own children. Most services are age-integrated institutions from 0-5 years, but there are also separate crèches/nurseries (0-2 years) and kindergartens (3-5 years).
The "municipal day care institutions" are run directly by local authorities. "Self-governed day care" institutions are institutions run by private suppliers based on an operating agreement entered into with the municipality. Self-governed day care institutions are subject to municipal supervision and receive municipal grants to cover the institution's expenses. "Outsourced day care institutions" are established by private suppliers based on a tender and are operated based on an agreement with the municipal council. Outsourced day care institutions are part of the municipal supply, and the municipality allocates places in the institution. In all these three types of institutions, the fee for a place must not exceed 25% of the budgeted costs for the place. "Private institutions" are run by private suppliers by approval from the municipal council. The municipality cannot allocate a place in a private institution. The municipality provides a subsidy per child admitted to the private institution. The private institution itself determines the parents' own payment. However, since 2020, private institutions have been prohibited from drawing profit from offering childcare.
Since the mid-1960s, family day care has been part of the public provision of ECEC (Rostgaard 2012). Family day care is mainly used for the age group 0-2 years, but is an important component in the overall provision of childcare. Family day care can be both private and municipal, and offers a care setting in a homely environment and with a smaller group of children. Families also have the option of a private childcare scheme where parents receive a financial subsidy from the municipality for hiring a private childminder. The municipality must approve the childcare agreement as a condition for the parents to receive the financial subsidy. Finally, the municipality can decide to offer parents a subsidy to look after their own children between 24 weeks and up to the start of school as a form of substitution for a place in a day-care.

In the Netherlands, ECEC started to develop in the 1990s. In a few years, public budgets for childcare tripled and the percentage of children up to the age of three in daycare or guest parents' care increased from 5.7% in 1990 to 25.9% in 2006 (Van Hoorden & Becker, 2012: 98-100). After political discussions regarding a collectively financed basic provision for all children versus a demand-led system subsidising parents who wished to buy childcare services on the market, the latter model was implemented in 2005. Related to the 'part-time-economy' of the Netherlands, childcare is still done for a relatively great part informally (e.g. by grandparents) and by the mothers themselves that work part-time to take care of their young children at home. Although reorganisation of ECEC care on a free-market basis is growing in many Western countries, the Netherlands can be called a champion, together with the United Kingdom, Australia, Canada, and New Zealand (Van Hooren, 2021).

The ECEC system in the Netherlands consists of private daycare centres offering care for children between birth and four-years-old up to five days a week throughout the year, and home care by child-minders for children between birth and 12 years. The main aim of the Dutch ECEC system is to support working parents, but for children aged 2-4 years, the so called *peuterspeelzalen* provides for educational development of the children as well (mostly for two day-periods a week). This second aim of child-development has become more important in the last decades, together with a third related aim of combating unequal opportunities. At age four, children in the Netherlands are eligible for full-day kindergarten, which is part of the publicly funded primary school system and free of charge. Children aged 5 and more have to go to school and many daycare centres also for care for children before and after school time and in the lunch break.

Despite several attempts by the government to improve and harmonise the sector's governance, ECEC services are still a 'patchwork' with fragmented objectives, provisions and funding (SER, 2016). An important Dutch characteristic of the childcare sector is the provision by private organisations: non-for-profit as well as for-profit. These organisations themselves make their tariffs. Parents pay directly to day care centres and the Tax Service reimburse partly these costs under certain conditions. Reimbursements are dependent on the income levels of the parents (the lower the income the higher the reimbursement). ECEC services receive subsidies from the local governments to provide these services for targeted groups of families. Another Dutch feature of the childcare sector is the distinction it makes between working parents and non-working parents (same as in England). Non-working parents have access to subsidised nurseries and disadvantaged families have access rights for subsidised places in the special educational programs. However, tax reimbursements for childcare are only available for working parents.

In 2021, the tripartite Socio-Economic Council made a plan for reforming childcare in the Netherlands. This plan proposed the idea to provide for 2 days childcare a week for children from 0-4 years old, largely financed by public funds and being financial affordable for parents. For the Netherlands, this is a step towards a more universal system that aims to combating inequality in early life. However, the government did not adopt the social partners' advice to abolish the condition of giving the rights only to those parents that have a job. Therefore, this is limiting again the universal access among young children.

Childcare in the Netherlands is paid by the government, the employers and the parents. The Netherlands seems to be the only country with a legal obligation for employers to contribute financially. The employer is obliged to pay 1/6th of the daycare costs for every parent (so 1/3 in total). This is done by employers' premiums in sector funds. Every employer in the Netherlands is an obligated member of a sector fund. Parents receive their employers' contributions together with the government's contribution at one time through the Tax Service. Relatively speaking, Dutch parents pay high contributions for childcare. In recent history, the parents' contribution fluctuated highly because of changing policies of the government. When the new system will start in 2025, contributions from parents will change again: less for the first 2 days a week, but maybe (much) more for the other days.

In Germany, governance of ECEC has historically been framed by the subsidiarity principle restricting the role of the state in favour of family and non-profit actors in service provision. However,

from 2000 onwards, several reforms contributed to an expansion and restructuring of early childhood services (Müller/Wrohlich, 2014: 2; DJI, 2021). The expansion of daycare institutions for 3-6-year-old children with the "Tagesbetreuungsausbaugesetz TAG" (Daycare Development Act) in 2005 introduced a legal claim and goal to provide a half-day kindergarten slot for all children of this age group. In 2008, there was the introduction of legal claim for a slot in a publicly subsidised care institution for 1-3-year-old children by the "Kinderförderungsgesetz, KiföG 2008" (Childcare Funding Act). Implementation since 2013 aimed to reach a 30% coverage rate in child daycare services for one-to-three-year-old children. Further reforms in 2019 (Gute KiTa-Gesetz) and a follow-up in 2022 (KiTa-Qualitätsgesetz) have been focusing on childcare quality (see https://www.gute-kita-portal/english).

Besides being beneficial to coverage, the reforms, however, revealed a structural deficiency in governance both with regard to reform design and financing. Although the respective legislation is on the central state level, the design of the reforms has to be co-determined with the governments of the regional states, which have by constitution the right to govern social services. Respective laws have to pass both the lower house (Bundestag) and the upper house of parliament (Bundesrat). As conservative as well as more left-wing central governments from the 2000s onwards have been interested in modernising childcare services across the country, regional states claimed a (co-)financing in exchange of their support for the respective reforms. As implementation of the respective reforms' rests with the regional states and central evaluation has proved difficult, regional differences in childcare infrastructure and coverage tend to persist. The majority of (centre-based) care and early education for children aged 1-6 years is provided by service providers (Trägerschaften). These service providers might be public (run by local authorities), or run by non-profit or for-profit organisations. Additionally, there are self-organised childcare initiatives and childminders relevant especially for toddlers where coverage by nurseries is still low.

In Spain, care services were highly centralised during the dictatorship period in terms of regulation, funding, and management. The political and territorial articulation of competences after the approval of the Spanish Constitution (1978) led to a gradual and asymmetric decentralisation in many policies, including care services to guarantee regional grounded public provision. The Local regime Law (1985) enhanced this approach, obligating local entities of more than 20,000 inhabitants to provide social services. Moreover, the approval of regional statutes and social services laws have established an heterogenous map of social services regulation (Ministerio de Derechos Sociales, 2021) and provision (Álvarez et al., 2020). That is, 17 different regional systems and contexts. The central Government establishes a general regulatory framework for each activity and allocates funding, while allowing regional and local to adapt regulations and funding. Thus,.

ECEC is strongly influenced by the regulatory framework of the education system and is divided into two levels. The first is up to three years and the second level from three to six years. Both levels are voluntary and have an educational nature. The first level is not free of charges, with an enrolment rate of 41%. The second level is free of charges and the educational administrations must guarantee a sufficient supply of places in public centres. This level has an enrolment rate of 98%.

In terms of regulation, while there is a framework standard on minimum requirements for schools and another on the curriculum for the second level, in the 0-2 level the Autonomous Communities are responsible for determining these requirements. Thus, Royal Decree 1630/2006 defines the objectives, aims and general principles of the 3-5 level. The Autonomous Communities must develop the curriculums. On the contrary, in 0-2 level both the contents and the minimum requirements of the centres are totally regulated by the Autonomous Communities (Vélaz de Medrano, 2020). In this the first level, regional educational administrations must establish the contents and regulate the requirements that the centres must meet to reach the level, as well as the numerical ratios pupils-teacher, the infrastructures, equipment and the number of school positions, lacking a common regulation about these issues at national level. Even so, there have been changes in the legislation in the last 15 years. Only with the Education Law of 2020 (LOM-LOE) passe by the left-wing coalition government (the previous Education Law of 2013, LOMCE, of the *Partido Popular* did not make

any substantial changes to ECEC) substantial modifications were introduced. This law attempts to improve quality, extend coverage and affordability of the 0-2 level. Although it is still non-compulsory, the objective is to make 0-2 education universal, guaranteeing a "public, sufficient and affordable" offer of places (European Commission, 2020). The LOM-LOE recovers part of the educational character of the 0-2 level, which the LOMCE defined as welfare, based on the obligation to define a pedagogical proposal elaborated by the educational centres. In the absence of a general regulatory framework, all regions, in their respective education laws, establish in detail the contents of 0-2 level. Only the Community of Madrid collects the contents of this level in a more general way (Vélaz de Medrano, 2020).

In Italy, the ECEC services were first developed at local level, both by municipalities and by religious and non-profit institutions, especially in 1950s-60s, following local experiences developed in the first part of the last century. ECEC services have been traditionally divided between services for children up to 3 years old and children between 3 and 6 years old. The provision of early childhood education care from the birth to three years old consists of about 80% of nurseries. 2% of company nurseries and 10% of the so called "spring sections", usually organised within kindergartens, which can be accessed by children aged 24 to 36 months. The remaining 8% of the places refers to "supplementary" services, structured in flexible forms by schedule and organisation, while respecting regional quality standards (Istat, University of Venice Ca' Foscari and MIPA, 2020).

The Legislative Decree n° 65 in 2017 established the "integrated education and training system from birth up to six years", with the aim of "guaranteeing boys and girls equal opportunities for education, care, relationship and play, overcoming inequalities and territorial, economic, ethnic and cultural barriers". The traditional split of the ECEC services in two segments or educational cycles was reduced, but not eliminated. In 2017, legislation emphasises the importance of "pedagogical, didactic and educational continuity" between the two educational ECEC cycles, promoting also the creation of public, unitary ECEC institutions, comprising both services for children up to 3 years old and those for children between 3 and 6 years old. However, and despite some services organised in the same way in the private sector, the structural integration into unique institutions between services for children up to 3 years old and services for children between 3 and 6 years old are still exceptions among the ECEC services.

The split of the ECEC services into two cycles is reflected in their governance. In the services for 0-2-year-old children, governance is highly decentralised to Regions and municipalities. State regulation is traditionally very limited. Municipalities and private providers provide services. The main service for 0–2-year-old children, the "nido d'infanzia" (nursery) was instituted in 1971 (Law 1044/1971) at national level, while the regulation of "supplementary services" was introduced in 1997 (Law 285/1997). A specific educational service for children of 2 to 3 years old (*Sezioni primavera* – "Spring sections", as mentioned above) was established in 2006 (Law 296/2006).

The 2017 reform increased the central government responsibilities (and funding) and especially that of the Ministry of Education in the ECEC services for children between 0 and 2 years old. This change was motivated by the explicit recognition in the Legislative Decree 65/2017 that ECEC services for 0-2 year old children are "educational" and not "socio-educational" services (or even "social", as they were considered previously). This justifies a greater role of the Ministry of Education, as it happens in ECEC services for 3-6 year old children, which are considered "school" since the beginning of the 1970s.

Since 1968 (Law 444/1968), services for 3-6 year old children (kindergartens) have been under the responsibility of the Ministry of Education, which is the main provider. State kindergartens, which were instituted in 1968, share the same management and are institutionally linked with State primary schools (children from 6 to 10 years old). Regulation is shared between central State and Regions. Beyond the central State, municipalities and especially private organisations (mainly non-profit) are the other providers.

ECEC services include two stages in Hungary. In the first stage, there is the provision of non-compulsory institutional care for children aged 0 to 3 years. This service provision is either for a

charge with the obligation to pay full fee, or subsidised (state-subsidised) nursery. In the second stage, the provision of care and educational services is mandatory for all children from the age of 3 until they reach school age. The service provision in case of this second stage is free of charge.

Unitl 2022, the level of governance responsible for ECEC services differed according to the area concerned. Responsibility for ECEC policy was shared between two under-Ministries within the Ministry of Human Capacities: the State Secretariat for Family and Youth Affairs was responsible for centre-based care (bölcsőde) for children under the age of three; and the State Secretariat for Education was responsible for the kindergarten education system (óvoda) for children 3-6 years old. The same differentiation was present also in case of the political management and administration of the ECEC sector itself. However, the institutional systems in both stages were overseen by the Ministry of Human Capacities, but the ECEC sector falled under the competence of different state secretariats. Nurseries were supervised by the State Secretariat for Family and Youth Affairs, while kindergartens, as part of the public educational system, belonged to the State Secretariat for Public Education. Since 2022, the Ministry of Human Capacities closed, the competencies related to the (social) care sector (both the LTC and ECEC - kindergartens) moved under the Ministry of Interior - similarly as within the Human Capacities - two State Secretariats are responsible for the two sub-sectors. The nurseries moved under the Ministry of Culture and Innovation. The day care provided for children under the age of three years is stated within the Hungarian Child Protection Act (Act 31 of 1997). Since 2017, the Act states four types of providers, which can provide day care for children under the age of three years. From these providers two are institutional, center-based, namely the nurseries and mini-nurseries, and the two others are non-center based, namely the family nurseries and workplace nurseries. In the nurseries, there are the most prevalent childcare providers for children under the age of three years. Family nurseries can be established in an easier and faster way, as other nurseries, because this type of care service could be provided within the house of the service provider, or in a building specially created and modified for the needs of this type of childcare services. The second part of the ECEC sector consists of Kindergartens. Legislation changed in 2017. Before then, if the kindergartens had enough available places, they could accept children, which reached only 2½-year. Since 2017, this option was removed due to a legislational change.

Municipalities are allocated a sum for maintaining and running kindergartens from the national budget, based on the number of core professionals and support personnel employed. Parental fees are waived for most families due to the government programme for the provision of free meals, both in kindergartens and nurseries, for children coming from families below a certain income threshold. In nurseries, the maximum fee is not allowed to exceed 25% of the net per capita income of the family.

The Slovak ECEC system consists of nurseries and kindergartens administered by different ministries and legal systems. Nurseries provide care of children between the age of 6 months and 3 years. Nurseries are not a part of the education system. Municipalities found nurseries. Pre-primary education is the first stage of the education system. Kindergartens for children between ages of three and six provide pre-primary education. They are free of charge for children one year before compulsory school attendance. In all other cases except for children with special needs, tuition fees without an upper limit can be charged. The system of preschool care services underwent considerable changes. Before 1989, the centralised ECEC system consisted of more than 4 thousand public kindergartens free of charge attended by more than 2.4 million children in Slovakia. The number of facilities has been continually dropping down together with the birth rate decline. The nurseries for children 0-2 years old faded out gradually under the regulations of the Ministry of Health.

The 0-3 years old children may attend the nurseries established as social services under the Act on Social Services (408/2008 Cal.) from 2017, regulated by the Ministry of Labour, Social Affairs and Family. The children 2-6 years old can attend the kindergartens under the Ministry of Education, Science, Research and Sport competence. Nevertheless, establishing and financing the preschool facilities lies in towns and municipalities' decisions and financial resources.

Table 1. Public spending on ECEC over time (years 2000-2017; share of GDP)

Country	2000	2005	2010	2015	2017
Austria	0.27	0.28	0.45	0.51	0.52
Belgium	0.49	0.61	0.67	0.80	0.80
Czech Republic	0.31	0.31	0.39	0.44	0.44
Denmark	**1.37**	**1.32**	**1.37**	**1.32**	**1.25**
Estonia	0.12	0.26	0.34	0.75	0.77
Finland	0.93	0.90	1.03	1.12	1.06
France	1.26	1.20	1.21	1.32	1.32
Germany	**0.33**	**0.37**	**0.46**	**0.60**	**0.67**
Greece	0.13	n.a.	0.03	0.34	0.30
Hungary	**0.59**	**0.68**	**0.65**	**0.70**	**0.68**
Ireland	0.22	0.28	0.48	0.33	0.34
Italy	**0.48**	**0.50**	**0.52**	**0.56**	**0.55**
Latvia	0.08	0.09	0.76	0.78	0.78
Lithuania	0.09	0.67	0.79	0.79	0.76
Luxembourg	0.41	0.39	0.53	0.74	0.83
Netherlands	**0.32**	**0.43**	**0.83**	**0.59**	**0.64**
Norway	0.69	0.76	1.21	1.33	1.36
Poland	0.23	0.28	0.48	0.58	0.46
Portugal	0.28	0.37	0.39	0.38	0.38
Slovak Republic	**0.42**	**0.39**	**0.40**	**0.49**	**0.57**
Slovenia	0.60	0.53	0.49	0.49	0.64
Spain	**0.43**	**0.43**	**0.54**	**0.50**	**0.45**
Sweden	0.99	1.22	1.47	1.56	1.58
United Kingdom	0.64	0.75	0.76	0.64	0.56

n.a.: data not available
The countries in bold belonging to the SOWELL project.
Source: OECD (2022)

2.2 Public expenditure

In the last two decades witnessed a major increase in public expenditure on ECEC services, especially for the establishment and strengthening of provision for 0-2 children. As Table 1 shows, there was an increase in public spending on ECEC in almost all EU countries. The only exceptions are the United

Kingdom and two countries of the SOWELL project. In Denmark the expenditure in 2000, expressed as a share of GDP, was higher than in 2017. In Spain, the expenditure in terms of share of GDP is quite the same in 2000 and 2017: data show that ECEC expenditure grew during the 2000s and first part of the 2010s, and then dropped. Among the other SOWELL countries, the Netherlands and Germany are the ones that practically doubled their expenditure on ECEC over almost two decades.

Although a common trend is detectable for most countries, Table 2 shows that there are still important differences among them. Denmark remains among the top spenders for ECEC, together with the other Nordic countries and France (this fact probably explains the light cut in expenditure that took place in recent years). All other SOWELL countries spend to a similar extent in terms of share of GDP. However, in relation to these latter countries, Germany and the Netherlands spend much more on a per capita (child) level than Spain, Hungary, and Slovakia, with Italy in the middle between these two groups, as the columns on the right of Table 2 show. Table 2 also reports, when data are available, the amount of resources dedicated to services for children aged 0-2 and for children aged 3-5. What is typical of Nordic countries and France (including probably Denmark, although specific data are not available for this latter country) is the relevant amount of resources invested in ECEC services for children aged 0-2. Partially, Germany and the Netherlands follow a similar path (at least they spend for children aged 0-2 almost as much as for children aged 3-5), whereas Italy, Spain, Hungary, and Slovakia spend much less for the former group of children (around 0-1% of their GDP).
The OECD data on ECEC expenditure can be compared to those produced at the national level in the SOWELL countries.
In Denmark, ECEC is an important welfare task of the municipalities with net operating expenses of around EUR 3.36 billion in 2017. Central government allocates funds with the intent to fund the new staffing requirements. According to law, parental payment must not exceed 25% of the gross operating expenses per child in the individual day care or of the average gross operating expenses per child in the operation of day care of the same type in the municipality. According to recent reporting funded by FOA, parental payment for 0-2-year-olds is on average EUR 665 for family day care and EUR 410 for care in a day care centre without lunch. Moreover, there is great variation in the parental payment for the 3-5-year-old children across municipalities. From 2009 onwards, the public sector in Denmark experienced mild austerity. However, since 2019, a new (Social Democratic) government has reinvested somewhat in the public sector and have linked the budget to demographic development: it is likely to reduce the pressures linked to the quadrilemma, but not to remove the pressures totally.
In the Netherlands, as previously explained, the government, the employers and the parents pay childcare. The Netherlands seems to be the only country with a legal obligation for employers to contribute financially. The employer is obliged to pay 1/6th of the daycare costs for every parent (so 1/3 in total). This is done by employers' premiums in sector funds. Every employer in the Netherlands is an obligated member of a sector fund. Parents receive their employers' contributions together with the government's contribution at one time through the Tax Service: practically, Dutch parents pay high contributions for childcare. The austerity measures increased parents' contributions, from 18% in 2008 to 40% in 2013. Public subsidies increased after 2015 and parents' contributions could be lowered to 30%. The financial system is not transparent for the parents and in 2021, severe failures in compensating parents for childcare costs through the tax system has been one of the main reasons for the coalition government to fall.
In Germany, expenditure doubled from 2006 to 2018, especially the one for child daycare centres. ECEC often is not free of charge for parents. The legal right to childcare for children aged 1-3 and 3 years to school age usually applies to a half day place. For childcare exceeding this time slot, many regional states and local municipalities raise fees. At the same time tax regulations allow for generous deductions if parents claim private expenses on childcare, i.e. private childminders, private daycare centres, or fees for longer hours in daycare centres

Table 2. Public spending on early childhood education and care (year 2017)

	As a share of GDP (%)			Per child in USD PPP		
Country	Total	Childcare	Pre-primary	Total, per	Childcare, per	Pre-primary, per
Austria	0.5	n.a.	n.a.	4900	n.a.	n.a.
Belgium	0.8	0.1	0.7	6100	2000	10000
Cyprus	0.3	0.0	0.3	n.a.	n.a.	n.a.
Czech	0.4	n.a.	n.a.	2700	n.a.	n.a.
Denmark	**1.3**	**n.a.**	**n.a.**	**11100**	**n.a.**	**n.a.**
Estonia	0.8	n.a.	n.a.	4000	n.a.	n.a.
Finland	1.1	0.6	0.5	8000	8800	7200
France	1.3	0.6	0.7	8400	8100	8700
Germany	**0.7**	**0.3**	**0.4**	**6600**	**4400**	**8900**
Hungary	**0.7**	**0.1**	**0.6**	**3600**	**1200**	**6100**
Ireland	0.3	n.a.	n.a.	3200	n.a.	n.a.
Italy	**0.5**	**0.1**	**0.5**	**4600**	**1400**	**7500**
Latvia	0.8	n.a.	n.a.	3400	n.a.	n.a.
Lithuania	0.8	n.a.	n.a.	4100	n.a.	n.a.
Luxembourg	0.8	n.a.	n.a.	14500	n.a.	n.a.
Netherlands	**0.6**	**0.3**	**0.3**	**5800**	**5500**	**6100**
Norway	1.4	0.6	0.7	12300	11900	12700
Poland	0.5	n.a.	n.a.	2300	n.a.	n.a.
Portugal	0.4	n.a.	0.3	2500	n.a.	4800
Romania	0.3	0.0	0.3	n.a.	n.a.	n.a.
Slovak	**0.6**	**0.1**	**0.4**	**2800**	**900**	**4300**
Slovenia	0.6	n.a.	n.a.	3800	n.a.	n.a.
Spain	**0.5**	**0.1**	**0.4**	**3200**	**300**	**5900**
Sweden	1.6	1.1	0.5	11700	15600	7800
United	0.6	0.1	0.5	3600	900	6200

n.a.: data not available
The countries in bold belonging to the SOWELL project.
Source: OECD (2022)

In Italy, the Municipalities spent in 2019 about 1.5 billion euros for children aged 0-2 for ECEC services. The 19.6% of this expense was reimbursed by families in the form of co-payments and fees (Istat, 2020).
Over the years, the expenditure of municipalities for educational services has seen an expansion, until 2010, when the highest value was recorded, equal to 1 billion and 607 million euros. In the following two-year period, there was a 9% decrease in expenditure due to austerity. In the three-year period 2015-2017 there has been a stabilisation of both municipalities and family expenditure, which is slightly below 20%. Average spending per capita went from 542 euros per year in 2004 to 818 euros in 2018. About 96.5% of the municipalities' expenditure on socio-educational services for early childhood is used for nursery schools, the remaining 3.5% for supplementary services for early childhood, which have a much lower diffusion and costs. Further investments should come from the Recovery and Resilience Plan, where it is reported an investment of ECEC services, especially targeted at children aged 0-2, of 4.6 billion Euros with the aim to double the available places in nurseries by 2028.
In Spain, from a diachronic perspective, public expenditure on early childhood and primary education has had a positive progressive trend since the 1990s, with the economic crisis of 2008 as a trend reversal. Data on public expenditure on early childhood and primary education in relation to total public expenditure show a downward trend in the whole series. Here we see more clearly the 2008 crisis effect with a decline from 2008 onwards, followed by another decline in 2021. The Covid-19 crisis also led to a decrease in the expenditure ratio, due to the greater effort of the State in public health expenditure. Regarding public expenditure per pupil as percentage of GDP per capita by ECEC levels, in 3-5 level the trend is rather stable, with minor changes. In contrast, in the 0-2 level there has been a continuous decrease until 2017 (with an expenditure of 13.4%), with a relevant increase of 11.19% happening in 2018 (reaching an expenditure level of 14.9%) With the current Education Law of 2020 (LOM-LOE), the increase is expected to be even higher.
In Hungary, municipalities are allocated a sum for maintaining and running kindergartens from the national budget, based on the number of core professionals and support personnel employed. The calculation is related to the average national salary of kindergarten pedagogues and the number of kindergarten children. Parental fees are waived for most families due to the government programme for the provision of free meals, both in kindergartens and nurseries, for children coming from families below a certain income level, having three or more children, or children with disabilities. In nurseries, the maximum fee is not allowed to exceed 25% of the net per capita income of the family. In public kindergartens parents pay only for subsistence. In state subsidised private settings parents could pay (without subsistence) roughly EUR 223 per month.
In Slovakia, also Municipalities are allocated a sum for running kindergartens from the national budget. Public expenditure grew during the last decade, but it was mostly concentrated on ECEC services for children aged 3-5. Further investments should come from the Recovery and Resilience Plan, where it is reported an increased access to kindergarten by the investment of EUR 141 million with the creation of 12.352 new places by the end of 2025.

2.3 Service coverage

2.3.1 A general overview

Childcare coverage varies substantially across countries. During the last fifteen years there has been a development of heterogeneous assets across countries to ensure the services. Table 3 shows what happened over the last two decades before the onset of the Covid Pandemic in the EU. Although there are some differences between the OECD and the Eurostat (EU-SILC) estimates, trends are quite clear. Practically, in most EU countries there was an increase (often particularly strong) in coverage rates of children below 3 years in their attendance to ECEC services. However, in some countries belonging to the SOWELL project there was no increase. In particular, Germany, Spain, the Netherlands and

Hungary witnessed an increase between 10% and 20% in their coverage rates, whereas the data for Italy, Slovakia, and Denmark show either substantial stability or a decrease in coverage. In general, there is still a high level of heterogeneity among countries in terms of the coverage rate.
In relation to kindergarten, childcare attendance increased as well and it reached in most Western European countries and in most Central Eastern European ones respectively the 90% and the 80% threshold.

Table 3. Enrolment rates in ECEC over time

Country	Data source	Less than 3 years			From 3 years to minimum		
		2005	2010	2018	2005	2010	2018
Austria	EU-SILC	4.0	9.0	20.0	69.0	83.0	88.0
	OECD	n.a.	12.5	20.9	n.a.	85.0	89.7
Belgium	EU-SILC	41.0	35.0	54.4	98.0	99.0	99.2
	OECD	44.5	39.2	56.8	100.1	99.0	98.5
Bulgaria	EU-SILC	16.0	7.0	16.2	58.0	54.0	73.6
	OECD	8.7	7.5	16.2	n.a.	80.6	77.7
Croatia	EU-SILC	n.a.	11.0	17.8	n.a.	47.0	51.5
	OECD	n.a.	8.4	20.1	n.a.	59.0	67.7
Cyprus	EU-SILC	19.0	25.0	31.4	78.0	79.0	82.6
	OECD	27.1	30.4	38.5	n.a.	70.1	87.8
Czechia	EU-SILC	2.0	3.0	9.1	70.0	71.0	79.8
	OECD	2.5	4.0	11.0	84.7	79.0	86.7
Denmark	**EU-SILC**	**73.0**	**77.0**	**63.2**	**95.0**	**90.0**	**94.4**
	OECD	**n.a.**	**n.a.**	**56.0**	**n.a.**	**96.9**	**99.5**
Estonia	EU-SILC	11.0	21.0	28.3	78.0	92.0	94.9
	OECD	n.a.	22.8	27.7	83.8	88.9	91.2
Finland	EU-SILC	26.0	28.0	37.1	76.0	77.0	85.9
	OECD	24.6	26.6	33.4	68.1	72.6	82.3
France	EU-SILC	32.0	42.0	50.0	95.0	94.0	95.1
	OECD	43.9	47.9	57.5	100.0	100.0	100.0
Germany	**EU-SILC**	**16.0**	**20.0**	**29.8**	**86.0**	**92.0**	**87.6**
	OECD	**16.8**	**26.8**	**37.7**	**87.6**	**94.2**	**94.2**
Greece	EU-SILC	8.0	8.0	40.9	62.0	69.0	84.1
	OECD	14.0	11.3	44.0	n.a.	56.1	65.3
Hungary	**EU-SILC**	**7.0**	**9.0**	**16.5**	**78.0**	**79.0**	**90.9**
	OECD	**6.6**	**9.6**	**16.5**	**86.8**	**86.7**	**92.2**
Ireland	EU-SILC	20.0	29.0	37.7	78.0	90.0	93.1
	OECD	26.1	29.7	41.3	n.a.	82.4	100.0
	EU-SILC	**25.0**	**22.0**	**25.7**	**91.0**	**87.0**	**88.6**

Italy	**OECD**	**27.3**	**23.3**	**26.1**	**n.a.**	**97.3**	**93.6**
Latvia	EU-SILC	16.0	18.0	27.4	66.0	66.0	86.2
	OECD	18.2	18.7	25.9	77.4	82.1	93.0
Lithuania	EU-SILC	11.0	14.0	20.8	57.0	68.0	80.4
	OECD	13.2	15.6	28.3	58.7	72.3	86.2
Luxembourg	EU-SILC	22.0	36.0	60.5	59.0	79.0	91.3
	OECD	34.8	45.8	63.6	n.a.	89.9	87.2
Malta	EU-SILC	5.0	9.0	32.1	57.0	72.0	91.0
	OECD	n.a.	41.2	54.8	n.a.	98.9	94.3
Netherlands	**EU-SILC**	**40.0**	**50.0**	**56.8**	**89.0**	**91.0**	**95.2**
	OECD	**n.a.**	**54.6**	**58.4**	**n.a.**	**94.3**	**89.4**
Norway	EU-SILC	34.0	48.0	55.6	80.0	81.0	88.3
	OECD	32.7	52.6	57.3	87.7	96.2	97.0
Poland	EU-SILC	2.0	2.0	10.8	30.0	42.0	57.7
	OECD	2.8	3.8	13.5	38.3	59.6	81.6
Portugal	EU-SILC	30.0	37.0	50.2	30.0	79.0	92.6
	OECD	20.5	27.1	39.7	76.6	85.7	91.0
Romania	EU-SILC	6.0	8.0	13.2	57.0	66.0	59.8
	OECD	n.a.	9.7	14.4	n.a.	84.1	80.8
Slovakia	**EU-SILC**	**3.0**	**3.0**	**1.4**	**67.0**	**72.0**	**73.7**
	OECD	**2.9**	**3.0**	**6.6**	**73.3**	**71.2**	**77.6**
Slovenia	EU-SILC	24.0	36.0	46.3	77.0	91.0	93.8
	OECD	24.8	34.0	42.6	75.5	85.8	91.1
Spain	**EU-SILC**	**38.0**	**37.0**	**50.5**	**94.0**	**93.0**	**95.8**
	OECD	**14.9**	**26.3**	**38.2**	**97.6**	**97.1**	**97.5**
Sweden	EU-SILC	52.0	51.0	49.3	87.0	94.0	97.5
	OECD	n.a.	46.5	46.3	n.a.	94.2	93.8
United Kingdom	EU-SILC	29.0	34.0	38.6	88.0	89.0	67.0
	OECD	37.0	40.1	45.1	90.2	92.3	100.0

n.a.: data not available
The countries in bold belonging to the SOWELL project.
Sources: OECD (2022) and Eurostat (2022)

Estimates for some of the countries of the SOWELL project differ depending on the source (OECD and Eurostat). Therefore, it is important to look at nationally collected data as well, presented in the SOWELL country reports.

National data for Denmark show a substantial stability in 0-2 coverage rates over the first two decades of the XXI century.

The ones from the Netherlands, although they refer to the 0-4 coverage rate, confirm a substantial increase in coverage rates from the mid-2000s to the second part of the 2010s: from 46% in 2007 to 67% in 2017.

In Germany, from 2000 onwards, childcare services have been expanding. Childcare reforms helped to expand childcare services especially for the 1-3-year-old children. The attendance in this age group increased from 17.6 per cent in 2008 to 35.5 per cent in 2020. However, there are still large differences between Eastern and Western states and experts unanimously state an unmet demand especially in larger cities in West Germany: 24% of Western German households with children below 3 years declare unmet needs in terms of ECEC places (14% in Eastern Germany) and another 10% declares problems with an hourly demand exceeding supply by at least 5h/week (11% in Eastern Germany).

The growth of ECEC coverage rate in Spain has been impressive over the last three decades. The enrolment rate for 0-2 years old children went from 3.3% in 1990-1991 to 57.4% in 2019-2020. In the case of the second level, at age 3-5, the enrolment rate went from 38.4% in 1991-1992 to 94.1% in 2020-21. In spite of the impact of the financial crisis and austerity policies, the coverage rate increased by 10% during the 2010s.

Data from the Italian National Institute of Statistics (ISTAT) confirm the OECD/Eurostat trends: practically there was no substantial change in coverage rates during the last two decades: publicly funded ECEC services' coverage went from 12.2% in 2007 to 13.5% in 2018. In Italy, children under 3 years of age who attend public or private educational facilities were 28.6% in 2018. Since the municipal educational services or those affiliated with the municipalities welcome 13.5% of children under the age of 3, it can therefore be estimated that the remaining 9.9% attend private educational services (Istat, University of Venice Ca' Foscari and MIPA,2020). Also private provision totally funded by families did not increase over time. Kindergarten's coverage rate has been traditionally high and above 90%.

In Hungary, national data confirm the increase in ECEC coverage rate for children under 3. In 2008, available places in nurseries were 25,937, whereas in 2020 there were around 44,000 places in infant nurseries, (including mini infant nurseries and workplace ones), plus 6,032 places in family infant nurseries. Overall, in terms of 0-2 coverage rates, it meant a shift from 11% in 2007 to 16% in 2019. Also, the number of places in Hungarian kindergartens increased in the last decade. In the 2008/2009 school year, the total number of places for children represented 354,267, whereas in 2019 there were 382,691 places.

Finally, Slovakia's national data show a substantial stability in the coverage rate for children below 3 years: it was around 5% in 2007 and it remained practically to the same level in 2018. The number of children in public kindergartens has been increasing since 2009 but when looking at a longer period of 15 years, this number is stable. In addition, the average participation rate in pre-primary education of children between the age of 4 and starting of the compulsory education stagnates in Slovakia, while in the EU it has been rising. Current capacities of public kindergartens are not sufficient, and the number of unsuccessful applications has increased from 1,679 in 2004 to 12,486 in 2016. The state does not guarantee capacities for children, even though education is mandatory upon reaching six years old in Slovakia.

Overall, when national data are available, on one hand, they confirm the results from the international databases; on the other hand, they help to fill the gaps in missing data for specific years. Table 3 reports a comparative look at coverage rates in the SOWELL project's countries and how they changed over time.

Table 3. Coverage rates in 0-2 ECEC services over time in the SOWELL project's countries: a comparative synthesis

	Coverage rate at the end of the 2010s	Variation in the coverage rate between the 2000s and the 2010s	Role of private provision at the end of the 2010s	Increase in the relative role of private provision between the 2000s and the 2010s
DK	High (around 60%)	Stability	Very limited (below 11%)	Light increase
NL	High (around 60%)	Strong increase (above +10%)	Dominant (above 80%)	Strong increase
DE	Medium (31-40%)	Strong increase (above +10%)	Prevalent (60-70%)	Stability
ES	Medium-High (40-50%)	Strong increase (above +10%)	Medium (45-55%)	Light decrease
IT	Medium-low (21-30%)	Stability	Medium (45-55%)	Light increase
HU	Low (11-20%)	Moderate increase (+5/10%)	Very limited (below 11%)	Stability
SK	Very low (below 11%)	Stability	Dominant (above 80%)	Stability

Denmark and the Netherlands are the two countries with a high coverage, although this result is the outcome of two different trends: substantial stability over time in the former, and a strong increase in the latter. Given that these rates are calculated on the entire 0-2 population and that many countries (especially the Nordic ones) have generous and accessible leave programmes for parents when their children are below one year, a coverage rate around 60% represents an almost universal coverage for children between 1 and 2 years old. At the same time, in the Netherlands, children up to three years of age spend few hours in day care, (also) because many working mothers have a part-time job in the Netherlands.
Germany and Spain have partially followed a similar path: their coverage rate was medium-low in the 2000s and in the first two decades of the XXI century they gave a strong impulse to new nurseries, increasing robustly their coverage rate to a medium level (31-40%).
Italy stands alone as a case with a stagnant medium-level of coverage over time.
Lastly, Hungary and Slovakia, although stemming from very low/low levels of coverage and still characterised by such levels, have partially followed two different paths: Hungary increased to a moderate extent its coverage rate over time, whereas in Slovakia the level remained very low.

2.3.2 Public and private provision

As Table 3 shows, several countries expanded over two decades their coverage, whereas others remained relatively stable. It is important to understand how this growth took place: if through the expansion of publicly run services or through private (contracted-out) provision.
Let us start with the four countries that show an increase in coverage: the Netherlands, Germany, Spain, and Hungary. Again, common trends are not easily detectable. However, marketisation / privatisation was not the main option followed by most countries, although private actors play an important role in most ECEC systems.
The Netherlands stand out as a very good case of strong coverage rate increase through marketization (although children attend formal services for a limited number of hours, as stated above). Since 2005,

the country has adopted a demand-led system subsidising parents who wish to buy childcare services on the market. Although reorganisation of ECEC care on a free-market basis is growing in many Western countries, the Netherlands can be called a champion, together with the United Kingdom, Australia, Canada and New Zealand (Van Hooren, 2021). Overall, the ECEC-system consists of private daycare centers offering care for children between birth and four-years-old, and home care by child-minders. At age four, children are eligible for full-day kindergarten, which is part of the publicly funded primary school system and free of charge. The system for children younger than 4 years was privatised and marketized in 2005. Non-for-profit as well as for-profit organisations make their tariffs. Parents pay directly to day care centres and the Tax Service reimburse partly these costs under certain conditions. Reimbursements are dependent on the income levels of the parents (the lower the income the higher the reimbursement). Over time, the demand-led model of childcare led to more 'for profit' organisations: from 40% in 2003 to 70% in 2010.

Germany followed only partially the Dutch coverage growth model. In 2020, ECEC service providers were public in 32.7% cases, whereas most of them were non-profit (64.2%), and only 3.1% for-profit. Germany has had historically a social services system centred on a mixed provision, with the prevalence of non-profit providers. Therefore, in this respect the growth of ECEC services followed such a traditional approach.

In Spain, as well as in Hungary, the increase of coverage rate did not come at the expense of a drop in public provision. In Spain, 52% of children 0-2 years attended at the end of the last decade public facilities and the relative share of direct public provision increased over time. In Hungary, public actors (municipalities) provide most of the nurseries and kindergartens. For instance, only 10% of children were enrolled in 2016 into private kindergartens. The relative weight of private provision did not change strongly over the last two decades.

Looking at the three countries where no particular increase in coverage rates took place, Denmark keeps on appearing as a country with a limited private provision, only slightly increasing over time, although a change in the legislation allows since 2006 the creation and running of private care centres for children age 6 months until school age, if the municipality approves of the care centre. Competitive exposure through public procurement has also been limited in ECEC services. Moreover, since 2020 private institutions have been prohibited from drawing profit from offering childcare.

Slovakia can be considered as an opposite case to Denmark: private providers (82% of places) mostly run the few nurseries present in the country. However, the kindergarten system is almost totally public (92% of places).

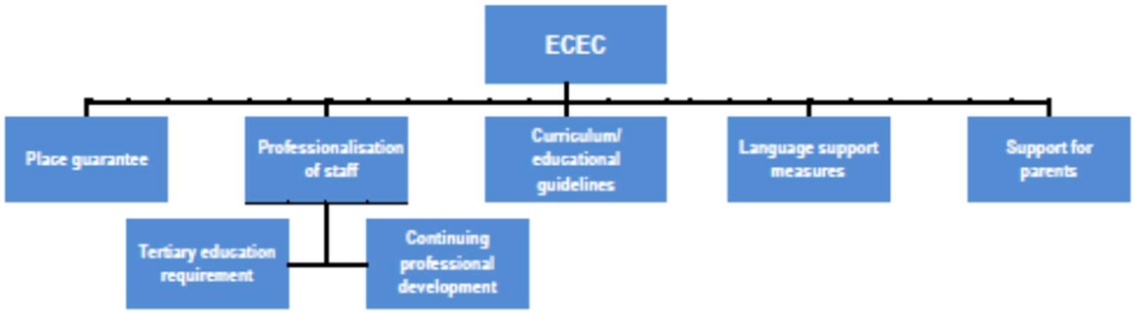
In Italy, the composition of the offer in ECEC services for children below 3 years shows a prevalent public provision – including those contracted-out - (58%) compared to private ones (42%). Practically, the situation remained the same since the mid-2000s. However, due to the freezes in hiring during the austerity years there was an important change among publicly funded places: if in 2012 54% of them were run directly by municipalities, the share was equal to 49% in 2019. In other terms, contracting-out speeded up over the last decade. In kindergarten, the supply remains mostly public (71% of children in 2015) and it is largely publicly funded.

2.4 Quality of services

In order to study the quality of ECEC services we have adopted the framework proposed by Eurydice (2020; 2022) (see Figure 2), which distinguishes among five dimensions (legal entitlement to a ECEC place; professionalisation of staff - by looking at requirements concerning a tertiary education degree for workers and continuing educational development; the presence of curriculum/educational guidelines; language support measures; support for parents).

To this Eurydice framework, we add two further information: to what extent ECEC services for children aged 0-2 years are considered "education" or "care"; what the children-to-teacher ratio is in these services as well as in those for children aged 3+ years.

Figure 2. The quality of ECEC services: an analytical framework



Source: Eurydice (2020; 2022)

Table 4 reports the situation in the EU, including also the UK and Norway. Only half of European countries have introduced a universal entitlement to ECEC: among them, there are three SOWELL countries: Denmark, Germany, and Spain. Furthermore, only nine countries (including Germany and Denmark, but not Spain) have a universal entitlement to ECEC for children aged below 3 years.
Also, a compulsory age for ECEC is not very common (it is present in around 58% of European countries): among SOWELL countries it is present in Hungary (starting at the age of 3 years), Slovakia, and the Netherlands (at the age of 5 years).
Usually compulsory primary education starts at 6 years, although it is set at seven years in around a quarter of European countries (it is never the case among SOWELL countries).
The level of qualification required to staff members is also heterogeneous. There mainly three groups of countries: around one third does not require to have at least one staff member with a tertiary qualification in education sciences (Denmark, and Slovakia among them); around 30% requires such qualification only for kindergarten (Spain, Hungary, and the Netherlands among them; Italy changed only recently); around 38% has such requirements also for nurseries and other educational services for children aged 0-2 (Germany among them). Continuing professional development for teaching staff is prescribed in most countries (around 80% of them), often both for nurseries and kindergarten. However, Denmark, Germany and the Netherlands are among the few countries that have not introduced such a requirement.
The definition of curriculum or educational guidelines has become very common: all countries have them, and it is defined in around 70% of countries both for nurseries and for kindergarten. In this case, Italy, Slovakia and the Netherlands are the countries where educational guidelines are present only for kindergarten, although educational guidelines for ECEC services for chidren aged 0-6 (therefore including 3-6) have been approved in 2022 in Italy.
Language programmes as targeted support are offered practically in all countries, often both in nurseries and kindergarten. Italy, Hungary, and Slovakia are among the countries (38% of all EU countries) offering these programmes only in kindergarten.
Parental support programmes have been introduced in half of the countries. Where they are provided, they are offered both at nurseries and at kindergarten's levels. Denmark, Italy, the Netherlands, and Slovakia are among the countries that do not offer these services at least in terms of national legislation requirements.
Finally, information on the students-to-teacher- ratio is available for kindergarten in most countries, whereas they are scarcer when it comes to nurseries. In relation to the former (services for children between 3 years and compulsory primary school), the average ratio in the EU is around 13 children for each teacher. At the same time, in 20% of countries this ratio is equal to or below 10 children for each teacher: Denmark and Germany are among this group. At the same time, among the SOWELL countries, the Netherlands stands out of the relatively high ratio (16.1 children for each teacher).

Table 4. Selected ECEC quality aspects (year 2020/21) (children's starting age in years/months)

Country	Universal entitlement to ECEC (a)	Compulsory ECEC	Compulsory primary education	At least one staff member with a tertiary qualification in education sciences	Continuing professional development as duty or necessary for promotion	Curriculum or educational guidelines	Language programmes offered as targeted support*	Parent support: parenting programmes*	Ratio of pupils to teachers: children below 3 years (b)	Ratio of students to teachers: pre-primary education children 3+ years) (b)
AT		5y	6y		0+ years	0+ years	0+ years	0+ years	8.9	13
BE	2y 6m	5y	6y	2.5+ years	0+ years	0+ years	2.5+ years	2.5+ years	n.a.	14
BU		5y	7y	0+ years	3+ years	3+ years	3+ years	3+ years	n.a.	12.1
HR		6y	7y	0+ years	0+ years	0+ years	0+ years	0+ years	8.2	10.7
CY		4y 8m	5y 8m	3+ years	3+ years	3+ years		3+ years	10.9	14.6
CZ	3y	5y	6y		3+ years	3+ years	3+ years		n.a.	13
DK	**6m**		**6y**			**0+ years**	**0+ years**		**5.2**	**10.3**
EST	1y 6m		7y	0+ years	0+ years	0+ years	0+ years	0+ years	n.a.	n.a.
FI	9m	6y	7y	0+ years	0+ years	0+ years	0+ years		n.a.	9.2
FR		3y	6y	0+ years	0+ years	0+ years	3+ years	0+ years	n.a.	23.3
DE	**1y**		**6y**	**0+ years**		**0+ years**	**0+ years**	**0+ years**	**4.9**	**9.3**
EL		4y	6y	4+ years	4+ years	4+ years	4+ years		n.a.	10.1
HU		**3y**	**6y**	**3+ years**	**0+ years**	**0+ years**	**3+ years**	**0+ years**	**14.7**	**12.7**
IE			6y			0+ years			n.a.	n.a.
IT			**6y**	**3+ years**	**3+ years**	**3+ years**	**3+ years**		**n.a.**	**12.0**
LV	1y 6m	5y	7y		0+ years	0+ years	0+ years		7.2	9.8
LT		6y	7y	0+ years	0+ years	0+ years	0+ years	0+ years	9.7	9.8
LUX	3y	4y	6y	3+ years	0+ years	0+ years	0+ years		n.a.	11.8
MT			5y		3+ years	0+ years	3+ years	0+ years	n.a.	11.2
NL		**5y**	**6y**	**4+ years**		**4+ years**	**0+ years**		**n.a.**	**16.1**
NO	1y		6y	0+ years		0+ years	0+ years		7	12.1

PL	3y	6y	7y	3+ years	3+ years	3+ years	3+ years		n.a.	14.5
PT	3y		6y	0+ years	3+ years	3+ years	0+ years		n.a.	15.9
RO		5y	6y		0+ years	0+ years	3+ years	0+ years	25.2	15.2
SK		**5y**	**6y**		**3+ years**	**3+ years**	**3+ years**		**n.a.**	**11.6**
SI	11m		6y	0+ years	0+ years	0+ years	0+ years	0+ years	11.6	20.6
ES	**3y**		**6y**	**3+ years**	**3+ years**	**0+ years**	**0+ years**	**0+ years**	**9.1**	**14.0**
SW	1y	6y	7y	0+ years		0+ years	0+ years		12.9	14
UK	3y		5y	3+ years	0+ years	0+ years	0+ years	0+ years	31.4	39.7

(a) A universal legal entitlement to ECEC exists when every child of a certain age has an enforceable right to benefit from ECEC provision.
(b) Data from Eurostat (2022)
* Data refer to 2018/19
Blank cells: no regulation
The countries in bold belonging to the SOWELL project.
Source: Eurydice (2020; 2022); Eurostat (2022)

As mentioned, it is harder to describe the situation in relation to nurseries for the lack of comparable data, available only in half of the countries (among them also Italy, the Netherlands, and Slovakia). The average ratio for the countries where data are available for nurseries is around 9 children for each teacher. Hungary presents one of the highest ratios (14.7), whereas Germany and Denmark show the lowest ones (around 5), and Spain is around 9. At the same time, there is a very high correlation (.813) between the ratio for nurseries and the ratio for kindergarten for each country, when data are available. Therefore, when the data for nurseries are missing, it is possible to infer by looking at the data for kindergarten in the same country.

Given this general comparative view to the issue of quality of ECEC services, we can look more in detail to the situation in the countries of the SOWELL project. Table 5 proposes a way to rate the service quality in the seven countries, based on most indicators reported in Table 4: we have only excluded the dimensions of parental support and languages programmes because they might be offered at the local level and they do not result in national comparative analyses. Below the Table 5, there are the explanations for the score's assignment to each dimension. Germany is the country that reaches the highest score (88.3 points out of a potential maximum of 100 points). Then, it follows Denmark (71.8). Hungary (68.0) and Spain (64.3) show relatively good scores, whereas Italy (59.3), Slovakia (55.2), and especially the Netherlands (42.9) present lower scores.

Looking more in detail at the single countries, thanks to the SOWELL country case reports, Denmark and Germany are the two countries that present a high level of service quality, although in both countries there are challenges.
The Danish service quality model appears clearly. On one hand, it is based on a universal entitlement to ECEC from 6 months of age and a very low students-to-teacher rate, which ensures a potentially very good interaction between staff and children. On the other hand, it has left a relatively large autonomy to municipalities in defining other aspects of service quality (for instance, teachers' qualification). However, the last decade witnessed an increasing attention by Danish governments to the service quality issue. In fact, one of the main topics in the Danish political arena in the last ten years has been in terms of structural quality focussed on sufficient care to size of child population

and ratio of care workers to group size of children. The number of family day carers decreased significantly while the number of pedagogues slightly increased in just a little over a decade. The structural reform of Danish local government implemented in the years 2004-2007 meant that many day care institutions were merged into larger units, meanwhile budgetary restrictions on municipalities were introduced in 2009 meant poorer coverage (ratio of staff per child), less trained staff, earlier transition of children from nursery to kindergarten and/or more closing days. The most recent developments in legislation on the ECEC sector have aimed at securing sufficient staff per number of children and securing sufficient educated staff.

Table 5. Selected ECEC quality aspects (year 2020/21): how SOWELL countries score (standardised scores)

Country	Universal entitlement to ECEC (a)	At least one staff member with a tertiary qualification in education sciences	Continuing professional training	Curriculum or educational guidelines	Ratio of children to teachers: kindergarten children 3+ years	Total score	Total score on a 0-100 scale
DK	2	0	0	2	9	13	71.8
DE	2	2	0	2	10	16	88.3
HU	0	1	2	2	7	12	68.0
IT	0	1	1	1	8	11	59.3
NL	0	1	0	1	6	8	42.9
SK	0	0	1	1	8	10	55.2
ES	1	1	1	2	7	12	64.3

Score assignment: for the "Universal entitlement", "Tertiary qualification of staff", "Continuing professional training", and "Presence of educational guidelines" dimensions, the score goes from 0 (absence of any regulation), to 1 (presence of the regulation but only for children aged 3+ years), and to 2 (presence of the regulation starting from nurseries); given the importance of the students-to-teachers ratio in kindergarten, it has been assigned to this indicator a 0-10 score (where 10 was given to the country with the lowest ratio in the EU - as shown in Table 4, it is Finland with a 9.2 ratio).

One important innovation that took place in the last decade in Denmark was the introduction of educational guidelines. In 2016, policies formed under a liberal-conservative government introduced pedagogical curricula in day care and also introduced measures to improve supervision and the securing of service quality. Amongst other, the government introduced a Forum for Quality in Daycare including local government representatives, trade unions, and other civic society organisations. The forum has actively engaged in developing standards for pedagogical curricula, conducted evaluations and developed tools for improving local supervision of quality of day care. A new central government task force has been formed offering supervision for municipalities. In December 2020, the social democratic government reached a political agreement with other parties securing minimum staffing requirements by legislation in 2024. The agreement also includes funding

for implementing the requirements in the period 2020-2023 corresponding to more than 3,900 additional pedagogical staff in the day care institutions in 2024 (Ministry of Children and Education, 2020). The agreement also aims at improving the number of educated pedagogues and child careers by securing additional funding to municipalities for increasing the average number of educated child-care staff. Finally, the agreement stipulates rules to prohibit private institutions from drawing profit from offering childcare. Furthermore, with this new agreement, the forthcoming legislation on minimum standards will secure children who start in kindergarten before the age of three one pedagogical staff per three children as an annual average in the municipality. The introduction of minimum staffing requirements by law is to safeguard against local savings and to secure more equal standards in service coverage and quality across municipalities. The introduction of minimum staffing requirements is a structural strengthening of quality in services. Moreover, previous initiatives taken by the liberal-conservative government introduced pedagogical curricula in day care and introduced measures to aid municipalities in supervision and the securing of service quality in day care. Overall, the combination of introducing curricula and strengthening municipal supervision of quality of services together with minimum staffing requirements will strengthen service quality.

As Table 5 shows, Germany is the country that stands among the SOWELL countries as the best in terms of service quality required and offered. It practically presents the same institutional facets of the Danish system, but it also prescribes the presence of at least one staff member with a tertiary qualification in education sciences both in nurseries and kindergarten. However, there is a quality difference between childcare for children 1-3 in nurseries (and by childminders) and children 3-6 in kindergarten. The latter show higher professionalization with regard to the staff and services offered. Overall, throughout the last years, a change in the political and public framing of ECEC has occurred. While originally ECEC was understood as care, supporting family care by mothers, public childcare is now attributed a central role in early education as it should compensate in part for a quality of education, which families for different reasons cannot provide. This paradigm shift served to force expansion of all-day care, to expand childcare services for children aged 1-3 years old, and to set up and increase early childhood education study programmes at universities. In 2019, the so-called "Gute Kita-Gesetz" was introduced, aiming at high quality of care provision by better staff/children ratios, further education for childcare workers, and providing specific offers such as language training for children with specific needs. The SOWELL country case study shows that, on one hand, there have been improvements in terms of ensuring service quality; also in day-care centers the majority of the staff is trained. However, on the other hand, there are still critical issues at stake. First of all, the majority of service provision in centre-based care in Germany is still half-day (usually in the morning) and hence does not meat the demand of working parents as reports show: 10% of parents with children aged 1 to 2 years, and 18% of parents with children aged 3 years or older report a higher demand than exceed the supply by at least 5 hours per week. Second, there is still a shortage of places in nurseries, especially in West Germany (unmet demand for 24% of families with children aged 1 to 2. Third, small initiatives (often run by parents) as well as childminder groups seem to provide often a less professional care: for small initiatives often run by parents, the experts interviewed report concern regarding professionalisation, since parents as 'employers' or board members supervising trained employees do not act on a professional ground.

Spain and Hungary present a medium-to-high level of service quality. In particular, Spain has a universal entitlement to ECEC starting at 3 years of age, high educational requirements for staff members, and educational guidelines. However, the ratio of students to teachers both in nurseries and kindergarten is quite higher than in Germany and Denmark and in comparative European perspective. Furthemore, the process of political and territorial articulation of competences after the approval of the Spanish Constitution (1978) decentralised many policies, including those related to education and social services. This choice has led to a heterogenous map of social services and education regulation and provision (Álvarez et al., 2020). In particular, in the absence of a general regulatory framework, all Autonomous Communities, in their respective education laws, establish in detail the contents of 0-2 level ECEC services. In terms of service quality regulation, there is a framework standard on

minimum requirements for schools and another on the curriculum for the second level, while in the 0-2 level the Autonomous Communities are responsible for determining these requirements. Thus, Royal Decree 1630/2006 defines the objectives, aims and general principles of the 3-5 level. The curriculums must be developed by the Autonomous Communities. On the contrary, in 0-2 level both the contents and the minimum requirements of the centres are regulated by the Autonomous Communities. At the first level, the respective educational administrations of Spanish regions must establish the contents and regulate the requirements that the centres must meet to teach the level, as well as the numerical ratios pupils-teacher, the infrastructures and equipments and the number of school places, without any specific national basic regulation about these issues. Even so, there have been changes in the legislation in the last 15 years. The Education Law of 2002 of the Partido Popular established two levels, preschool education and early childhood education, the first being of a welfare and educational nature. The Education Law of 2006 of the socialist party (defined early childhood education for the first time in its current format, but with limitations. First, the Law left regulation of 0-2 level in hands of regional governments, differentiating it from the rest of educational levels. In second place, there were no requirements or educational inspection for this level. Finally, it defined with ambiguity the kind of staff that has to be involved: 'staff with appropriate qualifications to attend these children'. This poor definition had negative effects on professional recognition and qualification of workers at this level. In respect to service quality, a major change took place in 2020, with the most recent Education Law introduced that year by the Socialist Party. This law attempts to strengthen ECEC services at the 0-2 level. Although it is still non-compulsory, the goal is to make it universal, guaranteeing a "public, sufficient and affordable" offer of places. Furthermore, the new education law stresses the educational character of 0-2 ECEC services, while the previous legislation considered them more as welfare, introducing the obligation to define a pedagogical proposal elaborated by the educational centres.

In Hungary, there is no universal entitlement to ECEC. However, most children aged 3 years or more attend. Educational guidelines are present both for kindergarten and nurseries, whereas educational requirements for staff apply only to kindergarten. Hungary has also a relatively high ratio of students to teachers both at the nurseries and kindergarten's levels.

Italy and Slovakia present a partially lower level of ECEC service quality than Spain and Hungary. Italy does not have any universal entitlement, although more than 90% of children aged 3 to 5 years attend kindergarten. Tertiary education requirements and educational guidelines have been present until very recently only for teachers in kindergarten. The teacher to student ratio is relatively high (12.0 in kindergarten), although the ratio regionally differs in the case of services for children aged 0-2. However, there have been policy changes in recent years that have attempted to improve ECEC service quality. First, educational guidelines were introduced in 2022 for nurseries. Second, in 2017 an "integrated education and training system from birth up to six years" was introduced, aiming at reducing the traditional split of the ECEC services in two segments or educational cycles (0-2 years and 3-5 years). 2017 legislation emphasises the importance of "pedagogical, didactic and educational continuity" between the two educational ECEC cycles, promoting also the creation of public, unitary ECEC institutions, comprising both services for children up to 3 years old and those for children between 3 and 6 years old. However, and despite some services organised in the same way in the private sector, the structural integration, into unique institutions, between services for children up to 3 years old and services for children between 3 and 6 years old are still exceptions among the ECEC services. Furthermore, the 2017 reform explicitly recognized that ECEC services for 0-3 year old children are "educational" and not "socio-educational" services (or even "social", as they were considered in the past). This justifies a greater role of the Ministry of Education, and therefore that of central Public Administration in the regulation of ECEC services for children up to 3 years old has gradually increased in the last years. In recent years to improve the service quality there has been an introduction by law to increase the educational level of teachers and educators. Kindergarten teachers graduate in a 5-year master course, which is the same required to primary school teachers. From 2021-

22, a 3-year degree is required for educators in nurseries and other services for 0–2-year-old children. Before 2021-22, educators in nurseries did not need to be graduated.
Slovakia has to a limited extent invested in ECEC service quality: no universal entitlement to ECEC is present, nor educational requirements for staff members. Educational guidelines are present in kindergarten. The ratio of students to teachers in kindergarten is higher than in Germany or Denmark, but it is lower than in all other SOWELL countries. In recent years, a growing attention has been paid to ECEC quality in Slovakia, although major challenges are still ahead. Current capacities of public kindergartens are not sufficient, and the number of unsuccessful applications has increased in the last two decades, especially in the capital Bratislava. Since September 2021, all 5-year-old-children are required to attend kindergarten, but there is a place shortage that makes it difficult in several geographical areas to enforce such requirement/entitlement. The content of pre-primary education quality was specified in the state educational program, approved in June 2008, which defined curriculum and requirements for all children attending kindergartens, including the basic minimum required competencies that children have to handle. In 2016, the Ministry of Education approved a new school educational program for pre-school education valid for all kindergartens since September 1, 2016 (Štátny pedagogický ústav 2016). Next to a detailed description of curriculum, the state guarantees the quality of all pre-primary institutions, which are part of the school network (schools formally accredited by the Ministry of Education, Science, Research and Sport to provide education and care in the country.
Along a continuum of ECEC service quality among the seven SOWELL countries, Denmark and Germany are positioned at one (medium-high) end of the continuum, and the Netherlands place themselves at the opposite end. There is no universal entitlement to ECEC, the requirements for staff qualification are applied only for ECEC services dedicated to children aged at least 4 years, the ratio of students to teachers is relatively high. Pedagogical staff working in ECEC are required to have an upper-secondary vocational education level 3 degree covering certain topics relevant to the development of a child. In homecare by child-minders upper-secondary vocational education level 2 is required (just since 2010). These requirements in the Netherlands seem quite low compared with Germany and Denmark. Furthermore, two other features help to such an overall assessment of the Dutch case. First, in the Dutch childcare sector the distinction is made between working parents and non-working parents, with tax reimbursements for childcare only available for single working parents and both working parents. Second, children till three years old are going for little hours to day care, (also) because many working mothers have a part-time job: EU-SILC Eurostat data (2022) show that on average children aged below 3 years and those aged between 3 and 5 years attended ECEC services respectively for around 17.1 and 22.1 hours per week (the average EU situation is respectively: 28.7 hours and 30.9 hours; in all other countries of the SOWELL project, with the only exclusion of Spain, the amount of hours is above 30). In 2021, the tripartite Socio-Economic Council made a plan for reforming childcare in the Netherlands. This plan proposed the idea to provide for 2 days childcare a week for children from 0-4 years old, financed by public funds. For the Netherlands with a not that high level of childcare facilities, this is a step towards growth in a more universal system with more investments. Remarkably, the government want to keep the subsidy-condition that parents do have a job, what is limiting the universal access among young children.

2.5 Quality of work: labour market characteristics and working conditions

Comparative research on the quality of working conditions in the ECEC sector is still limited. One of the few available indicators that can be used for a first comparative assessment of quality of work in ECEC services is provided by OECD and it relates to the level of salaries in pre-primary education, compared with the salaries of teachers in other levels of education and to earnings for full-time, full-year workers with tertiary education. As Table 6 shows, there are fundamentally three clusters of countries. First, there is a group of countries where teachers of all levels have salaries quite lower (at least 25% less) than workers with tertiary education.

Table. 6 Statutory salaries* relative to earnings for full-time, full-year workers with tertiary education (2019)

Country	Pre-primary	Primary	Lower secondary general	Upper secondary general
Austria	0.62/0.65**	0.65	0.68	0.74
Belgium (Flemish	0.85	0.85	0.85	1.09
Czech Republic	0.53	0.59	0.59	0.59
Denmark	0.66	0.77	0.78	0.82
Finland	0.63	0.81	0.87	0.94
France	0.69	0.69	0.74	0.74
Germany	0.91/0.96**	0.96	1.04	1.08
Greece	0.73	0.73	0.73	0.73
Hungary	0.47	0.47	0.47	0.52
Ireland	1.00/1.06**	1.06	1.07	1.07
Italy	0.67	0.67	0.73	0.75
Lithuania	1.12	1.12	1.12	1.12
Luxembourg	1.66	1.66	1.78	1.78
Netherlands	0.78	0.78	0.93	0.93
Norway	0.65	0.70	0.70	0.77
Poland	0.66	0.66	0.66	0.66
Portugal	1.28	1.28	1.28	1.28
Slovak Republic	0.44	0.54	0.54	0.54
Slovenia	0.94	0.98	0.98	0.98
Spain	1.11	1.11	1.24	1.24
Sweden	0.74	0.81	0.84	0.84
United Kingdom	0.99	0.99	0.99	0.99

* In Denmark, there is no statutory salary based on legislation. The information refers to sector collective bargaining.
** Given that data are missing in Austria, Germany and Ireland for pre-primary school teachers' salaries, two estimations have been calculated: one assuming that pre-primary school teachers receive a salary that is 5% lower than primary school teachers (the -5% value is the average one among the countries providing the information on salaries and that are included in the Table); one assuming that pre-primary school teachers receive the same salary of primary school teachers (as it is the case in most countries providing the information on salaries and that are included in the Table)
Source: OECD online Dataset: Teachers' statutory salaries

This is especially the case of many Central-Eastern European countries (including Slovakia and Hungary), where teachers receive salaries 40-50% lower than the average for tertiary education workers. However, there are also Western European countries where teachers' salaries are quite

below the average, Italy being one of them. Usually in this first cluster, pre-primary education teachers are paid similarly or even less than other teachers.
There is then a second cluster of countries where teachers in general are paid less than the average of workers with tertiary education, but not as low as in the first cluster (usually they are paid between 5% and 20% less). However, in this cluster, that includes Denmark and the Netherlands, pre-school teachers have salaries quite lower than teachers from other levels of education.
Finally, there is a third cluster where teachers salaries are similar, if not higher, than the ones of workers with tertiary education, and also pre-school teachers are usually paid according to these wage levels. Germany and Spain are part of this group.
Using the information collected through the country case studies, and looking at the ECEC labour market structure in SOWELL countries, it appears that such labour market is characterised by a strong presence of female workers, few of them having a migrant background. The average age is variable across countries. Moreover, the lack of turn over after the austerity measures implemented last decade determined a strengthening of an ageing problem among ECEC workers. In some countries such as Denmark, the Netherlands and Spain the average age is relatively low, because these countries started in advance the process of reassessment of the ECEC services and their workforce, instead in countries like Italy and Hungary this process has started only after 2008, and the outcome is a highly aged workforce.
A relevant issue for ECEC services in many countries is the difference between 0-2 services and 3-5 services, given that the first segment is in many countries considered only partially education, but a welfare service.
In Denmark, the main occupational groups include pedagogues, which are comparable to pre-school teachers, pedagogical assistants, day care assistants and family day carers, a group of pedagogical managers are also included. These occupational figures required a college degree Day care assistant work in day care centres alongside other trained staff and requires no formal further training. Family day carers are employed by the municipality, and must be approved by the municipality. However, the position requires no formal further training. The number of family day carers have decreased significantly while the number of pedagogues have slightly increased.
Looking at the Dutch case there are around 110,000 people employed in the sector: 88,000 of them are pedagogical workers. The Netherlands are characterised by strong diffusion of part-time work. The childcare labour market is very flexible; indeed there has been an increase over time in temporary contracts.
In Germany, employment in the service sector is growing, with an increase rate of around 90% since 2006. In 2020 employment reached a peak with 785,670 persons.
From 2010 to 2020 there has been +77.5% in hirings. Additionally, from 2006 to 2020 an increase in employment can be observed in the pedagogical and managerial staff (+92%/675,600 employees in 2020) representing the largest share of staff (86 per cent) in day-care centres (DJI 2021). This expansion can be attributed to reform legislations in 2005 and in 2008, establishing a right of half-day childcare for children aged 3-6 years. While in 2011 small teams/units comprising less than 14 trained employees were dominating, in 2018 roughly 25 % of childcare institutions had more than 14 trained employees. Especially non-profit providers tend to have larger teams. There is a slight change towards professionalisation as the share of personnel with university degrees in pedagogics and educational sciences increased from 3.2% (2006) to 5.6% (2018).
In Italy the characteristics of the labour market in the ECEC sector varies between public and private providers. In the public services, after the financial crisis of 2008, there has been a restriction on recruitment with only one new hire allowed for every four retiring and this has created limitations in stable staffing levels (Eurydice, 2021). After 2008, there has been a strong increase of temporary contracts, to handle working costs. This change impacted on the workforce composition. The total number of teachers in 0-3 education services in 2019 was 35,034. 13,053 of them were in public services and 21,981 in private services. In 2014 the total number of educators was 33,429. In public services educators were 12,720 and in the private services educators were 20,709. From 2008 to 2019

the tertiary-educated grew gradually and the lower secondary educated remained very few. Instead, the percentage of the employed having an upper secondary education also decreased gradually. This data is related to the increase of the required tertiary education level to access the teacher profession both in the age segment 0-2 and in the age segment 3-5.
In Hungary, between 2008 and 2016 the number of educators increased visibly from 5,788 to 7,365. During this period, the ratio of professional educators, or skilled caregivers increased too, and that from 88.0% in 2008 to 98.5% in 2016. In the Hungarian nurseries, the most developed employees are professionals, or skilled caregivers. The family infant nurseries employed in 2017 were 1,513, whereas in 2018 this number represented 1,466, in 2019 is visible a massive change, in comparison to the previous year, because the employment level was at the number of 1,770. In 2020 there was an increase in the number of employed educators, and family infant nurseries employed were 1,343 employees. In day care for children institutions, in 2017 there were 270 employees and in 2020 they decreased to 156 employees. In infant nurseries, there is a very small workforce. The employment level in kindergartens has a swinging trend. In the school year 2008/2009 the total number of employed teachers in kindergartens were 29,860 employees. Then, there was a growth until 2015/2016, reaching a peak number of 31,484 employed persons. Afterwards, a slight decrease took place in the number of employed teachers.

Shifting the attention to working conditions in the ECEC system, what can be observed in many countries is a worsening of working conditions that involve salaries, workload and contracts, affecting strongly the quality of the employment. Looking at the results emerging from the SOWELL case studies, quality of work is very different among the seven countries.
In Denmark, working conditions in ECEC services are overall homogeneous and protected in both the public and the marginal share of private services outsourced. In ECEC services, the main job-related issue concerns the high rate of part-time work in the sector. In the fall of 2020, LGDK and trade unions within a project called 'A Future with Full Time' have initiated a general effort to increase full time employment among municipal employees. The effort has a broad approach including working time culture, life course needs, employee involvement and work environment perspectives. Pedagogues in ECEC services are a group that receives particular attention. All 85 percent of the municipalities have more than half of their pedagogues employed part time. Both labour shortage (shortage of labour in general) and skill shortage (shortage of qualified labour) represent core issues, due to an ageing workforce, problems in attracting people to the occupation, and a part-time culture in the sector. The actors in the area, primarily the government (Ministry of Social Affairs) and the social partners, but to some extent also the training institutions, have taken a number initiatives to address this problem. In particular, the social-democratic government, which took office in June 2019, has committed itself to increase the staff/user ratio in the public sector, putting further pressure on labour supply.
In the Netherlands, working conditions in ECEC are fragmented and display a marked deterioration. The ECEC is a private and commercial sector in the Netherlands, where a demand-led system subsidising parents who wished to buy childcare services on the market was implemented in 2005. The privatised system raised issues in working conditions given that it challenged the extension mechanism in the application of collective agreements. In fact, when new players entered the social dialogue arena in the ECEC sector (BvoK), traditional union FNV accused BvoK of facilitating a race to the bottom in working conditions searching for yellow unions available to sign pirate contracts. This pirate contract is not allowed by the government because of the making of the other collective agreement legally binding for all employers and employees in the ECEC sector.
In Germany, the main issue affecting the ECEC sector is labour shortage that has been identified also as the cause for the perception of and rise in stressful working conditions. Hence staffing is still on the political agenda of Central and State Ministries of Education as well as between employers and unions. In the ongoing discussions defining 'adequate levels of staffing' has proved difficult, as demands in childcare facilities differ depending on the socio-structural composition of the children,

the size, and the location (larger and smaller cities, more or less segregated neighbourhoods) of the facilities. Overall working conditions in ECEC are rather homogeneous given that the religious non-profit organisations, which do not have to follow the general collective agreement framework relevant for the public workforce, nevertheless refer to these agreements. Hence, public sector childcare collective agreements tend to set standards in wages and can serve as a blueprint for the labour regulations in Christian as well as other non-profit organisations.
In Spain, the wage level of ECEC educators set in the XII National collective agreement of childcare and education centres is one of the main problems when it comes to employment conditions, as it is close to the national minimum wage. This low wage level has been the objective of negotiations between social partners to establish a minimum differential due to the latest increases in the national minimum wage by the central government. In the public sector, wages are higher than in the private sector, although these wages have a high disparity across Spanish regions, due to territorial bonuses provided. Accordingly, another demand of unions is the equalisation of working conditions between Autonomous Communities. However, in some cases trade unions have used these regional differences in order to demand improvements in those regions with lower standards and the extension of these better employment and working conditions for the rest of the Spanish regions.
In Italy, working conditions in ECEC suffer from a huge deterioration and fragmentation due to the spreading application of private sector national collective agreements instead of the one applied in the public sector. The private sector NCAs set systematically lower terms and conditions of employment compared to the public sector: they establish an average of 38-40 hours of weekly work for educators and kindergarten teacherd (36 in the public sector NCA for local government and even less in the school NCA adopted in the State kindergartens), with a monthly distribution of working time that can fluctuate and the daily shifts are flexible. Furthermore, a significant share of employees normally works part-time. This has also repercussions on the income stability of these workers since working hours are scarcely predictable and workers are only paid according to the number of hours they have actually worked. Furthermore, in the private sector, the pace and the intensity of work are reported to be higher than in the public sector.
Partially poor working conditions are reported also in Hungary and Slovakia.

2.6 The ECEC quadrilemma: a synthesis and major outcomes

Figure 2 reports on a 0-100 scale how the seven countries of the SOWELL project fare on each dimension of the quadrilemma for ECEC services: public expenditure (relative to GDP), childcare coverage (for children below 3 years of age), quality of ECEC, and quality of working conditions (this latter dimension has been measured according to the level of salaries for pre-school teachers, given the absence of other indicators on the topic).
Practically, the seven countries have found different ways to tackle the ECEC quadrilemma.
On one hand, there is Denmark that tries to "square" the quadrilemma putting efforts on all four dimensions, but partially sacrificing jobs' quality (in terms of pre-school teachers salaries) to the other three dimensions. In the Danish case, salaries are set through the voluntarist bargaining system, which has not been able to lift wages to the same extent as government policy have lifted the other dimensions in recent years.
On the other hand, there are Slovakia and Hungary, where on all four dimensions there are clear signs of a lack of investment (the regulation of services' quality being the only partial exception). In the middle between these two extremes there are the other four countries. The Netherlands in order to have a high coverage, but containing expenditure, has chosen a path of relatively medium-to-low service and job's quality. Germany seems to follow an opposite path: in order to keep / to improve service and job's quality, it has partially sacrificed coverage (although the latter increased steadily over the last decade). Italy resembles Germany but to a smaller scale in all four dimensions, trying to contain a possible worsening, which could involve especially job's quality.

Finally, Spain is an interesting case that, however, needs further data to be fully analysed. Coverage has been expanded and it has reached a medium-high level. Service quality is at a medium-high level as well. However, expenditure is still comparatively low. Job's quality remains a big puzzle: looking at OECD data it seems high, but the information collected through the SOWELL project provides a very different view. Part of the reason lies on the fact that there are relevant differences between salaries in the public sector and the private sector (and within the private sector, between State-funded education and the rest of private schools, especially in 0-2 level) in the Spanish case. OECD data refers to public sector, where working conditions are good in terms of salaries, when comparerd to the private sector.

Figure 2. The ECEC quadrilemma in the SOWELL countries: end of the 2010s

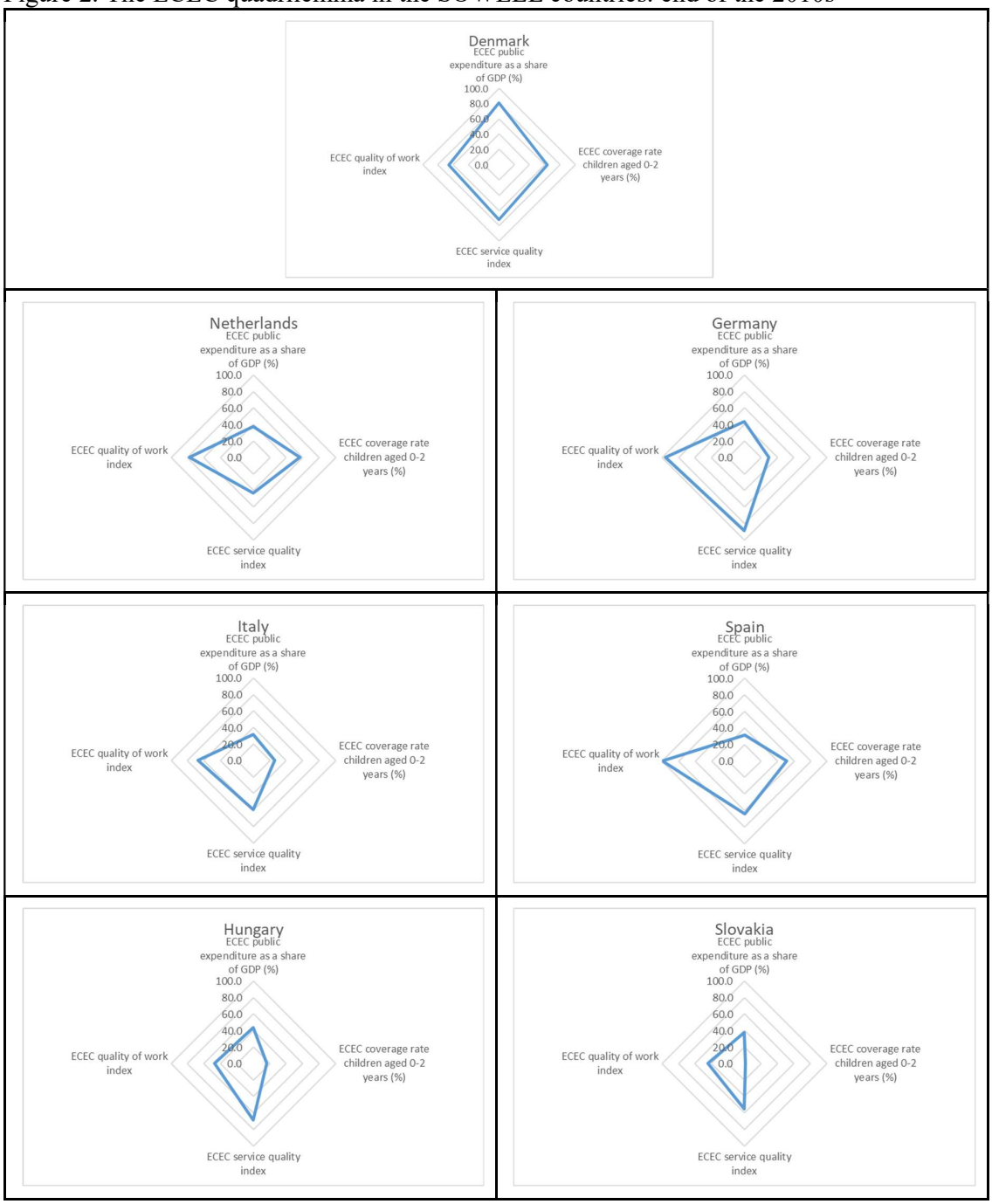


Table 7 reports the data presented in Figure 2 for the 2010s and it provides insights over trends between the mid-2000s and the end of the 2010s. It is possible to use quantitative data for two indicators (expenditure and coverage), whereas for the other two it is only possible to provide qualitative information, which have been illustrated in the previous paragraphs. Overall, there has been in most SOWELL countries a coverage expansion and, to a lesser extent, a public expenditure expansion as well as an increase in service quality. Working conditions have not improved everywhere. To the contrary, in several countries there seems to have been a trade-off between service coverage increase and worsening of labour conditions (as in Italy and the Netherlands).

Table 7. The ECEC quadrilemma in the SOWELL countries: changes and trends over time

	Expenditure		Coverage		Service quality		Working conditions	
	End of	Trend in	End of	Trend in	End of	Trend in	End of	Trend in
Denmark	81.3	Stability	63.2	Decrease	71.8	Improvement	66.0	Improvement
Germany	43.8	Increase	29.8	Increase	88.3	Improvement	96.0	Improvement
Netherlands	37.5	Increase	56.8	Increase	42.9	Improvement	78.0	Deterioration
Spain	31.3	Increase	50.5	Increase	64.3	Improvement	(100.0)*	Deterioration
Italy	31.3	Stability	25.7	Stability	59.3	Improvement	67.0	Deterioration
Hungary	43.8	Stability	16.5	Increase	68.0	Improvement	47.0	Stability
Slovakia	37.5	Increase	1.4	Stability	55.2	Improvement	44.0	Stability

* The Spanish case study for the SOWELL project shows that there are important differences between the public and private sectors, the latter including the worst conditions

3. The structure and the characteristics of the labour market in the LTC sector

3.1 Governance, regulation and type of services provided

The overall organisation of public long-term care provision can be analysed from three different perspectives (Pavolini, 2022). First, countries can be classified as to whether they possess a dedicated public social protection branch for long-term care, which can be labelled an "integrated" system, or otherwise, which can be labelled a "split" system. Second, public long-term care provision can be observed in terms of the level(s) at which social protection is organised (e.g. at regional level, national level, etc.). Lastly, different eligibility criteria are used in Europe in order to access long-term care.
In relation to the first issue, only 11 countries out of 29 (the EU, plus Norway and the UK) have an integrated public long-term care system. Among the SOWELL project countries, Germany, Denmark, Spain and the Netherlands do. The remaining 18 have a public system, which is usually split, on one hand, between healthcare and social care/social assistance, and, on the other hand, between institutions in charge of providing cash benefits and institutions responsible for in-kind services: among the SOWELL project countries, Italy, Hungary, and Slovakia belong to this second cluster.
In relation to the second issue, long-term care public provision is organised mostly at just one territorial level in 14 countries (Germany, Denmark, and the Netherlands included). This main territorial level is the municipal level in the Nordic countries, among them Denmark, where municipalities are in charge of ensuring an integrated healthcare and social care long-term care

system. The main territorial level in most Continental European countries (including Germany and the Netherlands) is the national level, where a specific branch of social protection for long-term care plays a pivotal role in the organisation of care. In this latter case, an important complementary role is played by local and regional authorities running services. In the remaining countries, including Italy, Spain, Hungary and Slovakia, long-term care organisation responsibilities are allocated to different layers of government depending on the type of provision (healthcare services, social care services, and cash allowances).

In relation to the criteria for eligibility to long-term care social protection, EU countries differ as to whether they adopt a "universalist" approach (characterised by high social protection coverage for all residents, and universal publicly provided services and benefits) or a "selectivist" one (characterised by targeting or customising services and policies for particular groups). The mapping of EU Member States shows that there are also other approaches beyond the pure "selectivist" or "universalist" perspectives. In particular, four models can be found that can be placed on a continuum, from selectivity at one end to universalism at the other.

A "selectivist" model is present in several Central-Eastern European, including Hungary; in these countries, access to long-term care public provision, either cash benefits or in-kind services, is dependent not only on an assessment of care needs, but also on financial means testing (usually based on income, and in some cases property, often including close relatives' economic resources). A "mixed" model is adopted in a limited number of countries, including Italy and Slovakia, where, depending on the type of long-term care provision (cash benefits or services), either selectivity in services or universalism in cash benefits is applied. A "quasi-universalist" model is present in very few countries, among them Spain, where access to provision is formally linked only to a care needs assessment and not to financial means testing, but where, at the same time, long-term care coverage rates are relatively low and de facto the system is partially selectivist. A "universalist" model is adopted in nine countries, mostly Continental and Nordic European ones: needs assessment is the core principle in these countries regarding long-term care provision (through either services or cash benefits). Denmark, Germany and the Netherlands belong to this cluster.

Looking more closely to SOWELL countries, Denmark has been since the 1970s among the front-runners in LTC in Europe (Antonnen and Sipila, 1996). The system was built over time and it has municipalities as the cornerstone of provision. Since the 1990s "ageing in place" through the strengthening of social provision at home and in communitarian settings instead of residential care has become a major issue.

In Germany, mandatory long-term care insurance was introduced in 1995 and it represented a major breakthrough transforming a relatively underdeveloped LTC into a fully-fledged system.

In the Netherlands, the long-term care sector has also a long tradition. The Dutch healthcare system is regulated through four Acts: among them, there are the *'Wet langdurige zorg'* (Wlz) - Long-term care Act - for long-term care services (since 2015) and the *Wet maatschappelijke ondersteuning'* (Wmo) - Social Support Act - for housekeeping services in homecare, protected homes for homeless people etc.. Wlz consumes 20% of the total healthcare budget. A large reform in 2015 – with a first step already in 2007 - was directly targeted to long-term care in nursing homes, homes for elderly people and at people homes (Maarse & Jeurissen, 2016). Since 2007, homecare has been governed by instruments of public procurement at the level of municipalities and in 2015, a broader LTC-reform pushed further to decentralisation to municipalities, more individual responsibility and non-residential care, and expenditure cuts. In 2019, the government recognized disappointing performances of the earlier introduced market mechanisms in the Social Support Act regarding the quality of services as well as the quality of work in homecare.

The key regulatory framework of long-term care services in Spain is the Law reform to promote personal autonomy and the care of dependent people (2006), also known as LAPAD. The 2006 reform was originally founded on the crisis of the traditional care model for dependent people, traditionally based on the informal caregiving of women within the family. The changes in the family model and the inclusion of women in the formal labour market motivated the reform of the social care system in

order to entitle to dependent people through public services. The new legislation introduced the possibility to build a social care model with the public sector providing care services or at least financing a certain social organisation of daily care (Torns et al., 2012). Thus, the approval of this law was a turning point to recognize subjective rights such as the entitlement of access to support to daily life activities in case of three dependency ranges (moderate, severe, and serious). The access to these services was disassociated to income and personal or family assets. The preamble of the LAPAD establishes the political will to professionalise the long-term care sector. For that purpose, the law determines several LTC services to guarantee that right. First, requesting the access to public LTC services: residential care, day-centers, telecare, and domiciliary care services. Alternatively, requesting financial benefits for the hiring of professional caregivers, access to private centers or, even, to compensate caregivers within the family. The law also regulates the validation of professional qualifications of caregivers with proven long experience but lacking credentials.

In Italy, the governance of LTC services (residential, semi-residential and home services) is highly decentralised to regions and local governments, reflecting a limited interest by the central State for these services. Municipalities are mainly responsible for service delivery. This determines a strong fragmentation and territorial heterogeneity. Cash transfers are more centrally regulated than services. At national level, INPS (the National Social Security Institute) delivers and is responsible for the main monetary transfers programme: the "Companion Allowance". Companion allowance is the most important economic benefit for non-self-sufficient elderly people over 65 and disabled people under the age of 65.

In Hungary, long-term care is a low-priority area of public policy, attracting little attention and sparking few debates. By enjoining the obligation of caregiving on families, the Fundamental Law (Constitution) of 2011 exacerbated the trend of shifting the burden of care to them. There is no coordinated long-term care system. Despite recent progress toward unification, LTC currently maintains a dual health-care and social-care organisation. Until recently, the LTC sector had a centralised organisational planning, which meant a domination of institutionalised form of care service provision over the home-based form of care service provision. The trend changed due to the increasing number of interest towards home-care services, which increased especially in the period after the economic crisis in 2008.

In Slovakia, long--term care is provided mainly through the system of social services complemented by increased attention paid to older persons in the health care system. Nevertheless, the main burden lies on family and informal caregivers.

Therefore, social services are organised so that they would help persons receiving long-term care and their families as much as possible (and for the state and the self-government to a financially acceptable extent). Social services guarded and provided by communities or self-government regions are financed from budgets of communities and regions; however, some selected facilities are financed from the state budget. These means are complemented by payments from clients themselves, by gifts, finances of associated communities, means of the public health insurance, or other resources (e.g. also from the EU structural funds, or government subsidies). LTC is in the jurisdiction of the Ministry of Health in cooperation with the Ministry of Labour, Social Affairs and Family. All available evidence points to a poor coordination between health and social long-term care, but lack of coordination is perceptible also between state administration and regional/local administration. There is an acute demand for measures integrating health and social care into one institution. The crucial role of informal (family) care in the Slovak LTC system is generally acknowledged. However, policy reforms in the past years were targeted almost exclusively on the formal sector of LTC, and improvement of informal care is still outstanding.

3.2 Public expenditure

Member States finance public long-term healthcare and social long-term care mainly through three channels: essentially taxation; predominantly compulsory social contributions; combining taxation

(usually funding social care) and compulsory social contributions (usually funding healthcare). Taxation is the most common source of funding (in 12 EU countries, as well as in the UK and Norway): Denmark, Spain, and Italy belong to this cluster.

Table 8. Public expenditure on LTC: share of the GDP and composition (year 2019)

Country	Public spending for LTC as a % of	Public spending on cash benefits as % of total LTC public
Austria	1.8	41.0
Belgium	2.2	10.7
Bulgaria	0.3	30.8
Croatia	0.4	50
Cyprus	0.3	57.1
Czech	1.5	27.5
Denmark	**3.5**	**0.0**
Estonia	0.4	4.6
Finland	2.0	11.9
France	1.9	5.6
Germany	**1.6**	**40.8**
Greece	0.2	0.0
Hungary	**0.6**	**0.0**
Ireland	1.3	0.0
Italy	**1.7**	**52.3**
Latvia	0.5	32.7
Lithuania	1.0	39.8
Luxembourg	1.0	0.6
Malta	1.1	20.0
Netherlands	**3.7**	**32.6**
Poland	0.8	74
Portugal	0.4	0.7
Romania	0.4	0
Slovakia	**0.8**	**40.4**
Slovenia	1.0	25.8
Spain	**0.7**	**50.2**
Sweden	3.3	2.6

The countries in bold belonging to the SOWELL project. Source: Pavolini (2022)

Compulsory social contributions are the core funding pillar in just a few countries, where insurance-based long-term care schemes have been set up, as in the German and Dutch cases. Finally, ten countries combine funding sources, as also in the case of Hungary and Slovakia. Countries adopting a mix of contributions and taxes do not usually have "integrated" long-term care systems; in these countries, healthcare and social care are funded by different institutions, and taxation finances the social care part of long-term care.
The lion's share of EU countries apply cost-sharing and long-term care fees. The very few countries that do not rely on fees, have usually high means testing thresholds that limit the beneficiaries' access to the public long-term care system. Fees tend to apply to residential care, in order to cover accommodation costs more than care treatments. At the same time, all countries have introduced safeguards for those beneficiaries with limited economic resources: their fee is usually covered partially or in total by local authorities.
As it can be seen in Table 8, LTC cash benefits play different roles in different countries. Italy, Spain, Germany, and Slovakia are among the countries where half or at least 40% of the total public LTC budget goes to transfers, whereas the opposite takes place in the Netherlands, and, especially, Hungary and Denmark.

Table 9 provides an overview on how LTC expenditure changed over time. Unfortunately, Tables 8 and 9 are not perfectly comparable (Table 8 reports data mostly referring just to health LTC expenditure). However, the latter Table can offer an overview of general trends. In particular, among the SOWELL countries, Denmark showed a decrease in (relatively high level) public expenditure, whereas Germany, the Netherlands, and to a lesser extent Spain, and Hungary witnessed an increase. Italy and Slovakia kept their expenditure steady over time.
Given that comparative data on public expenditure over time have some missing information, it is important also to analyse expenditure data from national sources. In this respect, public expenditure on eldercare increased slightly in Denmark, in the the period since 2008. However, relative to the number of elderly (aged +65), the inflation-regulated numbers for the elderly from 2007-2017 shows a decline of 21%. A Social-democratic government took office in June 2019. Part of their welfare policies have been to increase expenditure in accordance with demographic development – a policy which has been formalised in the Welfare Act from 2020. The change is felt in the municipalities, although it has in no way solved the multiple challenges in the sector: once the increase in expenditure is linked to demographic changes (with a growth of the elderly population), the recent policy choices have still kept expenditure on a too low level, created by years of declining expenditure per user.
In Germany, there was a growth of LTC expenditure over the last two decades. Social LTC insurance is the most important cost unit but it only covers two thirds of all expenditures on LTC. In the Netherlands, expenditures in care grew in the last two decades. To put a halt to growing expenditures, in 2007 several types of homecare were transferred to the municipalities and other LTC-budgets have been effectively frozen. Municipalities became responsible for non-residential care and coverage of housekeeping services was shifted to the new Social Support Act with substantial budget cuts. It was assumed that municipalities would be able to provide care more efficiently and tailor it better to the needs of recipients since they are closer to citizens and, more importantly, since this meant that the rights-based approach of the form Exceptional Medical Expenses Act (*Awbz*) would be replaced with a compensation-based approach under the Social Support Act (Batenburg et al., 2015). Since 2007, the hope is that less costly home-based support will enable people to continue living in their own setting for as long as possible and to participate in society. In 2015, a more radical and broader reform in the LTC sector was implemented. This reform consists of four interrelated pillars: a normative reorientation towards more individual responsibility in arranging services, a shift from residential to non-residential care, decentralisation of non-residential care and expenditure cuts (Maarse & Jeurissen, 2016; Batenburg et al., 2015). Long-term care continues to be largely publicly funded and a statutory health insurance scheme will remain in place for persons who really need residential care.

Table 9. Public expenditure on LTC over time (year 2019)

		Percentage of gross domestic				Purchasing power standard (PPS) per			
Country	Type of LTC	2007	2010	2015	2019	2007	2010	2015	2019
Austria	Health	1.24	1.50	1.54	1.52	408.71	484.47	572.18	597.93
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Belgium	Health	1.93	2.09	2.46	2.44	576.93	623.35	854.03	895.55
	Social	n.a.	n.a.	n.a.	0.69	n.a.	n.a.	n.a.	253.15
Bulgaria	Health	n.a.	n.a.	0.01	0.01	n.a.	n.a.	1.45	1.60
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Croatia	Health	n.a.	n.a.	0.22	0.21	n.a.	n.a.	38.39	44.86
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cyprus	Health	n.a.	0.24	0.32	0.30	n.a.	60.35	76.08	85.29
	Social	n.a.	n.a.	0.02	0.06	n.a.	n.a.	3.78	18.50
Czechia	Health	n.a.	n.a.	0.92	1.02	n.a.	n.a.	253.88	320.68
	Social	n.a.	n.a.	0.40	0.65	n.a.	n.a.	110.87	205.35
Denmark	**Health**	n.a.	**2.30**	**2.21**	**2.16**	n.a.	**721.00**	**787.09**	**836.54**
	Social	n.a.	**1.00**	**0.98**	**1.04**	n.a.	**314.06**	**347.29**	**404.86**
Estonia	Health	0.19	0.30	0.61	0.64	36.72	50.99	138.89	168.65
	Social	n.a.	n.a.	0.04	0.06	n.a.	n.a.	9.34	15.84
Finland	Health	1.63	1.89	1.75	1.59	499.97	550.92	565.90	557.23
	Social	0.50	0.68	0.74	0.78	152.87	198.12	240.14	272.21
France	Health	1.23	1.62	1.75	1.75	352.71	453.08	555.42	597.41
	Social	0.57	0.62	0.64	0.63	164.87	173.39	203.25	216.27
Germany	**Health**	**1.50**	**1.68**	**1.84**	**2.25**	**456.30**	**512.50**	**677.36**	**900.88**
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	Health	n.a.	0.06	0.10	0.13	n.a.	11.88	20.83	27.72
	Social	n.a.	0.02	0.01	0.01	n.a.	4.83	2.26	2.63
Hungary	**Health**	**0.29**	**0.31**	**0.28**	**0.25**	**47.77**	**53.40**	**59.50**	**60.74**
	Social	**0.29**	**0.32**	**0.39**	**0.35**	**48.34**	**55.29**	**82.94**	**84.47**
Ireland	Health	n.a.	n.a.	1.59	1.45	n.a.	n.a.	725.99	786.13
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Health	n.a.	n.a.	**0.92**	**0.90**	n.a.	n.a.	**249.35**	**270.10**

Italy	**Social**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Latvia	Health	n.a.	n.a.	0.30	0.33	n.a.	n.a.	57.34	73.87
	Social	n.a.	n.a.	0.24	0.26	n.a.	n.a.	46.57	59.19
Lithuania	Health	0.34	0.61	0.56	0.53	56.25	95.36	129.56	147.60
	Social	0.51	0.52	0.50	0.62	84.27	82.04	116.06	173.85
Luxembourg	Health	n.a.	n.a.	0.97	1.03	n.a.	n.a.	697.90	745.06
	Social	n.a.	n.a.	0.30	0.32	n.a.	n.a.	219.34	234.13
Malta	Health	n.a.	n.a.	1.35	1.74	n.a.	n.a.	380.80	571.94
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Netherlands	**Health**	**2.29**	**2.61**	**2.71**	**2.84**	**853.70**	**893.86**	**1,006.46**	**1,157.27**
	Social	**1.02**	**1.22**	**1.31**	**1.23**	**381.10**	**416.79**	**488.68**	**500.62**
Norway	Health	n.a.	n.a.	2.82	3.11	n.a.	n.a.	1,240.47	1,423.17
	Social	n.a.	n.a.	0.62	0.63	n.a.	n.a.	271.15	287.32
Poland	Health	n.a.	n.a.	0.37	0.43	n.a.	n.a.	82.12	109.79
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	Health	0.29	0.33	0.43	0.45	59.81	66.14	93.70	112.64
	Social	0.36	0.38	0.45	0.47	73.58	76.74	100.14	116.21
Romania	Health	n.a.	n.a.	0.29	0.32	n.a.	n.a.	49.42	74.87
	Social	n.a.	n.a.	0.05	0.06	n.a.	n.a.	8.74	15.07
Slovakia	**Health**	n.a.	n.a.	**0.02**	**0.03**	n.a.	n.a.	**5.36**	**6.01**
	Social	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Slovenia	Health	n.a.	n.a.	0.84	0.87	n.a.	n.a.	198.75	240.65
	Social	n.a.	n.a.	0.42	0.40	n.a.	n.a.	98.44	111.70
Spain	**Health**	**0.66**	**0.88**	**0.85**	**0.86**	**172.32**	**204.49**	**220.13**	**243.08**
	Social	**0.06**	**0.06**	**0.06**	**0.07**	**16.03**	**14.92**	**14.68**	**18.77**
Sweden	Health	0.64	0.64	2.86	2.85	212.50	205.29	1,031.57	1,039.03
	Social	n.a.	n.a.	0.53	0.53	n.a.	n.a.	192.39	194.17
UK	Health	n.a.	n.a.	1.75	1.81	n.a.	n.a.	528.99	572.61
	Social	n.a.	n.a.	0.42	0.47	n.a.	n.a.	126.65	148.09

The countries in bold belonging to the SOWELL project.
n.a.: data not available
Source: Eurostat online database - Health care expenditure by function (HLTH_SHA11_HC)

In Spain, the 2006 law reform initially aimed to professionalise the sector, although including several gaps as the informal family support within the portfolio of services of the sector. After this reform, national and regional governments increased substantially the long-term care expenditure due to the bigger number of people entitled to these services. Although the initial years of the economic crisis did not imply an expenditure decrease, first steps of budgetary cuts were applied in 2011 by the Socialist Government. Moreover, the new People's Party Government approved in 2012 the National Reform Program, including some restructurings for the long-term care services: adapting the implementation schedule to the available funding, reducing allowances for family care, increasing the beneficiary co-payments, and fostering the expansion of the private sector (Deusdad et al., 2016), together with the cancellation of contribution payments to register family caregivers in the social security system (restored in 2018 with the new Socialist Government). With the implementation of these measures, the National Government reduced expenditure by EUR 599 million in 2012 and expected to reduce EUR 1,108 million for 2013 (Ministerio de Hacienda, 2013). Therefore, its expenditure was reduced until 2013 and only recovering the expenditure prior cuts in 2016. In fact, the arrival of the Socialist Government of Pedro Sanchez in 2018 restored measures such as the social security payment for informal carers. These measures implemented during the crisis reduced drastically long-term care subsidies and implied a large decline in LTC services provision. For example, in the reduction of the number of delivered home care hours (Costa-Font, 2017), the initial decrease of people generally entitled to LTC services and the next increase of waiting lists, while the number of beneficiaries remained similar. These figures did not change substantially until the increase of the percentage of beneficiaries covered in 2018.

In Italy, spending on long-term care as a share of GDP remained relatively stable between 2005 and 2019, and the very light growth was mostly because of ageing trends, whereas in real per capita terms there was no increase.

In Slovakia, public spending on LTC reached 0.2% of GDP in 2019 far below the EU average. The low level of funding implies that considerable parts of current LTC needs are not covered by public means. Thus, informal care provided by family members or close non-relatives plays a decisive role in Slovakia.

Finally, LTC witnessed in Hungary a light increasing level of public expenditure over time.

3.3 Service coverage

3.3.1 A general overview

Long-term care provision takes two forms: services and cash benefits for individuals with long-term care needs. If all countries offer long-term care services, the differences among them lie in relation to the level of service coverage. In particular, as Table 9 shows, 12 countries offer home and residential care to less than 10% of their 65+ population (among them Germany, Spain, Hungary, and Italy), whereas all others have higher coverage rates. There are also differences among countries in terms of proportions of home care and residential care. Residential care is still quite important in several countries (at least 5% of 65+ live in this type of facilities in 7 of them - including Slovakia and the Netherlands) and coverage of home care still quite weak in many member states (less than 5% of 65+ receive formal support at home in 11 EU countries - including Germany, Spain, Italy, and Hungary).

With reference to cash benefit schemes for individuals with long-term care needs, only few countries do not practically provide this type of support (including Denmark and Hungary). The remaining countries have set up cash benefit schemes. An important distinction among these schemes is between "bound" cash benefits (beneficiaries have to document how the resources that they received are spent) or "unbound" benefits (beneficiaries are free to use the resources as they prefer without any form of accountability). Most countries with cash benefits use "unbound" cash benefits (including Germany

and Italy). Only a few countries use "bound" ones (among them Spain, the Netherlands, and Slovakia). Opting for "bound" or "unbound" cash benefits has important consequences. Schemes based on "bound" cash benefits usually ensure coordination between the beneficiary and the long-term care public system (in terms of social workers and health professionals' supervision, and in terms of integration with the provision of long-term care services). Schemes based on "unbound" cash benefits leave more freedom of choice to beneficiaries, allow for more flexibility in the way public resources are spent in comparison to "bound" schemes, but they do not often foster coordination.

While cash benefit schemes for individuals with long-term care needs are common in many countries, they cover at least 10% of older people in half of them (including Germany, and Italy). In several member states there is a correlation between the limited coverage through public services and the relatively high coverage through cash benefits (Italy and Germany as well), implying that these cash benefits essentially provide support to informal care and, to some extent, to provision by privately paid formal carers.

Table 10 provides information also on the generosity of cash benefit schemes (Pavolini, 2022). The level is measured as the percentage of the median monthly income of older people in each country. In most Member States (Italy being of the few exceptions) the amount of cash benefits is not fixed, but depends on the level of care support required by the beneficiary. Therefore, the level can vary significantly depending on the assessment of the beneficiary's needs (for example, as in the German cases). In many countries that offer cash benefits, the level of these benefits is relatively limited (being equal to maximum 36% of the median monthly income of older people): among them are Spain and Italy.

Unfortunately, there is no homogeneous database estimating coverage rates over time. Table 11 presents the information contained in the previous Table for 2019, along with the data reported in Keck and Saraceno (2012) for the mid-late 2000s. Strict comparison should be avoided given that the criteria for defining home care might be different in the two sources. Overall, a general assessment of the data in Table 10 shows that, as well known, there was in the last two decades a shift away from residential care toward home care. In many countries, the coverage rate of the former decreased or remained stable, while the one of the latter increased. This general trend applies only to some of the SOWELL countries (the Netherlands, and, to a certain extent, Spain). At the same time, according to the data, Germany increased more residential care than home care (the reason being probably that many potential beneficiaries of home care have preferred the cash allowance option instead of professional services), Denmark, and Hungary saw a reduction in home care provision, and Italy witnessed a general light expansion of coverage (also due to the fact that it was starting from a very low coverage level in the 2000s).

As shown already previously for other international comparative databases, the diachronic analysis has some flaws. Therefore, it is important to integrate the picture stemming out of such databases, with the information provided at the national level and collected through the SOWELL country case studies.

Table 10. The characteristics of LTC public provision in the EU: coverage rates (2019)

Country	Share of population 65+	Share of population	Share of population	Level of cash benefits
Austria	3.8	4.8	21.6	8%-81%
Belgium	6.2	15.7	7.8	5%-36%
Bulgaria	0.5	0.6	3.1	20%
Croatia	2.4	1.2	7.5	14%-42%
Cyprus	4.4	5.7	9.4	36%
Czech	4.2	4.5	12	5%-13%
Denmark	**4.6**	**14.3**	**0.0**	–
Estonia	10.1	20.2	2.9	n.a.
Finland	1.9	13.3	13.9	4%-19%
France	4.9	6.2	0.0	--
Germany	**4.3**	**3.6**	**11.3**	**40%-117%**
Greece	0.0	9.6	0.0	--
Hungary	**2.8**	**2.8**	**0.0**	**--**
Ireland	3.0	8.1	0.0	--
Italy	**3.2**	**4.7**	**10.9**	**36%**
Latvia	1.9	2.9	1.3	51%
Lithuania	10.6	12.4	15.6	n.a.
Luxembourg	5.2	6.7	0.9	1%-30%
Malta	3.9	7.0	0.4	--
Netherlands	**5.6**	**19.1**	**1.2**	n.a.
Poland	2.7	3.4	37.2	20-25%
Portugal	1.2	0.6	0.3	14%-24%
Romania	4.7	6	0	--
Slovakia	**6**	**5.8**	**8.7**	**80%-106%**
Slovenia	7.2	7.0	7.1	8%-43%
Spain	**1.2**	**3.9**	**4.3**	**12%-31%**
Sweden	2.9	11.0	11.0	26%[a]

a) it can vary among municipalities
The countries in bold belonging to the SOWELL project.
n.a.: data not available
Source: Pavolini (2022)

Table 11. The characteristics of LTC public provision in the EU: coverage rates over time

	Share of		Share of	
	Mid-late 2000s	2019	Mid-late 2000s	2019
Austria	5.5	3.8	4.8	4.8
Belgium	6.7	6.2	6.0	15.7
Bulgaria	0.8	0.5	n.a.	0.6
Croatia	n.a.	2.4	n.a.	1.2
Cyprus	n.a.	4.4	n.a.	5.7
Czech Republic	2.2	4.2	11.0	4.5
Denmark	**4.7**	**4.6**	**23.2**	**14.3**
Estonia	1.8	10.1	6.0	20.2
Finland	4.8	1.9	7.3	13.3
France	6.5	4.9	6.1	6.2
Germany	**3.8**	**4.3**	**3.5**	**3.6**
Greece	1.0	0	0.3	9.6
Hungary	**3.0**	**2.8**	**7.0**	**2.8**
Ireland	3.9	3	5.0	8.1
Italy	**2.0**	**3.2**	**4.1**	**4.7**
Latvia	2.4	1.9	1.8	2.9
Lithuania	0.8	10.6	n.a.	12.4
Luxembourg	5.1	5.2	7.3	6.7
Malta	4.6	3.9	11.3	7
Netherlands	**6.7**	**5.6**	**12.9**	**19.1**
Poland	1.6	2.7	1.7	3.4
Portugal	0.9	1.2	0.2	0.6
Romania	0.1	4.7	n.a.	6
Slovakia	**3.2**	**6.0**	**n.a.**	**5.8**
Slovenia	4.0	7.2	1.7	7
Spain	**3.4**	**1.2**	**3.5**	**3.9**
Sweden	5.9	2.9	9.2	11

The countries in bold belonging to the SOWELL project.
n.a.: data not available
Sources: Keck, W., & Saraceno, C. (2012) for the mid-late 2000s data; Pavolini (2022) for the most recent data

In Denmark, 122,000 persons above age 65 received practical assistance and personal care in private homes in 2018. Compared to 2008, there was a 22% decline in the number of beneficiaries. Considering that the number of elderly persons has increased in the same period, the share of dependent older people aged 65+ that are entitled to home help in private homes has declined from 19% to 12%. Recent research underlines that the share of 'weak elderly' (elderly who declare themselves in need of help) receiving home help in the form of practical assistance declined from 43% in 2007 to 25% in 2017. The possible explanations proposed are that older people apply less for help, or – more likely – that the criteria for need testing among Danish municipalities has tightened.
In the Netherlands, service provision of services can be 'in kind' or in 'personal budgets'. Thanks to the latter, "clients" can buy themselves tailor-made care services. These personal budgets are used quite a lot in LTC-services and provisions in social support and youth care. In 2018, for EUR 1,900 million these budgets were used in LTC services, and EUR 425 million were used in social support. The Netherlands were one of the countries with the highest institutionalisation rate of frail elderly people and in the last decade a strategy of "ageing in place" was developed, aiming at reducing residential care coverage in favour of home care.
In Germany, the situation over time did not change too much, for two reasons: first, the main reform that affected LTC services' coverage rate was introduced a decade earlier (in the mid-1990s); and second, many beneficiaries opt for cash allowances instead of (home care) services.
In Spain, the number of financial beneficiaries for informal carers within the family increased during the initial period of the crisis, being greater in 2009 (51,2%) and remaining similar or decreasing slightly until 2014. These financial benefits are often used to informally hire home care by immigrant women, promoting informal economy and undeclared work. Besides the increase of informal care, the crisis period has resulted in the decrease of public care provision in the sector.
In Italy, the LTC services are characterised by three types of care: home care, residential care, and semi-residential care, in which patients could receive care and assistance in social health services or social services. Over the last two decades there was an increase in home care provision coverage (although for a more limited amount of hours for each patient) and a very slight increase in residential care provision.
In Slovakia, the overall number of beds in nursing and residential care facilities per hundred thousand inhabitants decreased over time. While in 2008, there were 176 beds per hundred thousand inhabitants, in 2019 the number dropped to 128. The decreasing trend has its root in the changes in LTC policies and its priorities. One of the priorities is the decrease of residential long-term care and its transformation to community-based and home care. The current system does not provide support to families caring for deprived relatives. Although the legislation guarantees recipients of the care allowance (carers) are entitled to 30 days of respite care per year, out of 57,048 only 259 carers used it in 2019. Due to insufficient capacity, less than 1% of informal carers use the respite service.
Finally, in Hungary the total number of places for day-time and residential care of elderly people has been relatively stable over time.

3.3.2 Public and private provision

Apart from the changes in provision and coverage rate, a process shifting to private (contracted-out) provision took place in several countries.
In Denmark, it has been possible since 2003 for the municipalities to outsource tasks within eldercare. The balances between public and private providers can be measured in different ways. One way is the 'indicator for the exposure to competition' (IKU). IKU measures the percentage of a welfare service (measured in its monetary value) legally possible to outsource, which has been through a process of public procurement, no matter if the process has resulted in private or public provision of the service in focus. Measured in this way, private providers deliver a sizable and near stable part of the share of care for the elderly in Denmark. These statistics could give an impression of a high level of privatisation in elder care. However, because it is mainly cleaning service (part of the practical

assistance) - which accounts for around 17% of the total hours used in home help – that is outsourced, the share of the private care providers' working hours is not that high, and was in 2016 found to be 15%.

In Germany, historically, the main providers are organisations set up and supported by the protestant and catholic church (Diakonie und Caritas) alongside various secular organisations with roots in the labour movement (Arbeiterwohlfahrt) and other forms of civilian charitable engagement, the latter represented by an umbrella organisation (Paritätischer Wohlfahrtsverband). Only recently has this constellation come under pressure, offsetting new dynamics in staffing, wages and professionalisation. The role of state providers is limited in residential care homes and ambulant care services. In 2019, only 4.5 per cent of residential care home providers were public (695 in total), 42.7 percent private (6,570 in total), and 52.8 per cent non-profit providers (8,115 in total). Only 1.3 per cent of ambulant care service providers are public (198 in total), 32.2 per cent non-profit (4,720 in total), and 66.5 percent private providers (9,770 in total). From a diachronic perspective, the shares of public, non-profit, and private providers in residential care homes and ambulant care services have hardly changed in the last two decades. However, in ambulant care services, the number of employees in private ambulant care services has been continuously rising, whereas employment in non-profit organisations saw a less pronounced rise and employment in public ambulant care services has stayed on a low level over time.

In the Netherlands, there are around 2,300 homecare organisations, practically all private (for-profit and nonprofit) ones. Most of them are run by 1 person. Just 50 companies in the homecare sector have more than 50 employees. In residential care, the sector is mostly nonprofit and it has remained so over time.

In Spain, the last two decades witnessed a decrease in public care provision. The private sector clearly dominates service delivery, with an increasing role of profit-making agencies and extremely weak forms of public control and regulation. For instance, official data generally shows that 70% of residential care is provided by nursing homes of public ownership. However, once focusing on provision and not ownership, the public-private share is the opposite: 70% of the residential care provision being private. That is, outsourced residential care (public ownership and private provision) represents the most common pattern within the service provided to nursing homes users.

In Italy, where private provision has always been very relevant, there has been an increasing wave of privatisation in relation to provision in the last two decades. Most professional home care provision has been out-sourced / contracted-out to (mostly) nonprofit organisations. In residential care there is fundamentally private provision: almost 80% of beds are run by private providers (three quarters of them nonprofit), and this share has slightly increased over time.

In Hungary, residential provision sees a majority of public institutions (63% of total establishments), mostly local governments, whereas private provision is offered by churches (28%), and nonprofits (9%). Homecare also witnesses a prevalence of public provision (80% of total providers), with the churches playing the lion's share among private providers. Not very relevant changes took place in the last two decades.

In Slovakia, there is also a prevalence of private provision in residential care (56% of all establishments are private for-profit or non-profit, and only 44% are public). The situation has remained relatively stable over time. In home care, instead, two-thirds (67%) of providers are public and the remaining ones are mostly nonprofit. While the number of employees of public providers in home care increased slowly over time, the number of employees working for non-public providers decreased. However, as for other countries in the SOWELL project (including Spain, and Italy), the number of care allowance beneficiaries shows that informal home care by a family member or a relative is more popular than home care services provided by professionals in Slovakia. In this respect, the number of care allowance beneficiaries increased over time quite faster than those accessing formal home care services.

Table 12. Coverage rates in LTC services over time in the SOWELL project's countries: a comparative synthesis

	Coverage rate at the end of the 2010s	Variation in the coverage rate between the 2000s and the 2010s	Role of private provision at the end of the 2010s	Increase in the relative role of private provision between the 2000s and the 2010s
DK	High (around 20%+)	Decrease (both home and residential care)	Limited	Stability
NL	High (around 20%+)	Stability	Prevalent	Stability
NL	High (around 20%+)	Increase in home care Decrease in residential care	Dominant	Stability
DE	Medium (8-10%)	Light increase in residential care	Dominant	Stability
ES	Medium-Low (5-7%)	Light increase in home care Decrease in residential care	Prevalent	Increase
IT	Medium (8-10%)	Light increase	Prevalent	Increase
HU	Medium-Low (5-7%)	Stability in residential care Decrease in home care	Limited	Stability
SK	Medium (8-10%)	Increase	Prevalent in residential care Limited in home care	Stability

3.4 Quality of services

Defining the quality of service in LTC is very difficult. As the Social Protection Committee of the European Commission underlines (2021) in its most recent LTC report: the quality of long-term care is difficult to define; there is no formal national definition of long-term care quality in any Member State (instead, most Member States use the existing broad quality definitions applicable to healthcare and social care services); because the concept of long-term care quality is so multifaceted and lacks a common definition, finding the right set of indicators to measure it is challenging.

Table 13. Selected LTC quality aspects (second part of 2010s)

	Satisfaction of individuals aged at least 65 years with different dimensions of LTC										
Countr	Quality	Expertise and	Persona	Being	All	Mean five	Overal	% of older	Education requirement	Education requirement	Rate of LTC
AT	9.0	9.5	9.4	9.3	7.8	9.0	8.1	51.3	Technical	Bachelor	4.2
BE	8.0	8.2	8.0	8.0	7.7	8.0	6.9	69.6	High	Bachelor	5.5
BG	4.6	5.2	5.8	4.9	7.4	5.6	4.6	27.5	None	Technical	n.a.
CY	7.0	7.7	7.7	7.8	6.2	7.3	5.8	23.5	n.a.	Bachelor	n.a.
CZ	8.3	7.9	7.5	7.9	6.8	7.7	6.0	60.3	Technical	Bachelor	3.8
DE	8.0	7.8	7.6	7.4	7.2	7.6	7.1	60.5	High	Bachelor	5.4
DK	9.2	8.4	8.4	8.0	8.9	8.6	6.9	93.2	VET	Bachelor	7.8
EE	8.4	8.3	8.3	8.3	7.8	8.2	5.9	36.9	Technical	Bachelor	5.4
EL	6.6	7.8	7.9	7.6	6.4	7.3	4.8	9.7	None	Bachelor	0.3
ES	7.5	8.2	8.2	7.8	7.6	7.9	6.7	66.7	High	Bachelor	4.8
FI	8.2	8.3	8.1	8.1	7.5	8.0	6.8	78.3	VET	Bachelor	7.9
FR	8.2	8.4	8.3	8.1	8.0	8.2	7.1	74.6	n.a.	Bachelor	2.4
HR	7.6	8.2	8.6	7.9	6.6	7.8	5.7	53.7	n.a.	High	n.a.
HU	8.4	8.8	8.5	8.6	7.5	8.4	6.7	66.9	VET	Technical	1.9
IE	9.4	9.1	9.0	9.0	7.7	8.8	6.1	74.7	n.a.	n.a.	3.8
IT	6.7	6.9	6.9	6.6	6.8	6.8	5.6	39.2	High	Bachelor	3.7
LT	7.7	7.5	7.3	7.8	7.1	7.5	5.9	49.7	Technical	Bachelor	1.1
LU	9.1	8.9	8.5	8.3	7.8	8.5	8.2	75.9	VET	Technical	7.3
LV	8.1	8.1	7.5	7.8	7.3	7.8	5.8	51.5	VET	Technical	1.3
MT	8.4	8.7	8.7	8.8	8.4	8.6	7.9	65.8	Technical	Bachelor	n.a.
NL	7.9	7.7	7.7	7.9	7.6	7.8	6.5	91.4	VET	VET	8.0
PL	9.5	9.6	9.6	9.6	7.7	9.2	5.8	64.9	n.a.	Technical	0.6
PT	6.5	6.8	7.1	7.0	7.0	6.9	5.0	33.2	High	n.a.	0.8
RO	9.2	9.6	9.7	9.7	6.8	9.0	6.0	54.3	None	Technical	n.a.
SE	8.7	8.5	8.7	8.6	8.3	8.6	6.1	90.0	n.a.	n.a.	12.0
SI	8.3	8.3	8.2	8.3	7.3	8.1	6.7	71.7	VET	Bachelor	2.0
SK	9.2	9.1	8.6	8.6	7.1	8.5	5.8	61.7	High	Bachelor	1.0
UK	7.5	7.6	7.9	7.8	6.7	7.5	5.2	72.8	None	n.a.	n.a.

VET: Vocational Training

Sources: own elaboration on Eurofound microdata (2016) for users' satisfaction; LTC workers' density from OECD (2022); OECD data for educational requirements taken from Rocard et al. (2021

In the present section, we have used three sets of indicators in order to compare countries. A first one is derived from the Eurofound European Quality of Life Survey of 2016, where a set of variables was used to rate the satisfaction of LTC service users, with five specific quality dimensions in relation to those services: quality of the facilities; expertise and professionalism of staff; personal attention given; being informed or consulted about care; all patients being treated equal. Furthemore, the same

survey investigates the overall satisfaction with LTC provision in the country and the share of individuals who argue that it is not difficult to pay for LTC services. A second set of indicators refers to the education requirements for LTC workers (the data is collected by the OECD). The last set of indicators comes from OECD and it corresponds to the number of LTC workers per 100 elderly.
As Table 13 shows, there is heterogeneity among European countries. In general Nordic and Continental countries are the ones where satisfaction is higher, there is a higher diffusion of LTC workers, and LTC costs are more contained than in the rest of Europe.

As already done for ECEC, we have attempted to build a synthetic quality of services index also for LTC (Table 14). Denmark is the country with the highest quality, followed by the Netherlands, Germany, and Spain. Italy, Hungary, and Slovakia are the countries that perform the worst. In these latter countries it is particularly problematic the workers' density rate (also given that these countries rely heavily on informal care) and, in the case of Italy, there is an issue with the perception and satisfaction with how the LTC system works.

Table 14. Selected LTC quality aspects (second part of 2010s): how SOWELL countries score

Country	Mean five dimensions of LTC satisfaction	Evaluation of overall quality of LTC system in the country	% of older people (65+) declaring it is not difficult to pay for LTC costs	Education requirements for LTC workers: personal care workers	Education requirements for LTC workers: nurses	Rate of LTC workers per 100 elderly (2019)	Total score on a 0-100 scale
DK	86.0	69.0	93.2	70.0	100.0	65.0	80.5
NL	78.0	65.0	91.4	70.0	70.0	66.7	73.5
DE	76.0	71.0	60.5	70.0	100.0	45.0	70.4
ES	79.0	67.0	66.7	50.0	100.0	40.0	67.1
IT	68.0	56.0	39.2	50.0	100.0	30.8	57.3
HU	84.0	67.0	66.9	70.0	70.0	15.8	62.3
SK	85.0	58.0	61.7	50.0	100.0	8.3	60.5

Score assignment: indicators referred to older people evaluation of different aspects of their LTC system (including costs and equity) have been transformed, when necessary, in a 0-100 scale instead of a 0-10 scale; for educational requirements have been given 100 point if the country requires a tertiary degree, 70 points if it requires a VET or technical degree; 50 points if it requires only a high school degree; the LTC workers' density ratio has been assigned a 0-100 score (where 100 was given to the country with the highest ratio in the EU - as shown in Table 12, it is Sweden with a 12 ratio)

The analyses in the SOWELL country reports add insights on quality of services. In Denmark, municipalities are responsible for setting education requirements for LTC workers and therefore there is a variety of situations at the local level. A litterature review point to stability rather than change over time when it comes to service quality, and show no systematic differences in public and

outsourced services. However, municipalities have been critisied for looking too much at the price and too little at the quality when eldercare is outsourced, andmost of interviewees in the SOWELL found that service quality problem exist and are increasing in the public as well as the outsources part of LTC. Some important news come from interviewees that argue the picture could change after the new government coming into office in 2019 has linked the welfare budget to demographic development (see next section), a decision that might stop the decline in expenditure per user and thereby benefit service quality, although it is not certain. Most existing large-scale quantitative studies show stability rather than change in the service quality of LTC. However, the present as well as other qualitative studies indicates that many stakeholders experience declining service quality.

In Germany, roughly 50 percent of all employees in elderly care are professionals and 50 per cent are assistant workers. Assistant workers have either no vocational training or only a one- to two-year training. Because of German federalism, vocational training regulations so far were hardly harmonised and partly inconsistent. However, since the implementation of the German Nursing Professions Act ("Pflegeberufegesetz") in 2017 a uniting trend in the three previously separate and different training programmes in geriatric nursing (care of the elderly), healthcare, and paediatric nursing (children's nursing) can be observed. Hence, for the future workforce at least the three year vocational training in elderly care will be standardized, while the assistent care worker training schemes still depend on regional state regulations. This reform pursued, to make the vocational training system in nursing more attractive and to promote permeability between the different subfields in the healthcare sector. Theoretically, a skilled worker quota ("Fachkraftquote") of at least 50 per cent, mandatory since 1993, sets standards for the workforce composition especially in residential care. Although established to ensure high-qualitative care, experts state that the quota did not really help to increase care quality, partly due to implementation difficulties. Empirically, none of the German federal states was able to meet the quota appropriately. Therefore, from 2023 onwards, a new staffing assessment procedure ("Personalbemessungsverfahren"), which currently is in a testing phase, will be implemented. In contrast to the skilled worker quota, staffing ratios will be individualised according to the specific demand of care homes. Consequently, residential care homes will employ workers of all three categories, professional workers, assistant workers with one- to two-year training, and unskilled workers depending on the client composition and care needs of clients. While this new regulation might help to counteract the persistant staff shortages, it will probably not alter the semi-professionalized character of the sector. There is little scientific expertise in nursing and the institutional demand for personnel graduated from academic care degree programmes still seems to be low.. In 2017, only 0.34 per cent of all employees in ambulant care services had an academic nursing degree, and 0.45 per cent of those employed in nursing care homes. Regarding wages, several reforms initiated on central state level tried to counteract the low wage trend, triggered not least by the high presence of private for-profit home care services and residential care homes. In 2010, a minimum wage legislation for care work (in institutions) came into force, implemented on the basis of the Posted Workers Act ("Arbeitnehmer-Entsendegesetz") which was also applied to ambulant care services in January 2015. The Law for the Improvement of Wages in the Care Sector, which came into force in November 2019, created a legal basis to improve wages in the Employee Posting Act (AEntG) (BMG 2020). This regulation empowers the Care Commission ("Pflegekommission") to decide on specific minimum wages for care workers depending on their qualifications. With the fourth legal ordinance on mandatory working conditions in the care sector, the minimum wage for unskilled care assistants has been raised in four steps to 12.55 euros uniformly in Eastern and Western Germany by the beginning of April 2022. Since July 2021 a minimum wage for skilled nursing staff has been established for the first time, and it rose to 15.40 euros in April 2022 (BMG 2020). In June 2021, a further relevant reform has passed, the GVWG: The GVWG is a legislation to oblige especially private providers to adhere to wages negotiated in regional collective bargaining (as a minimum threshold) or at least average wages and to regulate a limitation of the own contributions ("Eigenanteile") as well as mandatory staffing levels (BMG 2021). This regulation will

be even more important as an attempt for a general national collective bargaining agreement with public and non-profit providers failed.

In the Netherlands, the governance of long-term care and social support aimed at more market-mechanisms between the triangle of care agencies / municipalities, long-term care providers and clients. Since 2019, the government recognizes disappointing performances due to these market mechanisms in LTC. The Minister's credo is not anymore 'competition' but 'co-operation between providers in the care sectors'. Most clear are the negative effects of the decentralisation – combined with cuts in public budgets and the introduced model of public procurement in the Social Support Act (2007 and 2015): 'municipalities have concentrated on organising the Act in their local settings, and have been less concerned with the results achieved; concepts such as 'appropriate support', 'independence' and 'participation' are moreover not easy to define and measure' (SCP, 2018: 203). Also the SER-report (2020: 172-174) points to governance problems such as high bureaucracy and administrative burdens for municipalities and homecare providers in the model of public procurement. The interviews point to low-cost competition between providers in homecare and related low quality of the services.

In Italy, in the last decade welfare policies have increased flexibility of the services, modelling care and assistance on specific needs of the elderly people by 1) de-institutionalizing the efforts and interventions, limiting the use of residential care and strengthening home care, 2) creating service networks that allows to differentiate and personalise the services provided and trying to integrate social and health care services 3) increasing their attention to the quality of care. However, evidence of problems in service quality frequently emerges and these problems were also highlighted by the pandemic. Several studies, including the important monitoring carried out by LTC Observatory (Barbarella et al., 2017), have been underlining for years that there is no tool to read the data on the phenomenon of LTC in Italy. We have seen a growth of the workforce over time but the workers' density in the sector (computed per 100 people aged 65+) is still low. In 2011, there were 3 workers for every 100 people in the services and in 2019 there has been a small growth to 4 workers (OECD, 2020). This contributes to high workloads and reduced service and work quality.

In Slovakia, skilled home nursing is part of the healthcare system. It is provided mainly by a single type of organisation, namely home care and nursing agencies. The latter agencies are part of primary healthcare and belong to the system of healthcare services. They provide complex special nursing care for clients/ patients, families, and communities within their own habitat. It is a self-contained functional unit allowing the provision of nursing care including prevention, therapy, rehabilitation, and counselling, healthcare as well as social and educational care. In 2011, there were 162 home care agencies in the Slovak Republic. Most of the agencies provide nursing care exclusively by means of qualified nurses. The emphasis is mainly on technical nursing of sick people at home. Some agencies also include rehabilitation provided by qualified physiotherapists. Others provide home assistance such as housework, shopping, cooking, and feeding. In 2014, 4,074 persons received home care services carried out by 111 private providers; and in 2016, home care services were supplied by 173 private providers to 3,594 clients. Compared with 2015, the number of providers grew by approximately 33 per cent, while the number of clients fell by 23 per cent. For the non-medical home care sector, there is no formal training or certificates. Also, there does not seem to be any labels or brands for intermediaries. The Act on Social Services defines the standards of quality for social services. They apply also to long-term care services. Although they were defined as long ago as 2008, a regular assessment of social services quality has not happened to this day. According to the last statements from the representatives of the Ministry of Labour, Social Affairs and Family, a system of quality assessment will be launched in September 2019. Postponing quality assessment (based on legally defined standards) has resulted from the fact that many providers were not able to fulfil all the criteria of the quality assessment system in the context of their existing levels of financial support. Despite this, partial evidence on some quality challenges comes from the process of preparing for quality standards implementation in 2015 and from the assessment procedures carried out within an

ESF-funded national project in 2016. However, these findings relate to social services in general, not just to long-term care services.

3.5 Quality of work: labour market characteristics and working conditions

In all European countries, the LTC services are growing due to socio-demographic and socio-economic factors (in particular ageing and the increasing female participation to the labour market). The financial crisis of 2008 has affected in many countries the structure of this specific labour market, the governance of the services, and the opportunities for both the employers, the employees, and the clients of the services.

In Spain, Italy, Hungary, and Slovakia there is a strong presence of informal/irregular home care, often characterised by irregular employment of migrant workers in Spain and Italy, which runs parallel to public professionalised LTC services. In countries with a larger share of informal care workers, the perception of formal care workers and employment conditions can be affected by this fact. The extension of informal care workers can put downward pressure on employment conditions. At the same time, the subjective perception of care workers can also be influenced by this and make formal care workers to have a more positive (relative to informal carers) view on their working conditions.

There are basically three working profiles in LTC. In particular, there is a first segment composed of doctors and nurses in healthcare facilities, in primary care and, partially, home carer. Then there is a second segment based on residential care facilities with a workforce composed mainly of nurses, social health operators, and support staff like cooks, cleaners. Finally, the third segment is mainly composed of home care workers.

Eurostat and the OECD provide data on the labour force in LTC.

The large majority of long-term care workers are personal carers, and the bulk of the workforce with a regular contract is employed in residential care (SPC-EC, 2020). According to Eurofound (2020) 67% of LTC workers were in 2019 personal care workers, and 33% nurses. In several European countries, including Denmark, Spain, Italy, and Slovakia, more than 80% of LTC employment is made by personal care workers. Furthermore, the overwhelming majority of long-term care workers are women (88%) and middle-aged (the median age was 45 in comparison to 42 in the overall workforce). Most workers in this field have a medium level of educational attainment, such as an upper secondary educational qualification or equivalent. Nurses have on average higher educational attainment levels than personal care workers, mirroring their more complex tasks and responsibilities (OECD, 2020). Around 20% of the LTC workforce is foreign-born, with substantial variation across countries (Slovakia is one of the countries with few foreign-born LTC workers). Most countries experience difficulties attracting a sufficient number of long-term care workers.

Looking at working conditions, only a minority of LTC workers (78%) is very satisfied with their working conditions. Eurofound (2020) indicators of job-quality indices (e.g. intensity, monthly earnings, physical and social environment, and working-time quality) show that LTC workers perceive a worse job quality compared with healthcare and other sectors. Furthermore, non-standard working arrangements, as well as irregular working hours, are widespread among the LTC workforce and are above average when compared to other sectors.

Table 15 is based on Eurofound microdata, pooling together data from the 2010 and 2014 waves of the Survey on Working Conditions. All the job quality indices provided by Eurofound are measured on a scale from 0 to 100, except for earnings, which is measured in euros. With the exception of work intensity, the higher the index score, the better the job quality. The Table shows how workers in LTC residential care fare, also compared to healthcare workers.

As it can be noticed, it is practically almost impossible to find a country where working conditions in LTC are equal to those in health care, especially when it comes to earnings.

Table 15. Working conditions in LTC: a comparative analysis (first part of 2010s)

	LTC workers in residential care					Difference between LTC residential care workers and					
Country	Skills	Good	Intensi	Prospec	Work	Monthly	Skills	Good	Intensi	Prospec	Work
Austria	50.7	65.3	43.4	60.3	67.3	82%	-24%	-3%	16%	-9%	-6%
Belgium	57.8	69.0	36.9	68.9	69.9	88%	-14%	1%	-10%	-4%	2%
Bulgaria	34.6	92.6	19.9	53.8	71.0	56%	-57%	3%	-42%	-33%	-7%
Denmark	67.5	54.1	39.6	65.1	65.7	76%	-5%	-27%	-7%	-14%	-8%
Finland	62.2	62.3	35.2	69.9	61.7	87%	-9%	-6%	-16%	-1%	-13%
France	56.6	57.8	44.4	69.6	67.3	80%	-4%	-13%	7%	4%	1%
Germany	53.4	67.8	38.5	68.6	68.5	85%	-7%	-10%	10%	1%	-4%
Hungary	57.1	87.3	36.5	62.5	69.0	69%	-6%	8%	0%	-10%	5%
Ireland	48.2	76.5	32.4	64.3	68.2	76%	-33%	6%	-28%	-1%	0%
Italy	55.6	87.4	33.2	56.5	71.8	65%	-7%	13%	-16%	-12%	4%
Luxembou	61.1	77.8	33.2	75.7	74.0	72%	-9%	14%	-19%	4%	4%
Malta	59.4	78.4	42.3	67.8	69.3	77%	-7%	7%	4%	2%	4%
Netherlan	60.5	61.2	38.0	54.5	72.5	71%	-18%	-8%	8%	-16%	3%
Norway	64.1	66.9	42.0	68.6	68.8	74%	-9%	-11%	5%	-3%	-2%
Portugal	39.7	83.8	31.2	53.9	66.5	59%	-36%	-5%	-4%	-21%	-2%
Slovakia	55.7	66.8	25.7	59.0	63.2	77%	-5%	-18%	-37%	-12%	1%
Slovenia	54.1	73.7	28.8	56.5	69.1	76%	-15%	6%	-38%	-11%	3%
Spain	51.8	78.7	40.0	51.0	64.2	67%	-13%	-1%	-2%	-22%	-5%
Sweden	57.0	63.0	37.7	63.7	65.0	76%	-20%	-5%	-13%	-12%	-6%
UK	56.8	64.8	41.2	66.0	63.8	61%	-21%	-7%	-13%	-7%	-5%

Source: own elaboration on Eurofound EWCS microdata for 2010 and 2015

Table 16 reports a job quality index based on the data contained in the previous Table for the seven SOWELL countries. It is interesting to underline two major results. . First, working conditions do not appear so different among the seven countries, especially when compared to the findings on service quality, coverage, and expenditure. Second, the scores are not particularly high: all countries have an issue with working conditions in this policy field.

Table 16. Working conditions in LTC: how SOWELL countries score (first part of 2010s)

Country	Skills and Discretion Index	Good social environment Index	Intensity Index (reversed)	Prospects Index	Work time quality index	Monthly Earnings (LTC as % of Healthcare earnings)	Total LTC job quality index (0-100 score)
Denmark	67.5	54.1	60.4	65.1	65.7	76	64.8
Netherlands	60.5	61.2	62.0	54.5	72.5	71	63.6
Germany	53.4	67.8	61.5	68.6	68.5	85	67.5
Spain	51.8	78.7	60.0	51.0	64.2	67	62.1
Italy	55.6	87.4	66.8	56.5	71.8	65	67.2
Hungary	57.1	87.3	63.5	62.5	69.0	69	68.1
Slovakia	55.7	66.8	74.3	59.0	63.2	77	66.0

Source: own elaboration on Eurofound EWCS microdata for 2010 and 2015

The results emerging from the SOWELL case studies confirm that quality of work is only partially different among the seven countries. The information gathered offers further insights on jobs' quality in LTC and on what actions have been implemented in recent years in order to improve it.

In Denmark, working conditions in LTC services are overall homogeneous and protected in both the public and the share of private services outsourced parts, which is covered by collective agreements. However, a share of the market (especially for cleaning) is in the hands of private providers not covered by collective agreements which likely have lower pay and worse working conditions than the covered providers. Furthermore, the Danish case study shows that there are work environment problems and work intensification as well as of harder conditions in the outsourced part. Labour shortage (shortage of labour in general) and skill shortage (shortage of qualified labour) represent core issues in LTC (home helpers in particular), due to an ageing workforce, problems in attracting people to the occupation, and a part-time culture in the sector. The actors in the area - primarily the government (Ministry of Social Affairs and Senior Citizens) and the social partners, but to some extent also the NGO DaneAge Association and the training institutions - have taken a large number of initiatives to address this problem. Moreover, the social-democratic government, which took office in June 2019, has committed themselves to increase the staff/user ratio in the public sector, putting further pressure on labour supply. Furthermore, another issue relates to low wages for home-helpers, an issue that has received high and special attention from social partners.

In the Netherlands, working conditions are fragmented and display a marked deterioration. In the LTC, the main issues reported are particularly low wages, high working pressure with significant effects on the physical and mental health of staff members; high regulatory pressure coinciding with low professional autonomy. Due to decentralisation of the responsibility to municipalities and the introduction of public procurement, private providers in homecare not only have markedly increased, but many traditional suppliers of home care services went bankrupt. This 'gap' in the market led to the rise of so-called Care Cowboys (organisations which use all kinds of 'dirty tricks' – i.e. barely legal means – to cut costs, and which were notorious for not complying with labour regulations). The

rise of these Care Cowboys fuelled a 'race to the bottom' in terms of working conditions. This motivated the social partners to amend the collective agreement in 2019 – stipulating that the working conditions of 'helpers' in home-based care could not worsen if they switched between employers.
In Germany, the working conditions are not particularly satisfying and wages are low. The fragmented employment relations system, the weak representation of LTC employees' interests, and the low degree of their self-organisation lead to an improvised collective bargaining autonomy, a low collective bargaining coverage, and a lack of influence of collective agreements. Working conditions in LTC deviate significantly from typical employment relations because part-time work is very widespread in this sector. Furthermore, a high workload is problematized by LTC workers themselves and many LTC employees are not satisfied with their income. In LTC, the wage level is very low compared to childcare and nursing occupations. Some attempts have been made to improve salary level by leveraging on minimum wage legislation. In 2020, the minimum hourly wage for unskilled carers was EUR 11.35 in Western Germany and EUR 10.85 in Eastern Germany. This equates to about EUR 24,000 (West) and EUR 23,000 (East) per year for a 40-hour working week (Eurofound 2020: 37). In 2021, the minimum wage slightly increased to EUR 11.80 in Western and EUR 11.50 in Eastern Germany. Furthermore, on 24 June 2021, a judgement of the Federal Labour Court was announced that the minimum wage must be paid for live-in care workers as well. A further issue also fragmenting working conditions pertains to the church (Caritas) role in collective bargaining as a veto player. In order to improve payment terms and working conditions, one of the union ver.di's demands was an extension of the minimum wage for skilled workers, too, as well as minimum holidays. However, it failed as church providers refused to join the collective bargaining agreement. The church-based right of self-determination allowed the employers' association "Caritas" to veto the extension of the collective agreement negotiated by ver.di and the joint federation of public, private, and non-profit employers "BVAP". Reasons for the veto position are that, in contrast to collective bargaining agreements, the Caritas would like to keep its autonomy and the collective bargaining agreement would have been below the level of the Caritas' employment contract guidelines (AVR). Therefore, the Caritas was afraid that its own wages would no longer be reimbursed by cost units and that it would have lost its competitiveness in the highly competitive skilled labour market. Church providers are a challenge for trade unionist work because they generally dismiss trade union activities, and strikes are prohibited for employees of church providers.
In Spain, undeclared work is common in home LTC services. This situation implies not only the precariousness of the absence of employment contract but also the inaccuracy on the content and schedules of the work or, or when it is concreted, it implies generally overtime and workload pressure. Regional and sectoral differences in working conditions due to a fragmented collective bargaining system, remains problematic. A multilevel wage-setting system is common in long-term care activities (as in social services), with the co-existence of sectoral agreements at national, regional, and provincial (sub-regional) level, together with some others at company level. In the particular case of home-help service, wage-setting is much more fragmented, with several regional and provincial agreements. The salaries in LTC are below the national average. Specifically, residential care workers' earnings per hour are 31% below national average and 27% below in the case of home-help service workers. Similar figures to social services (30% below), but far from other activities such as health care (37% above national average salary).
In Italy, working conditions suffer from a huge deterioration and fragmentation due to the spreading application of a plurality of private sector national collective agreements instead of the public sector one. This is due to the growing exposure of a large share of the care services to market dynamics, through contractualisation and outsourcing, both in the domiciliary and residential LTC sector. The result is a very fragmented picture in the care services, featured by a segmented and heterogeneous composition of the workforce employed in the sector. The private sector national collective agreements set systematically lower terms and conditions of employment compared to the public sector: they establish an average of 38-40 hours of weekly work (36 in the public collective agreement), with a monthly distribution of working time that can fluctuate and the daily shifts are

flexible. Moreover, the increasing use, by private providers, of collective agreeements signed only by autonomous unions, which set lower salaries and worse working conditions than those adopted by the most widespread private sector NCAs, gives to these providers advantages in the market competition, with the risk of triggering a "race to the bottom" in the working conditions, within the sector.
Furthermore, a significant share of social care workers normally work part-time, between 20 and 30 hours per week, since many of the services they provide are highly fragmented in terms of working hours or are performed only in specific moments of the day. This has also repercussions on the income stability of these workers, since working hours are scarcely predictable and workers are only paid according to the number of hours they have actually worked. Also, in the private sector, the pace and the intensity of work are reported to be higher than in the public sector.
Low pay and worsening working conditions, as well as job instability in the LTC service sector cause an increasing workforce mobility to the health care sector, especially (but not only) for more qualified workers such as nurses and doctors. This increases the staff shortage, which is an emerging issue within the sector.
Poor working conditions are reported also in Slovakia and Hungary. The common challenge throughout all forms of employment in the LTC care sector (formalised, non-formalized) is decent working conditions of workers. The main work-related issues are the following: domestic workers are expected to be available 24/7; overtime work is not properly monitored; the line between resting time and working time is blurred; weekend work and work during public holidays are widespread; wages are low, further pushed down in the case of Hungary by migrant workers from Romania or Bulgaria. Overall, workers in the LTC sector have on average lower wages compared to the national average. The highest wages are reported for the formal part of the LTC sector, which employs qualified nurses and medical employees for elderly care. Care workers and personal assistants earn significantly lower wages than the national average for the whole economy (EUR 1,092 in 2019 in Slovakia), but also lower than other occupations in the sector.

3.6 The LTC quadrilemma: a synthesis and major outcomes

Figure 3 reports on a 0-100 scale how the seven countries of the SOWELL project fare on each dimension of the quadrilemma for LTC services: public expenditure, coverage, quality of LTC, and quality of working conditions. The four dimensions and their measurement are the ones used in the previous sections.
As for ECEC services, the seven countries have found different ways to tackle the quadrilemma also in LTC. Before discussing the results, it should be kept in mind that not necessarily countries can be considered as unitary actors, taking deliberate balancing decisions. In reality it is different actors (government, social partners, others) taking various decisions – sometimes in different decsions making areans – which affect each other mutually. Therefore, thinking of the quadrilemma as trade-offs between the dimnesions applies to many country cases but not necessarily to all of them (e.g. Denmark, where the working conditions' dimension is regulately by voluntary collective bargaining).
Overall, countries tend to cluster more together. In the case of LTC, Denmark and the Netherlands try to "square" the quadrilemma in a more similar way than in ECEC, putting efforts on all four dimensions, but partially sacrificing jobs' quality to the other three dimensions (only quality of service is higher in Denmark). Slovakia and Hungary, and Spain score low on coverage and expenditure dimensions. Italy and Germany appear to be a case more similar to the latter cluster of countries, with the main difference being the level of expenditure. How can these results be explained in the case of Southern and Central-eastern European countries, especially in the case of Germany and Spain where major reforms were introduced in the last 2-3 decades? As shown previously, these are countries (Italy as well), where a good part of public expenditure on LTC does not follow the line of service provision but of cash transfers to households and beneficiaries. This policy choice, on one hand, turns seldom into a demand for professional LTC services (it often translates into a support for

informal family carers). On the other hand, it fuels an irregular or low regulated care market, often made by migrant workers, where both quality of services and that of working conditions are low. As the SOWELL country case studies show very well, for instance, this is case of Italy and Spain.

Figure 3. The LTC quadrilemma in the SOWELL countries: end of the 2010s

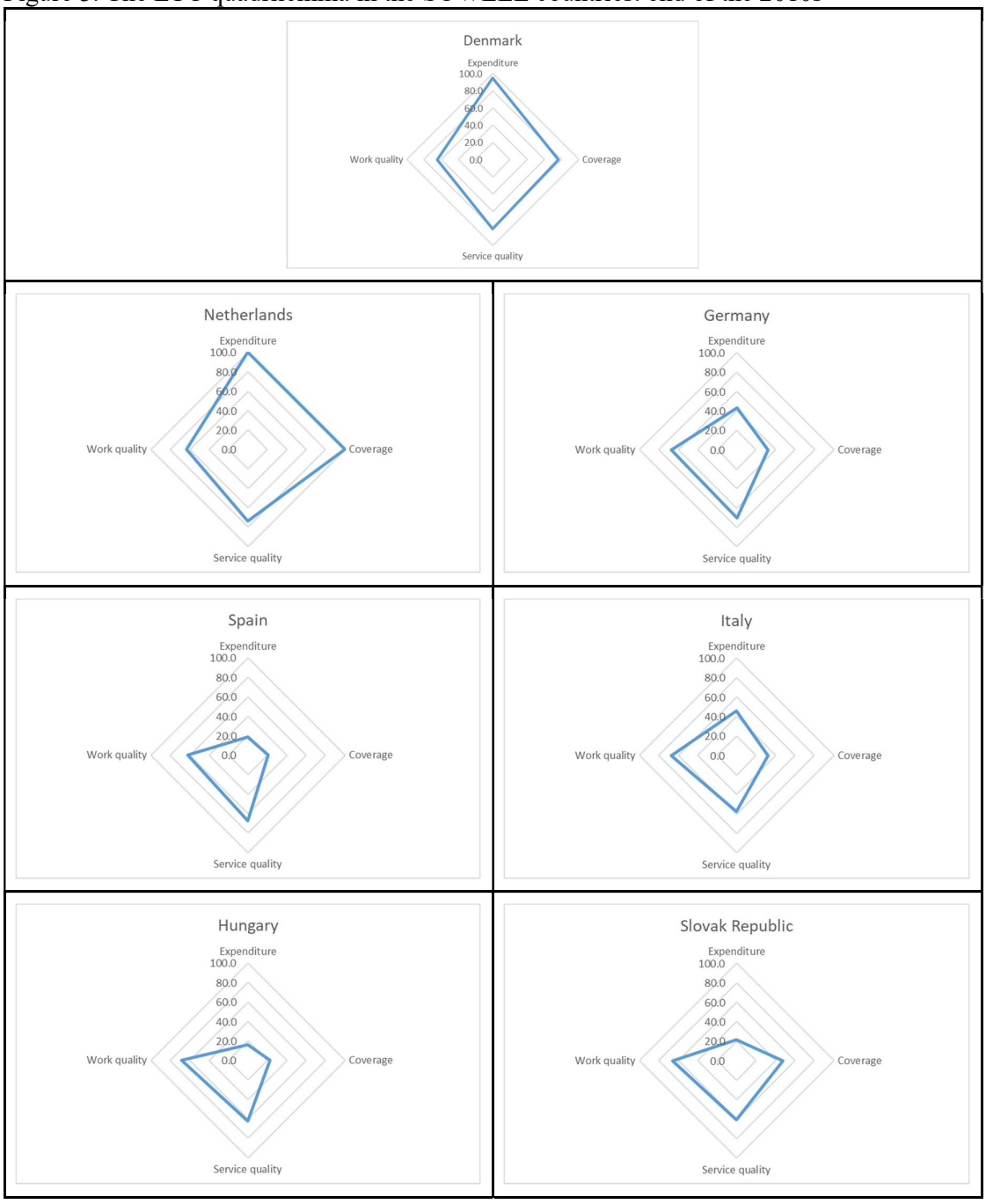


Table 17 reports the data presented in Figure 3 for the 2010s and it provides insights over trends between the mid-2000s and the end of the 2010s. Overall, there have been different trends in relation to professional service coverage: for example, a decrease in Denmark, a decrease in residential care coupled by an increase in home care in the Netherlands, and an increase mainly in residential care in Germany. Public expenditure 8as share of the GDP) witnessed an expansion in Germany, Spain and the Netherlands, whereas everywhere else it remained steady or, in Denmark, slightly declined. In

Nordic and Continental countries, there has been an attempt to improve service quality, whereas the situation has not changed significantly in Southern and Central–Eastern Europe. Finally, working conditions have not improved, with the main exception of Denmark. To the contrary, in several countries there has been a deterioration (the Netherlands, Germany, and Italy being the main examples). Again, as for ECEC services, there seems to have been a trade-off between providing service coverage and worsening of labour conditions.

Table 17. The LTC quadrilemma in the SOWELL countries: changes and trends over time

	Expenditure		Coverage		Service quality		Working conditions	
	End of 2010s	Trend in previous decade (2005)	End of 2010s	Trend in previous decade (2005)	End of 2010s	Trend in previous decade	End of 2010s	Trend in previous decade
Denmark	94.6	Decrease	76.5	Decrease	80.5	Stability	64.8	Deterioration
Netherlands	100.0	Increase	100.0	Stability	73.5	Stability	63.6	Deterioration
Germany	43.2	Increase	32.0	Light increase residential care	70.4	Improvement	67.5	Deterioration
Spain	18.9	Increase	20.6	Light increase home care Decrease residential care	67.1	Stability	62.1	Stability
Italy	45.9	Stability	32.0	Light increase	57.3	Stability	67.2	Deterioration
Hungary	16.2	Stability	22.7	Stability residential care Decrease home care	62.3	Stability	68.1	Stability
Slovakia	21.6	Stability	47.8	Increase	60.5	Stability	66.0	Stability

4. **Conclusions**

The empirical results of the project show some crucial issues in all countries.
The first main finding is that both in LTC and ECEC there seems that a common way to square the care quadrilemma is to invest (to different extents depending on the country) on coverage, expenditure, and quality of services, partially sacrificing labour conditions.
The second finding is that there are common patterns but also important differences between how the quadrilemma is tackled in LTC and ECEC. For instance, sacrificing labour conditions for the sake of the other three dimensions is more pronounced in the former sector than the latter one.
Third, there are country differences. Denmark remains the country where the various actors (governments and social partners above all) try to square the quadrilemma trying to avoid as much as possible the sacrifice of labour quality for the other three dimensions. However, it still comes up short when assessed in this respect. The Netherlands and Germany have adopted two different models, both based on investment of resources in these sectors but with partially different outcomes. In particular, the Netherlands seem to have chosen to sacrifice largely working conditions for the sake of coverage, especially in the ECEC sector. Germany has tried to invest less but to find a more balanced model.
Italy and Spain have started to differentiate from each other. Compared to Italy, Spain has been more successful in squaring the quadrilemma in ECEC than in LTC, although serious questions remain on working conditions' quality.
Hungary and Slovakia show differences among each other but at the same time are the two countries where a "low road" to solve the quadrilemma has been chosen so far (more in Hungary than Slovakia), based on low expenditure, (medium-to-)low coverage, not particularly high service provision and job quality.
Finally, the last finding regards all countries and it deals with the fact that labour shortages, unsurprisingly given what has been written so far, are a common feature for both ECEC and LTC. Labour shortages are a phenomenon characterising all seven countries, but with different peculiarities. Several initiatives are underway in some countries (especially Denmark, the Netherlands, and Germany) in order to tackle the issue, but so far there have been limited positive results. What seems clear from the SOWELL project is that labour shortages in LTC and ECEC are a structural phenomenon related to the whole political economy model adopted in the regulation of these two sectors, based on the sacrifice of the job quality dimension for the sake of the other three dimensions. Of course, there are deep differences between how the quadrilemma has been squared among different countries. At the same time, the common red line is a difficulty in all of them to improve working conditions. The direct outcome is a major labour shortage issue practically everywhere. The indirect and more long-term effect deals with the quality of services. Although many SOWELL countries have tried to improve the latter (for instance through education requirements), it is hard to think that this quality in the daily running of services can remain medium or high with working conditions do not improve: Both LTC and ECEC are labour-intensive sectors that require a skilled and committed labour force in order to perform well for the wellness of beneficiaries and their families.

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