The Executive summary has been translated with kind support of the UNICEF country office in Croatia.

SUMMARY

Dobrotic, Ivana

Matkovic, Teo

Menger, Valentina

AN ANALYSIS OF THE ACCESSIBILITY, QUALITY, CAPACITIES AND FINANCING OF THE EARLY CHILDHOOD EDUCATION AND CARE SYSTEM IN CROATIA

The first part of the research analyses the indicators of the accessibility and quality of early childhood education and care (ECEC) services and of public expenditure related to them, as well as the labour market for preschool teachers.

Accessibility. Increasing the number of child-care centres, i.e. expanding the network of child-care centres, is an important aspect of the accessibility of ECEC services. Between 2004 and 2016, the number of children attending regular kindergarten or nursery programmes in Croatia increased by 37.2%, while the number of child-care centres (institutions for early and preschool education) increased by 34.7%. Because each generation of preschool children in Croatia is smaller than the previous one, this significantly raised the number of children included in regular preschool programmes in the same period – from 13.4% to 21.4% for nursery-aged children, and from 41.2% to 59.2% for kindergarten-aged children, although the growth was slower during the financial crisis (2010 – 2015). The level achieved is still very far from meeting the Barcelona Objectives set by the European Union (33% of nursery-aged children and 90% of preschool-aged children included in ECEC services), or the objectives set within the Europe 2020 strategy (95% of children between the age of four and primary school age included in preschool programmes).

There are pronounced *systemic regional differences regarding the early childhood education coverage rate* in Croatia. In 2016, from 5.6% to 40.4% of children were included in nursery programmes, and from 24.4% to 82.8% of children were included in kindergarten programmes, depending on the county. In the period between 2014 and 2016, 146 municipalities where 7.2% of all kindergarten-aged children in Croatia live did not have a kindergarten programme, and 311 units of local self-government with 17.4% of all nursery-aged children in Croatia did not have a nursery programme in their area. The early childhood education coverage rate is highest in the most developed counties (as observed by the index of development), and the reverse is also true. The coverage rate is lower in municipalities than in towns. Growth in the period between 2004 and 2016 was uneven because underdeveloped counties and units of local self-government expanded their preschool capacities more slowly than others. Therefore, instead of equalisation, the differences among the counties and local self-government units increased.

In terms of the *spatial availability* of child-care centres, the Croatian National Educational Standard for Early Childhood Education and Care prescribes that the distance between child-care centre and place of residence should be less than one kilometre. Only in 17 urban centres does a child-care centre cover an area smaller than 5 km², while in 182 units of local self-government, the average area covered by a single child-care centre is greater than 50 km². Spatial availability is poorest in the most underdeveloped counties and local self-government units, in municipalities in particular, which is a real obstacle to increasing the coverage rate. Regular kindergarten programmes can also be implemented in primary schools, whose network (if we include the smaller branches of these schools, too) is far larger and spatially more even than the child-care centre network, but such practice is becoming rare, and in 2016 only 22 primary schools offered kindergarten programmes.

The number of unenrolled children who submitted an application is often used as a basic indicator of the unavailability of preschool programmes. In the period between 2013 and 2016, this number ranged between 4,000 and 5,000 children in Croatia, i.e. 10.8 - 13.2% of all three-year-olds. This, however, is not a completely reliable indicator because a certain number of parents never apply to enrol their children in a preschool programme if it is not available where they live, i.e. if the child-care centre is far away, if its fees are too high or if the number of places in the existing child-care centre is too small. Therefore, it is not surprising that in less developed counties and local self-government units, the proportion of unenrolled children in the generation for which the parents submitted an application is actually lower. Another

problem is the lack of full-day ECEC programmes, which affects the parents' options for work-family balance. Although the situation is improving, in 2016 in 11.3% of local self-government units inhabited by 3.1% of all preschool children in Croatia, only half-day ECEC programmes were available. Such a situation is more common is less developed local self-government units and in the Dalmatian counties.

Kindergartens are mostly attended by *children whose parents are employed*, whose proportion grew from 76.0% in 2005 to 82.7% in 2016. This suggests that kindergartens are less accessible for children with one or both parents unemployed, and these children make up almost half the population of children in Croatia.

Most often, *the founders of child-care centres* are towns or municipalities, but in the past ten years there has been a continuous growth in the number and proportion of private child-care centres – in 2016, they constituted 22.8% of all institutions with regular preschool programmes attended by 15.9% children. The number of child-care centres founded by religious communities, and the number of children attending them, is stable at 3%. At the county level, there are apparent regional differences regarding the founders of child-care centres, with private child-care centres particularly represented in the counties of Međimurje and Varaždin. An increase in the number of private child-care centres is less noticeable in the most developed local self-government units. Considering the organisation and size of child-care centres in the past decade, the situation is stable and lies within the pedagogical standard of preschool education and care.

Quality. Only high-quality preschool programmes can yield positive results in children. The education of preschool teachers, the number of children per preschool teacher and the size of the nursery or kindergarten group are considered the key structural indicators of quality. After introducing the new national preschool education and care standard in 2008, between 2007 and 2016 the average number of children per group decreased from 17.7 to 16.3 in nursery groups, and from 23.9 to 22.6 in kindergarten groups, while the teacher-child ratio improved (from 10.4 to 8.6 children per nursery teacher, and from 12.4 to 11.0 children per kindergarten teacher). However, there are still great differences among the institutions regarding these indicators. In terms of group size, the lowest criteria of the national preschool education and care standard were met only in the case of 23.1% of children in nurseries and 70.3% of children in kindergartens. While structural indicators of quality do not show great systemic differences

relating to the level of development of local self-government units, some progress is visible in private child-care centres. The number of expert associates per child has improved significantly during the last decade: from 200 children per associate in 2006, to 122 children in 2016. This change is more visible in private child-care centres. In the past decade, there has been no increase in the number of children attending extracurricular activities. These activities are predominantly offered by private child-care centres and those founded by religious communities, but no systematic difference relating to the level of development of local self-government unit has been noticed.

By means of a simulation, it was determined that by 2030 the system will need to ensure another 9,148 preschool teachers in order to meet the Barcelona Objectives and the requirements of the National Educational Standard for Early Childhood Education and Care. The largest number of preschool teachers will be needed in the counties and local self-government units of a lower development level (I - III) which are currently marked by a low coverage rate.

Labour market for preschool teachers. Between 2004 and 2016, the number of preschool teachers working in regular preschool programmes increased by 65%: from 7,146 to 11,822. On average, numbers grew by 390 persons yearly, with a slowdown in the years of the global crisis. While the number of preschool teachers was increasing, population aging occurred, so between 2005 and 2016 the proportion of preschool teachers over 50 years of age nearly doubled, jumping from 16.1% to 29.4%. Aging is most emphasised in public child-care centres (34.1% in 2016). With regard to employee aging trends, the number of retiring preschool teachers will increase, which will significantly hinder system growth: with the existing retirement patterns and the age structure of employees, the number of retired preschool teachers will rise from 97 per year (as identified in the period from 2006 to 2011) and 124 per year (from 2011 to 2016) to 229 annually in the period between 2016 and 2021, and 303 annually between 2021 and 2026.

According to data from the Croatian Employment Service, in the past ten years there have been increasing fluctuations and growing seasonal oscillations in the number of unemployed preschool teachers. Since 2013, from 1,600 to 1,700 preschool teachers each year become unemployed and register at the Croatian Employment Service, and between June and August the number of unemployed preschool teachers increases by 500 to 700 persons. The number of unemployed teachers in the month when fewest jobs are offered (May) decreased between 2005

and 2008 from 1,041 to 604 preschool teachers, then rose to 988 in 2013, and in May 2017 it was at its lowest point – 510 preschool teachers. In certain counties, the lack of preschool teachers has become acute. In 2016, the demand for preschool teachers skyrocketed to 4,217 persons.

Preschool teachers acquire their qualifications by completing a university or college programme implemented in nine counties. In these counties (with the exception of the City of Zagreb), the lack of preschool teachers is less severe. However, the total enrolment quota in the academic year 2018/2019 was 639 students (282 of whom are part-time students), and this has not drastically changed in the last decade (the quota was reduced in Zagreb and increased in Slavonia). According to data from the Croatian Bureau of Statistics, on average about 500 persons graduate annually from preschool teacher education, which, in the context of the imminent retirement wave and the lack of "spare" unemployed preschool teachers, will limit systemic growth to a maximum of 200 employees a year. Therefore, to enhance preschool education programmes, it is necessary to significantly increase the enrolment quota for preschool teacher education – and there are many who are interested in enrolling in this programme.

Financing. Financing the ECEC system is almost exclusively the responsibility of local self-government units, who bear over 99% of the public expenditure for ECEC. Total public expenditure for ECEC increased from HRK 1,218 million in 2005 to HRK 2,007 million in 2015, which means it grew from 0.46% to 0.61% of GDP, or from 8.1% to 10.6% of the total budget of local self-government units. According to these data, in 2015 average public expenditure per child was HRK 16,634. The decentralised financing of ECEC resulted in great regional differences in public expenditure, so the proportion of expenditure for ECEC in the budget of local self-government units in 2015 ranges from 5.7% to 14.1%, and it is considerably smaller in municipal budgets (6.9%) and in the budgets of less developed local self-government units. Moreover, expenditure per child is higher in the units of local self-government that belong in the 4th, and particularly the 5th, development group. It should be emphasised that there are great differences between local self-government units regarding their fiscal capacity, so the differences discovered in the share of local budgets allocated for preschool programmes are not sufficient to explain the large inter-county differences in the coverage rates.

Following the example of the recent reforms in other countries, a simulation was conducted to see the effect of an increase in local self-government expenditure to the level of 10% of the budget (for municipalities and towns which currently spend less), with additional transfers from the state budget based on the number of recently born children and the level of development. Such a reform would re-direct another HRK 273 million from local budgets and an additional HRK 299 million from the central budget to ECEC programmes, which would enable up to 42,000 more children to attend regular preschool programmes, i.e. it would raise the coverage rate to 14.7% and significantly reduce the differences among counties and local self-government units with regard to their level of development.

A SURVEY IN LOCAL SELF-GOVERNMENT UNITS

The second part of the research analyses the results of a survey conducted in local self-government units in 2015, which included 61.9% of local self-government units inhabited by 79.0% of all preschool-aged children in Croatia. The survey collected valuable information on the enrolment and financing criteria and practices which are not collected by the official statistics.

Enrolment criteria. Child-care centre enrolment criteria are extremely diverse. Local self-government units listed over sixty criteria. The criteria prescribed by law are most frequently applied. These criteria give advantage to children whose parents are employed, children of single parents, children of disabled veterans and victims of the Homeland war, children from families with three or more children, children with developmental difficulties, children from foster families and from families receiving child allowance. Only a small number of local self-government units apply all the criteria prescribed by law, and the most commonly applied criterion is the one referring to children of working parents. Few local self-government units have clear scoring criteria. However, towns and local self-government units that are more developed enrol on average a larger number of groups of children who have priority.

The economic price of preschool programmes. Speaking of the economic price of kindergartens, the average price was HRK 1,751 monthly per child. Prices are higher in more developed areas, but in these areas local self-government units provide higher subsidies, so, in the end, the parents' share in the economic price of preschool programmes is similar throughout the country. A total of 80% of children live in local self-government units where parents share

in the cost of the preschool programme at HRK 500 to 700 monthly per child. However, regional differences in salary and standards of living make preschool programmes less affordable to parents in less developed areas. In the counties that belong to the 1st and 2nd development group, the average share of ECEC fees in the net salary is 12.0% and 11.2%, respectively, while in the counties in the 3rd and 4th development group the share is 9.8% and 10.0%. Despite smaller preschool groups being prescribed by the educational standard, the survey shows that 71% of local self-government units do not calculate a separate economic price for nursery programmes. In local self-government units that differentiate between the two, the monthly price of a nursery is on average HRK 210 higher than the price of a kindergarten, but the subsidy given by local self-government units is also higher, so the average share of parents in the cost of a nursery is about HRK 50 higher in comparison to kindergartens.

Where only either public or private child-care centres exist in a local self-government unit, the average economic price, but also the average monthly subsidy which a local self-government unit provides to public and private child-care centres, is lower than in the case where the local self-government unit co-finances both public and private child-care centres. The economic price and the subsidy are the lowest in local self-government units where there are no public child-care centres. In local self-government units which finance both public and private child-care centres, co-financing of private child-care centres is often less generous, on average HRK 239 monthly per child.

A total of 37% of local self-government units stated that they also co-finance children living in their area if they attend child-care centres in the neighbouring local self-government units. Among them, there are 13% of small local self-government units with 2.7% of all preschoolaged children, i.e. approximately half of the local self-government units which do not have child-care centres in their area. However, the sum for co-financing preschool programmes in other local self-government units is on average HRK 145 a month per child less than the sum for co-financing preschool programmes in their own area.

Considering that ECEC fees can be a great burden on the household budget, local self-government units subsidise a large share of the price of ECEC for some groups of children. Given that the issue of subsidising ECEC prices is left to the founders, there are considerable differences among local self-government units. A total of 49 criteria were listed based on which parents can exercise the right to a higher subsidy from a local self-government unit. The most

common practice is that the right to a higher subsidy is granted to parents with several children who all attend ECEC programmes, and the majority of all preschool-aged children live in local self-government units where it is possible to exercise the right to reduced participation in the price of preschool programme on the grounds of receiving welfare benefits, disability, or being a single-parent family. More developed towns and municipalities usually define a number of criteria allowing parents to exercise the right to a higher subsidy in accordance with the higher fiscal and administrative capacity of these local self-government units.

Child-care centre working hours and the organisation of preschool. With regard to child-care centre working hours, the survey examined the availability of ECEC services before or after regular working hours (7 a.m. to 5 p.m.), i.e. the availability of "duty hours". Duty hours are available in only 29% of local self-government units which responded to the survey, and it is a service mostly provided in towns which offer "morning duty". The survey also explored the issue of organising a preschool programme for children who did not attend kindergarten or nurseries. The regular duration of the programme prescribed by law is 250 hours (exceptionally 150 hours) and while most local self-government units follow this legal framework, a small number of local self-government units do not meet the legal minimum requirements.

OVERVIEW OF RECENT REFORMS IN SELECTED EUROPEAN COUNTRIES

The third and the last part of the research contains an overview of reforms in selected European countries which have recently significantly expanded their ECEC capacity, and which can serve as a source from which Croatia can learn about public policies, while respecting the specific context and the current ECEC system. *Central government investments* in the development of new programmes is the approach that has proven to be successful in many European countries. This approach has also proven to be very effective in countries with a high level of decentralisation (Austria and Germany), where the establishment of funds intended for expanding and for the future work of preschool programmes allowed for the flow of additional funds to federal states, which resolved the huge shortfall of mainly nursery capacity. However, although the number of children included in nursery programmes has increased considerably (for example, from 17.6% in 2008 to 32.7% in 2016 in Germany), the mechanism for the redistribution of state funds did not quite take into account the different level of development of certain areas, so the regional differences between some parts of the country still remain. Germany still has issues related to the quality of preschool programmes, insufficiently qualified

personnel and working hours. Apart from measures focusing on increasing the number of children included in ECEC programmes, Austria is also introducing measures to adjust the working hours to fit the needs of employed parents and to improve the quality of the programmes.

A growing number of European countries *guarantee every child the right* to a place in an ECEC programme. Some countries are introducing *additional state subsidies* as an answer to the high cost of ECEC programmes and are considering the option of paying preschool teachers' salaries from the state budget. Some countries also use *resources from European funds* to build new or expand existing child-care centres, which has had a positive effect on their growth and has encouraged a change of priorities in local communities. For example, in Poland, access to EU funds played an important role in the inclusion of a growing number of children in ECEC programmes and in the equalisation of regional differences. However, it is important to underline that after financing from the EU funds ended, certain local self-government units faced the challenge of the sustainability of programmes, and in some cases the state had to intervene by providing financial support so the programmes could continue. However, a small number of ECEC programmes ceased to exist.