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Integration and descendants of migrants

Immigrant children in pre-school education in Slovenia

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Abstract

More than three out of four children aged 1-5 attend kindergarten in Slovenia. While not compulsory, it is the most affordable form of day-care for small children and generally perceived as extremely beneficial for the child's physical, social and cognitive development. For immigrant children, attending kindergarten before starting school is all the more important, as it is often the only place where they can learn and practice Slovene and begin actual integration. The paper studies the participation rates of different groups of immigrant children in pre-school education by utilizing a newly acquired administrative data source (Central Register of Participants in Education, CEUVIZ) and linking it with our population database (based on Central Population Register, CPR).

I. Pre-school education system in Slovenia

1. Children in Slovenia enter compulsory education at age 6. Before this, a large majority of children attend pre-school education. This is not compulsory, but generally viewed as very beneficial for the child's physical, social and cognitive development.

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2. Pre-school education in Slovenia is performed by public and private pre-school institutions (*vrtci* or kindergartens). They admit children from the age of 11 months (the earliest age at which paid parental leave can be over) and up to the entry into compulsory education. Public pre-school institutions are generally financed by local communities and parents, where parental contribution depends on their income, and some other sources. For most parents, kindergartens are the cheapest child-care option.

3. While the kindergarten network is very wide-spread, places are limited, especially for very young children. This means that not all children can attend, so local communities (founders of public pre-schools) have developed quite complicated point systems. Generally, permanent residence (of the child and the parents) in the municipality is worth the most points, especially if they have had it registered for a longer period. Additional points come from parents' student status, willingness to accept a place at any kindergarten in the municipality, at least two enrolled kindergarteners from the same family simultaneously, multiples, family size, age of child etc.

II. Immigrants and pre-school education

4. For immigrant children, attending kindergarten before starting school means that they come into daily contact with the language and culture that they are expected to fully understand and use once they enter school. Integration starts here: not just by learning the language, but by being included in a group, being a part of society. This is fully acknowledged and practical guidelines on integration of immigrant children exist. This does not, however, mean that there is any kind of policy incentivizing immigrant children to attend kindergarten.

5. Enrolling a child in kindergarten (and getting the subsidy based on income) is a bureaucratic process that even parents with a full command of Slovene language find difficult and confusing. Like others, immigrant parents can get help with the application, but getting their child accepted quickly might prove difficult due to the point systems favouring permanence of residence mentioned above.

6. The general participation rate in pre-school education in Slovenia was 78% in the 2015/2016 school year; the older the children, the higher their participation rate: as high as 92% among 5-year olds (2015/2016). This paper studies the participation rates of different groups of immigrant children in pre-school education by utilizing a newly acquired administrative data source (Central Register of Participants in Education, CEUVIZ) and linking it with our population database (based on Central Population Register, CPR), which includes data on some migration characteristics.

III. Data sources

A. Central Register of Participants in Education

7. In 2011 the Ministry of Education, Science and Sport established an administrative register of participants in education and training (CEUVIZ). It includes participants in education and training from kindergarten to tertiary education.

8. The register was established for the needs of deciding on rights from public funds, for the purpose of carrying out the tasks defined by the Organization and Financing of Education Act (ZOFVI-I), and for scientific research and statistical purposes. CEUVIZ began to serve these tasks with the academic year 2013/14, when the register of enrolled students was complete and when the register began to be used by the Centres for Social Work and the Employment Service of the Republic of Slovenia.

9. The source of data on participants in education is provided by individual educational institutions, and data are entered as the participants enrol in the program. Data on persons who have completed a program are not entered separately, only the status of the person changes and the date of completion or exit from the program are added. Data are checked by logical controls at the time of input.

10. The Statistical Office of the Republic of Slovenia has been receiving, processing and publishing data on higher vocational college students from the CEUVIZ since the 2014/2015 academic year. Since 2015 SURS has been also receiving individual data on participants in lower levels of education, and a full transition to this data source for many surveys on education is being carried out this year.

B. Central Population Register

11. First established after the 1981 census, the Central Population Register (CPR), maintained by the Ministry of the Interior, has been an increasingly important data source for all population statistics in Slovenia since the mid-1980s. SURS has been receiving full extractions from the CPR on an individual level since 2008, where some extractions are tailor-made to suit statistical needs.

12. Since the 2011 register-based census, SURS has been utilising the CPR and other administrative sources for more frequent derivations of data on different topics, including data on migration and different characteristics of migrants.

13. Thus we produce annual data on socio-economic characteristics of population and international migrants, and by combining annual migration databases and population stocks as of 1 January (both CPR-based), we also produce data on country of birth, year of first immigration to Slovenia and from 2016 on also data on country of birth of parents. While CPR data are constantly improving, it is important to know that in some cases PINs of parents are not available, e.g. for most foreign-born foreign citizens.

14. Both CEUVIZ and CPR use the same unique PIN as an identifier, so linking the two sources is simple. Please note that all data referring to kindergarten participation hereon are based on linkage between these two sources and may differ from officially published figures based on other sources and methodologies.

IV. Kindergarten attendance and immigrant children

15. For the purpose of this exercise, we linked all usually resident children between the ages of 1 to 5 as of 1 January 2016 (CPR-based) with all children enrolled in kindergarten in the 2015/2016 school year (CEUVIZ). We chose not to include infants due to negligible participation rates (only 11-month olds can enter

public kindergarten programmes); we also decided not to include 6-year olds as the majority have entered school by that age.

16. In total, there were 109,415 usually resident children, aged 1-5 on 1 January 2016 in Slovenia. Out of them, 83,703 (76%) were enrolled in kindergarten according to CEUVIZ.

Table 1: Kindergarten participation by age of children, Slovenia, 1 January 2016

	Children - TOTAL	In kindergarten	Not in kindergarten	Kindergarten participation rate (%)
Age – TOTAL	109,415	83,703	25,712	76.5
1	21,172	9,518	11,654	45.0
2	21,222	14,893	6,329	70.2
3	22,129	18,571	3,558	83.9
4	22,178	19,724	2,454	88.9
5	22,714	20,997	1,717	92.4

Source: SURS (CPR, CEUVIZ)

17. Different groups of children were identified relating to their migrant background. To define these groups, several variables from our stock database were used: country of citizenship of the child and each parent, country of birth of the child and each parent. Additionally, we also looked at activity status of each parent. Each child had information on country of birth, but some parent data were missing due to non-existence of links between children and parents for foreign-born population.

18. Defining these groups proved to be somewhat complex. The division by country of birth (or native-born/foreign-born) is too simplistic for this purpose, and country of citizenship does not necessarily indicate an immigrant background. As enrolling a child in kindergarten is largely dependent on the parents, their immigrant background plays an important role as well.

19. Thus we defined groups with different combinations of these variables (figures in brackets refer to the number of children in each group):

- **Group 1:** Native-born Slovenian citizens with at least one native-born parent (100,729)
- **Group 2:** Native-born Slovenian citizens with both foreign-born parents (2,495)
- **Group 3:** Foreign-born Slovenian citizens with at least one native-born parent (625)
- **Group 4:** Foreign-born Slovenian citizens with both foreign-born parents (238)
- **Group 5:** Native-born foreign citizens (3,581)
- **Group 6:** Foreign-born foreign citizens (1,720)

20. We deemed a further division of groups 5 and 6 by parents' country of birth unnecessary as there were very few cases of such children with native-born parents (well under 1%), meaning that almost all children in groups 5 and 6 have foreign-born parents.

21. The resulting groups are by no means uniform. They still differ regarding parents' country of citizenship, and more importantly, kindergarten participation rates within these groups may vary largely, possibly in relation to country of origin or other variables.

22. We looked at participation rates of children by age and immigrant background groups. A quick look at Table 2 shows that there are quite some differences in kindergarten participation rates between the six groups. In all groups but 3 and 4 the participation rate rises with age of the child. As expected, the participation rate is the highest in Group 1, but it is also encouragingly high for older children in other groups. It appears that first-generation foreign immigrants (Group 6) take longer to enter kindergarten than their native-born counterparts (second generation) from Group 5, which is understandable seeing as actual length of stay in the country/municipality is one of the key criteria when municipalities/kindergartens offer places to applicants, and settling in a new country takes time as well.

Table 2: Kindergarten participation rates (%) by immigrant background group and age of children, Slovenia, 1 January 2016

	TOTAL	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Age - TOTAL	76.5	78.3	65.5	35.1	26.9	53.0	58.4
1	45.0	46.5	37.2	4.5	0.0	25.4	10.3
2	70.2	72.6	56.0	19.3	20.6	44.6	30.5
3	83.9	85.9	68.6	37.7	30.8	65.8	51.6
4	88.9	90.6	79.1	47.3	21.7	76.2	66.0
5	92.4	93.8	83.0	44.3	47.6	84.2	78.3

Source: SURS (CPR, CEUVIZ)

23. Groups 3 and 4 show some unexpected but not inexplicable anomalies. Kindergarten participation rates in these two small groups are lower than in any other group, even though all these children are Slovenian citizens which would indicate that at least one of their parents is likely a Slovenian citizen as well, with sufficient capacity to enrol their child in kindergarten. We believe that the low participation rates in these groups are partly a reflection of under-reported emigration in the CPR. A lot of these children (and their parents) are quite likely not actually resident in Slovenia, an assumption also supported by the fact that we have no information on activity by either of the parents for 40% of children in these groups who are not enrolled in kindergarten. This issue is not as pronounced in other groups. Late and non-registrations of emigration, however, are a whole different subject worthy of its own separate studies.

C. Country of origin for children of foreign-born parents

24. While all groups may include children with some kind of immigrant background, children in Groups 4, 5, and 6 would probably benefit the most from cultural integration provided by kindergarten environment. Groups 5 and 6 are of particular interest to us because they are quite large, while Group 4 is small and suffers from the problem described in the previous paragraph. Children in Groups 5 and 6 can be collectively described as foreign children of foreign-born parents, i.e. they are all immigrants or children of immigrants who have not yet acquired Slovenian citizenship (unlike Group 2).

25. To look into differences (or similarities) between children with different countries of origin, we first have to determine the country of origin for each child in Groups 5 and 6. Group 6 (foreign-born foreign citizens) is simple enough: a large majority of these children have the same country of birth and citizenship, so the assumption that country of origin is the same is not too wild. For those whose country of birth and citizenship differ, we chose to assign country of citizenship as their country of origin as we assumed they have their parents' citizenship (in almost all of these cases there is no link between children and parents so we do not actually know the parents' country of birth or citizenship). So in Group 6 all children get country of citizenship as their country of origin.

26. In Group 5 (native-born foreign citizens) every child's country of birth (Slovenia) is different from their country of citizenship. The broad assumption that the country of citizenship is the country of origin could be wrong, as citizenship is an administrative category with its benefits, and different citizenships come with different benefits, which people migrating around former Yugoslavia are well aware of.

27. For children in Group 5 whose country of citizenship was the same as the mother's or both parents' country of birth or citizenship, we assigned this as country of origin. For those children, whose at least one parent had the same country of birth as country of citizenship (but different from the child's citizenship), we chose that parent's country of birth as the origin.

D. Country of origin and kindergarten participation among foreign citizens

28. For this analysis we looked at children from Groups 5 and 6, so 5,301 children in total, with a total of 52 different countries of origin derived for them (see above for detailed description of derivation of country of origin).

Table 3: Children by derived country of origin, immigrant background group and kindergarten attendance rate, Slovenia, 1 January 2016

	TOTAL	Group 5	Group 6	Kindergarten attendance rate - TOTAL (%)
Country of origin - TOTAL	5,301	3,581	1,720	54.7
Bosnia and Herzegovina	2,295	1,582	713	68.2
Kosovo	1,333	947	386	33.1
Macedonia	643	496	147	53.2
Serbia	296	189	107	58.4
Russian Federation	128	25	103	51.6
Croatia	121	68	53	52.9
China	95	84	11	29.5
Bulgaria	49	32	17	63.3
Italy	49	3	46	36.7
Ukraine	46	16	30	54.3
Montenegro	44	38	6	79.5
United States	24	3	21	37.5
other countries of origin	178	98	80	58.4

Source: SURS (CPR, CEUVIZ)

29. Quite expectedly, we found some differences in participation rates between children with different countries of origin. Children from Bosnia are much more likely to attend kindergarten than their counterparts from Kosovo. Out of the top 12 countries of origin, kindergarten participation rate was the lowest among children from China.

30. Determining the actual reason(s) why participation rates are so different between different countries of origin is difficult and possibly speculative, but some of the reasons could be employment of parents (especially mothers) which could also be related to cultural traditions/background, existing community network from country of origin in Slovenia, similarities between the country of origin and Slovenia (be it linguistic or in the system or tradition of pre-school education) etc.

31. This could be supported by different histories of immigration to Slovenia from different countries. To better understand the possible reasons for differences, a quick look at Bosnian and Kosovan (the two most common countries of origin among children in Groups 5 and 6) immigration history to Slovenia might be useful.

32. Citizens of Bosnia and Herzegovina are the largest group of foreign nationals usually resident in Slovenia; they stand for 44% of all foreign population (2016). Additionally, Bosnia and Herzegovina is the most common foreign country of birth for Slovenian citizens: 57,000 Slovenian citizens were born in Bosnia (40% of all foreign-born nationals). There is a decades-long tradition of Bosnian migrants coming to Slovenia for work, and only in the last few years family reunification has surpassed employment as the main reason for migration among Bosnian immigrants. There is a large Bosnian/Serbo-Croatian community in Slovenia, the languages are usually mutually understood, and although it has been a while, some elements of the old Yugoslav system (which might include the tradition of kindergarten education) have survived and become tradition.

33. Citizens of Kosovo are the second largest foreigner group among the population of Slovenia, representing 13% of all foreign nationals in 2016. There is a shorter history of Kosovan immigration to Slovenia so there are not that many Kosovo-born Slovenian citizens. Family reunification has been a more important reason for immigration than employment for longer than for Bosnian citizens. While Kosovan community in Slovenia is large, a language barrier might exist, especially in the recent years when younger generations of Kosovans are arriving with possibly poorer knowledge of Serbo-Croatian, the *lingua franca* of former Yugoslavia. Kosovans are perceived as a more traditional community with fewer women working and larger families.

E. Employment of parents and kindergarten participation

34. We expected a difference in kindergarten attendance between children whose parents work and those with at least one parent not employed. We were interested to see how this compares over different immigrant background groups. A prerequisite for such analysis are links between children and their parents. As already mentioned, not all persons have PINs of their parents in the CPR. Out of the 109,415 children aged 1-5 on 1 January 2016, 98.8% had the PIN of at least one parent: 97.9% of all children had PINs of both parents, while 0.9% had only one parent's PIN (the mother's PIN in large majority of cases).

Table 4: Children by immigrant background group and parents' PINs availability, Slovenia, 1 January 2016

	TOTAL	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
TOTAL	109,415	100,729	2,495	652	238	3,581	1,720
Mother & father	107,103	99,971	2,431	613	223	3,475	390
Mother	983	758	64	26	11	106	18
Father	17	0	0	13	4	0	0
No parental PIN	1,312	0	0	0	0	0	1,312

Source: SURS (CPR)

35. Additionally, even if we do have parents' PINs, we cannot be sure of the parents' activity status if they live abroad: if the parent is not usually resident in Slovenia, we do not derive an activity status for them, or if they are usually resident and they do not appear in any of the data sources used for deriving activity status, they are assumed inactive, but they might not be actually resident.

36. While "suspicious" cases could be excluded, we believe that the number of these cases is small enough not to skew the results. In total, out of more than 215,000 known parents, who were also usually resident, fewer than 1,100 (or 0.5%) had no information on their activity status in our data sources and were assumed inactive.

37. We decided to look at each parent's activity status separately, as we expected the mother's activity status to play a greater role in whether or not a child attends kindergarten. Table 5 gives a brief overview of children by activity status of parents (only children with at least one parental PIN are included). For the purpose of this exercise we only looked at children who have the PIN of at least one parent in the CPR. This means that the majority of children in group 6 (foreign-born foreign citizens) were excluded.

Table 5: Children and kindergarten participation rates by parents' activity status, Slovenia, 1 January 2016

		Father						
		TOTAL	Employed	Unemploy ed	Inactive	non- resident	no PIN	
Number of children	Mother	TOTAL	108,103	94,236	5,406	4,966	2,512	983
		Employed	80,638	73,812	2,489	2,743	1,164	430
		Unemployed	13,149	9,914	1,808	801	299	327
		Inactive	13,071	9,950	1,001	1,204	722	194
		non-resident	1,228	552	108	212	324	32
		no PIN	17	8	0	6	3	0
Kindergarten participation (%)	Mother	TOTAL	76.7	78.8	68.3	65.1	45.3	60.9
		Employed	82.1	82.5	83.9	78.8	68.1	71.9
		Unemployed	72.1	75.9	60.2	64.7	52.8	57.5
		Inactive	52.3	56.3	47.8	42.7	19.9	48.5
		non-resident	30.9	45.7	36.1	17.9	13.3	25.0
		no PIN	11.8	25.0	n/a	0.0	0.0	n/a

Source: SURS (CPR, CEUVIZ)

38. Almost 83% of children whose both parents work, attend kindergarten. On the other hand, the participation rate for children with two inactive parents is under 43%. It does appear that the mother's employment is more closely related to children's kindergarten attendance: 81% of children with working mothers and

unemployed/inactive fathers attend kindergarten, while among those with unemployed/inactive mothers and working fathers, the attendance rate is 66%. Generally, the participation rate is the highest among children whose mothers work and father is unemployed.

39. We tried to check if these general observations are also true if we look at different immigrant background groups, especially groups 1–4 (different variations of Slovenian nationals) vs. groups 5 and 6.

40. As table 6 shows, the differences are most pronounced among children where at least one parent is unemployed or inactive. This could in some part be possibly due to inactive parents and their children not actually residing in Slovenia. Among children of working parents, the differences are smaller.

Table 6: Kindergarten participation rates (%) by immigrant background group and parents' activity status, Slovenia, 1 January 2016

	Mother	Father					
		TOTAL	Employed	Unemployed	Inactive	non-resident	no PIN
Groups 1–4	TOTAL	77.6	79.6	70.4	66.5	45.9	61.6
	Employed	82.2	82.5	84.1	79.2	68.9	74.6
	Unemployed	72.6	76.2	61.4	65.3	54.4	55.6
	Inactive	54.9	59.4	52.0	45.4	20.1	49.4
	non-resident	32.2	50.6	38.8	18.9	13.2	27.6
	no PIN	11.8	25.0	n/a	0.0	0.0	n/a
Groups 5–6	TOTAL	53.5	57.0	42.0	27.8	26.7	56.5
	Employed	75.6	79.0	76.8	54.3	37.0	55.0
	Unemployed	65.7	71.5	47.9	48.3	27.8	70.7
	Inactive	35.9	38.8	26.9	12.9	16.0	40.0
	non-resident	20.5	24.3	10.0	0.0	20.0	0.0
	no PIN	n/a	n/a	n/a	n/a	n/a	n/a

Source: SURS (CPR, CEUVIZ)

41. Not all children from Groups 5 and 6 participate in kindergarten at the same rate, even if their parents' activity statuses are the same. To illustrate, we chose the four most frequent countries of origin of children in these two groups, as presented in Table 7.

42. Nearly 87% of children of Bosnian origin whose parents both work attend kindergarten. On the other hand, only 54% of children of Kosovan origin with two working parents are enrolled in kindergarten. The kindergarten participation rate of children of Macedonian and Serbian origin with two working parents is also quite high.

Table 7: Kindergarten participation rates (%) by country of origin (Groups 5 and 6) and parents' activity status (selected), Slovenia, 1 January 2016

	Mother	Father			
		TOTAL	Employed	Unemployed	Inactive
BA	TOTAL	66.6	67.1	73.2	36.6
	Employed	86.1	86.7	88.2	75.0
	Unemployed	76.8	77.5	70.0	50.0
	Inactive	45.2	46.2	56.3	18.2
XK	TOTAL	31.3	33.6	31.4	17.1

	Employed	53.6	54.2	66.7	n/a
	Unemployed	43.8	51.9	39.8	41.2
	Inactive	26.5	29.3	23.7	11.7
MK	TOTAL	52.8	57.5	32.8	22.2
	Employed	75.7	80.4	50.0	28.6
	Unemployed	54.5	62.9	35.5	66.7
	Inactive	35.5	38.1	23.5	0.0
SR	TOTAL	56.7	58.0	61.5	50.0
	Employed	73.6	76.7	66.7	100.0
	Unemployed	71.8	71.9	71.4	n/a
	Inactive	34.9	36.3	50.0	0.0

Source: SURS (CPR, CEUVIZ)

43. Determining the reasons for differences in participation rates of children of different origins is difficult. It appears that working Kosovan parents seem to find other child care options than kindergarten more often than other parents. Large families and more than two generations living together might be a part of the answer. Detailed analyses of data presented here along with census household data could suggest some answers.

44. There are also differences in participation rates among children of different origins with two unemployed parents: quite high among children of Serbian and Bosnian origin, low among those of Macedonian and Kosovan origin. It therefore appears that employment or unemployment of parents does not necessarily directly correlate with kindergarten attendance.

45. As already discussed, kindergarten participation rates increase with age. Broken down by age and origin, however, the figures are too small to draw any meaningful conclusions, although it does appear that even 5-year olds of Kosovan or Macedonian origin are less likely to attend kindergarten than their Bosnian counterparts.

V. Conclusions and future work

46. The rough analysis presented in this paper, as expected, shows that not all immigrant children attend kindergarten at the same rate. Kindergarten exposes children to a world way beyond their home environment, and immigrant children who do not attend kindergarten for whatever reason may be deprived of this experience of immersion into society in more ways than their counterparts of native-origin which could affect their integration and later school life.

47. All in all, we may conclude that every year about 20% of all children with foreign background who enter basic school are encountering a foreign system of education with almost no preparation.

48. This paper only looks at certain variables and by no means describes the situation in full. Year of first immigration, educational attainment of parents, even geographical distribution could be playing a part, including many possible combinations of these variables, but were not studied here.

49. Data used for the purpose of this paper were not as complete as could be – for a very thorough analysis data on parents could be at least somewhat completed with

census household data from 2015. Data on household composition could also offer some possible answers regarding parents' child-care choices.

50. As implied several times throughout this paper, there is an issue of over-registration: people counted as usual residents not actually residing in the country. This also includes children and may account for seemingly lower kindergarten participation rates in certain population groups. Kindergarten, though, is not compulsory, so participation is not a good proxy for assessing the quality of the CPR. CEUVIZ, however, covers all participants in education and is thus a very useful source for such assessments: we intend to link basic school (compulsory) pupil data with CPR to get a better insight into (mostly) over-registration in the CPR; we have previously only analysed over-registration of adults and used different sources and methods.