

EDUCATION IN UKRAINE



### FOREWORD

Digest formed by: Mariana Kavtseniuk, Iryna Kogut,

Maria Kudelia, Iryna Shevchenko, Yegor

Stadny, Tetiana Zheriobkina

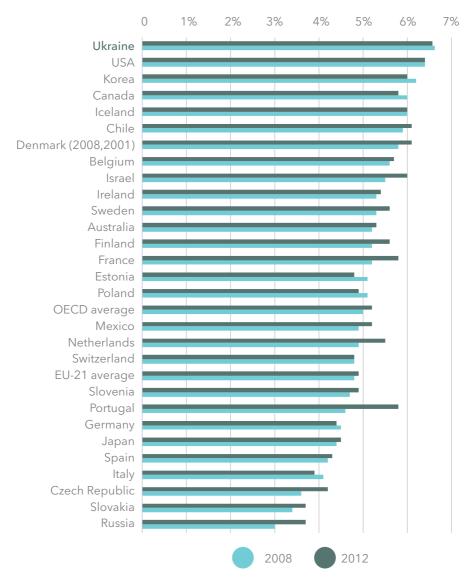
Editing: Yegor Stadny

This digest unites educational statistics and presents them in the form of perceptible graphs. This way we want to popularize basic information about the economics of education, participants of the educational process and the network of educational institutions in Ukraine. The data are displayed in comparison with other countries in order to observe Ukraine's place in the international context. We hope the digest will be useful to everyone who endeavours to understand the complex processes in the education of Ukraine.



# EDUCATION FINANCES

#### 1.1 ALL EXPENDITURES ON EDUCATION (WITHOUT PRESCHOOL) AS % OF GDP 2008, 2012



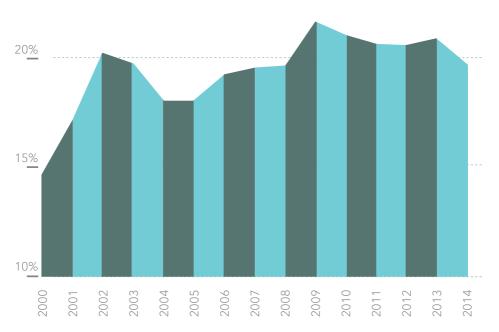
Source: State Statistics Service of Ukraine, OECD

Ukraine's expenditures on education as the percent of GDP is one of the highest compared to the developed countries. However, high share of the shadow economy (the percentage of which can be up to 50%, according to different

evaluations) must be taken into account. So, the real GDP is higher. Consequently, the actual share of expenditures on education may be lower. Another feature of education funding in Ukraine is its fragmentation – the state finances a wide branched network of schools. Hence, albeit a high index of expenditures on education as a share of GDP, expenditures per one pupil/student and teachers' salaries are very low, even compared to the countries of Central and Southern Europe.

#### 1.2 STATE EXPENDITURES ON EDUCATION AS % OF TOTAL EXPENDITURES OF CONSOLIDATED BUDGET, % (2000-2014)

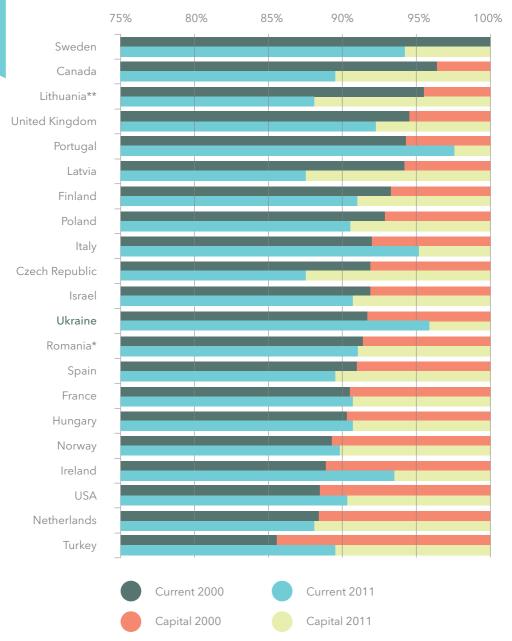




Source: State Statistics Service of Ukraine
\* Without territories of antiterrorist operation

During the last 12 years, the expenditures on education in the consolidated budget (central and local) accounted for one of the largest items and reached 18-21%. As a result, education expenditures are the most vulnerable in the attempts to cut the budget expenditures in the times of economic crisis.

### 1.3 STRUCTURE OF EXPENDITURES IN PUBLIC EDUCATIONAL INSTITUTIONS, % (2000, 2011)



<sup>\*</sup> Romania: current and capital expenditures for 2001 instead of 2000

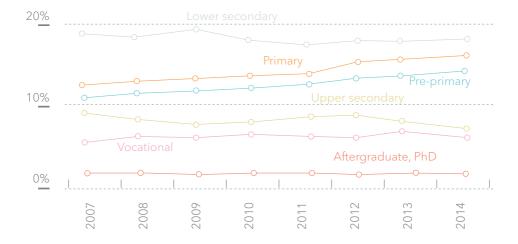
Source: UNESCO

<sup>\*\*</sup> Lithuania: current and capital for 2003 instead of 2000

Most of the developed countries have been gradually increasing the share of the capital expenditures on education, with the exception of Italy, Ireland, and Portugal. In 2000-2011 Canada, Czech Republic, Sweden, Lithuania, and Latvia showed the biggest increase rate. In Ukraine, on the contrary, the share of capital expenditures on education is very low (only Portugal has a lower one). Only 3.5% of public schools funding is used for the logistical re-equipment, renovation of premises, purchase of transport means and equipment. Universities can use funds for capital expenditures from the special funds earned on their own (including money received from tuition fees). Meanwhile vocational, secondary and preschool educational institutions do not have such opportunity. At the same time, to improve the quality of education it is essential to restructure the network of schools and make related infrastructural decisions, in particular, transportation of teachers and students, as well as schools' renovation. The solution of these issues requires great state costs.

#### 1.4 DISTRIBUTION OF ALL EXPENDITURES ON EDUCATION BY INSTITUTIONS/LEVELS, % (2007-2014)

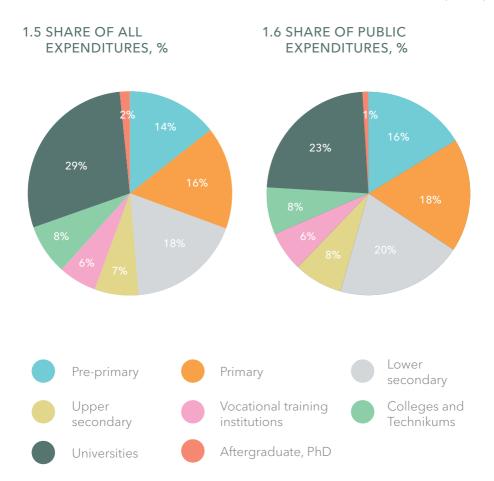




Source: State Statistics Service of Ukraine

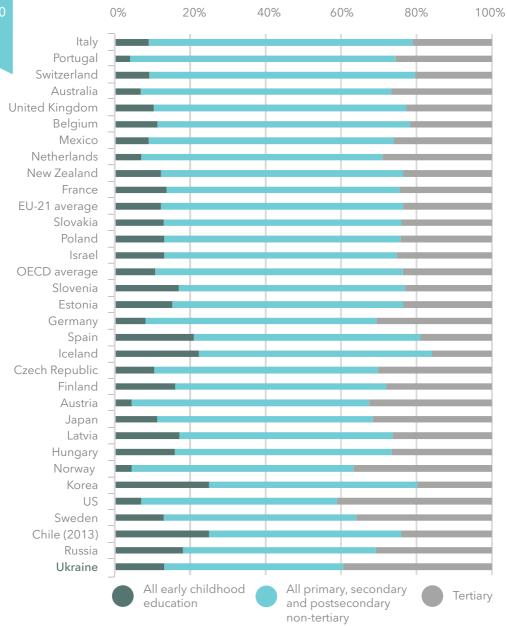
The expenditures on preschool, primary school and vocational institutions were increasing, while there was a decrease in the expenditures on HEI, secondary and especially on high schools during 2007-2014. Around 41% of education expenditures is directed to secondary education in Ukraine, while in developed countries this share is noticeably larger. At the same time, the state spends approximately 2.3% of all education budget to educate at vocational and higher education institution. In the last 8 years the share of expenditures on higher education has decreased by almost 5 percentage points and peaked at 36.8% of all expenditures and at 30,6% of public expenditures

#### EXPENDITURES ON EDUCATION IN UKRAINE BY LEVELS (2014)



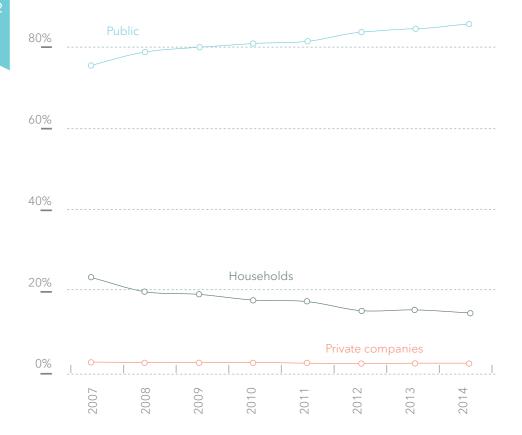
Source: State Statistics Service of Ukraine

#### 1.7 SHARE OF ALL EXPENDITURES ON EDUCATION BY LEVELS OF EDUCATION, % (2012)



Developed countries allocate much larger share of costs to primary, secondary or post-secondary non-tertiary education than Ukraine does. The share of such expenses in Ukraine is by 14 percentage points lower than it is on average in OECD. This is strongly related to the duration of schooling that takes 12-13 years in most developed countries. At the same time, the share of costs spent in Ukraine on higher education is by 14 percentage points higher than it is on average in the OECD. Chile and the U.S. have the closest indexes to the Ukrainian ones because they also have a significant level of private funding of higher education. However, these statistics do not cover two trends that somewhat balance Ukrainian indexes. On one hand, these indicators do not include parents' expenses on tutors and additional classes during school, as well as various semi-official schools fees paid by parents. On the other hand, they do not include partial repetition of the secondary school program in the so-called zero courses (e.g. mathematics) and in other disciplines in universities. Lastly, social stipends make up a third of all public expenditures on higher education in Ukraine while in most countries such stipends are not included in expenditures on educational institutions. In addition, should be considered the fact that the poorer the country is, the more it usually focuses on secondary education expenditures. (Sianesi and Van Reenen, 2002).

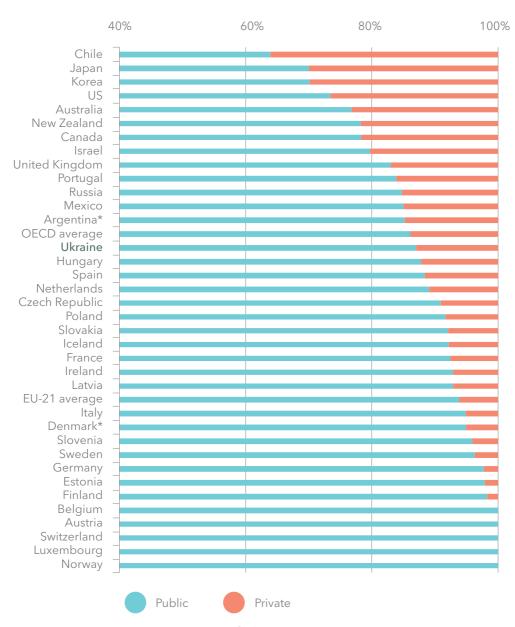
### 1.8 DISTRIBUTION OF EDUCATION EXPENDITURES BY SOURCE OF FUNDING, % (2007-2014)



Source: State Statistics Service of Ukraine

The share of households in educational expenditures has fallen by almost 9.4 percentage points since 2007. Partly this cutback could be explained by the decrease in number of potential students. Since 2008, children born in the period of drastic and prolonged fall in the birthrate started entering universities, and the number of state funded places in HEIs has been declining more slowly than the number of potential students. Thus, less households had to spend money on higher education. However, even after such decrease, the share of household expenditures on education remains higher compared to the average share in developed countries.

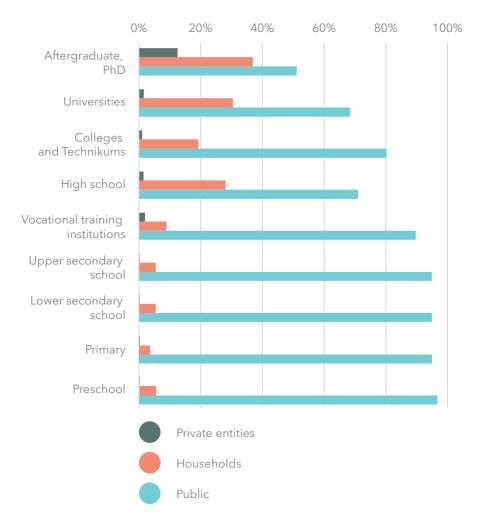
### 1.9 SHARE OF PRIVATE EXPENDITURES ON EDUCATION (WITHOUT PRESCHOOL), % (2012)



Source: State Statistics Service of Ukraine, OECD

<sup>\* -</sup> data of 2011

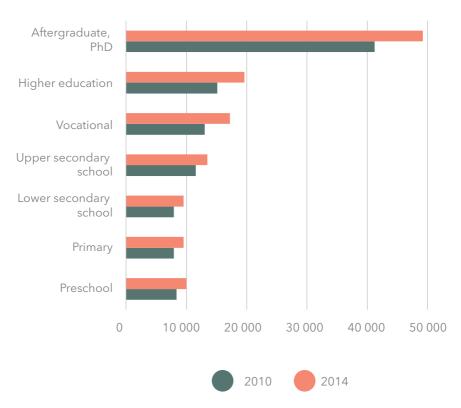
#### 1.10 PUBLIC AND PRIVATE EXPENDITURES ON DIFFERENT EDUCATIONAL LEVELS, % (2014)



Source: State Statistics Service of Ukraine

The share of household expenditures on higher and vocational education is much higher than on secondary education, as usual. In 2014, one third of expenses at universities were covered by out-of-pocket payments. Characteristically, the highest level of business participation in the education funding is recorded in aftergraduate education (12%). However, in general terms business participation in education funding remains at an imperceptible level of 0.8%.

#### 1.11 EXPENDITURES PER STUDENT/PUPIL, UAH IN PRICES OF 2010 (2010, 2014)

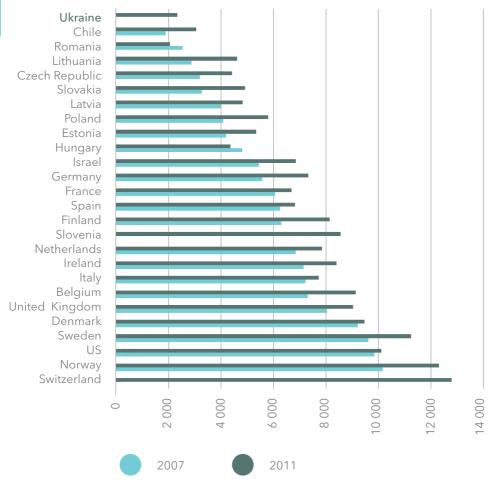


Source: State Statistics Service of Ukraine, author's calculations \* 2010 prices, based on the Consumer Price Index

The real cost per one student increased in all levels of education during the period of 2010-2014. The highest growth rates were observed in vocational (+32%) and higher (+30%) education. This growth is caused not by the increase of funding, but rather by the decrease of the number of students in this period by almost 28% in vocational schools and 32% in HEIs. Particularly dramatic reduction occurred due to the occupation of Ukrainian territories. However, the growth of expenditures per one student is not necessarily a positive fact. In Ukraine it is a result of the rapid fall in the number of students, while the number of teachers and educational institutions is decreasing much more slowly. As a result, education of each student becomes more expensive. However, such tendency does not mean education quality improvements, as additional funding is directed on the support of the current state, not on the further development.

### 1.12 PUBLIC EXPENDITURES PER STUDENT/PUPIL, PPP \$ (2007, 2011)

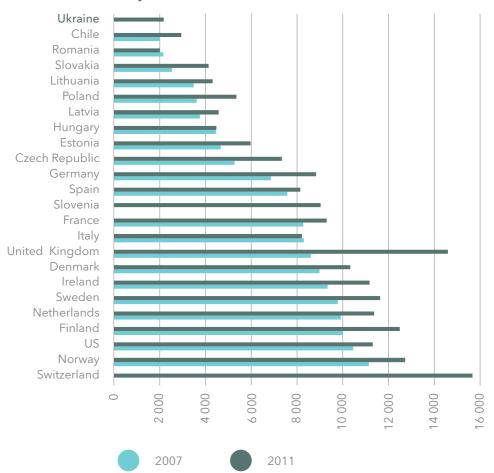
#### Primary school



Source: UNESCO

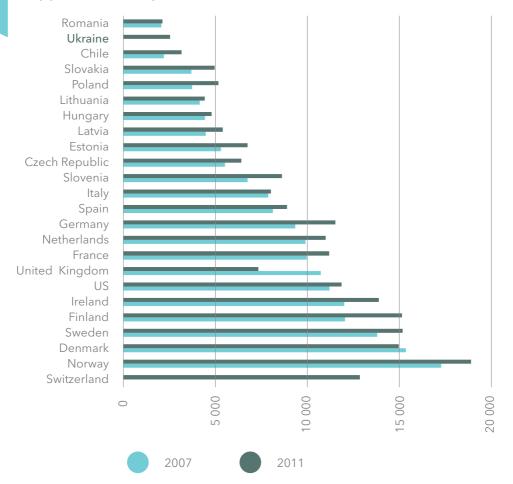
Almost all developed countries despite the financial crisis of 2008-2009 increased expenditures per one student/pupil. Chile, Lithuania, Slovakia, Poland, Czech Republic, and Germany demonstrate the highest growth rate concerning primary schools - 32-64%.

#### Lower secondary school



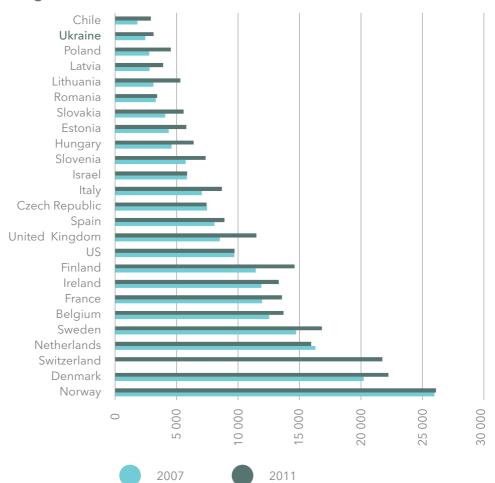
Growth rate of 29-70% is observed in figures of Great Britain, Slovakia, Poland, Chile, Czech Republic, Germany, and Estonia regarding lower secondary schools.

#### Upper secondary school



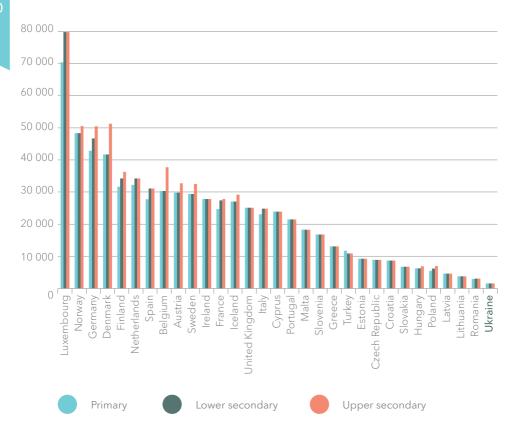
The growth was not so dynamic in upper secondary schools: 26-44% in Chile, Poland, Slovakia, Slovenia, Estonia, and Finland.

#### Higher education



In higher education the expenditures increased in Lithuania, Poland, Chile, Latvia, Hungary, Slovakia, UK, and Estonia by 33-71%. Expenditure rate per student has increased in Ukraine as well: the growth amounted to 27% in 2007-2011.

### 1.13 THE ANNUAL SALARY OF A FULL-TIME TEACHER AT THE BEGINNING OF CAREER, EUR (2014)



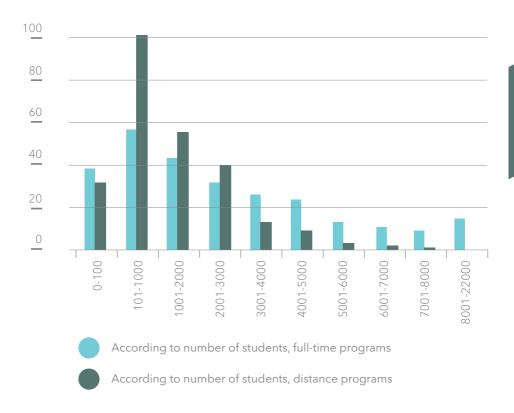
Source: Eurydice; State Statistics Service of Ukraine

Explanation: For the EU countries the annual full-time salary of a lower secondary school teachers in 2014 is taken, including taxes but without payments for additional work duties and surcharges for qualification, work experience, etc. For Ukraine the full-time salaries of teachers according to the Unified wage table of categories and coefficients for employees of public institutions and organizations is used. Position of a school teacher with graduate diploma corresponds to the 9th wage level. 20% of additional payment for the prestige of the teacher's work, which was received by all teaching staff in 2014, is taken into account. EUR-UAH exchange rate is as of the first half of 2014.

Ukrainian teachers are paid several or even up to ten times less compared to teachers in Western Europe, as well as throughout the post-Soviet and post-socialist camp (the Baltic countries and Central Europe). Standard teacher's salary is 58% of GDP per capita, while in Western Europe the figure is at least 80%, sometimes reaching 135% (in Portugal) or even 140% (in Germany). However, Ukraine's neighbours - Poland, Hungary, Romania and the Baltic countries - do not display such big numbers (for example, in Latvia it is only 32%). Interestingly, in most Western European countries upper secondary school teacher (sometimes - lower secondary as well) has higher salary than primary school teacher while they have the same workload. In the post-Soviet and post-socialist countries, teachers at schools of all levels have equal salary.

### HIGHER EDUCATION FINANCES

#### 2.1 AMOUNT AND SIZE OF STATE AND LOCAL UNIVERSITIES

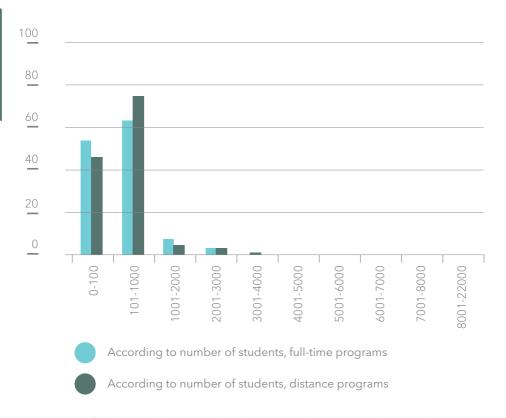


Source: Unified state electronic database on education, without colleges and technikums

As of December 2015 there were 393 public and private universities and their affiliates which are separate legal entities. Most of them have fewer than 1000 full-time students. Quarter of universities has fewer than 100 full-time students. 102 universities have less full-time students than distance ones. Those are mainly private universities, Ministry of Internal Affairs universities and ones which were transferred from the occupied territories. 29 universities have no full-time programs. Private universities are mostly small - almost all of them have fewer than 1,000 full-time students. Various public opinion polls show that reduction of universities in numbers is often associated with improvement of quality of higher education. However, this link re-

mains unproven. Moreover, if someone decided to close 218 smallest HEIs, it would affect only 6% of all full-time students, so the absolute majority of students and teachers would not face any changes at all.

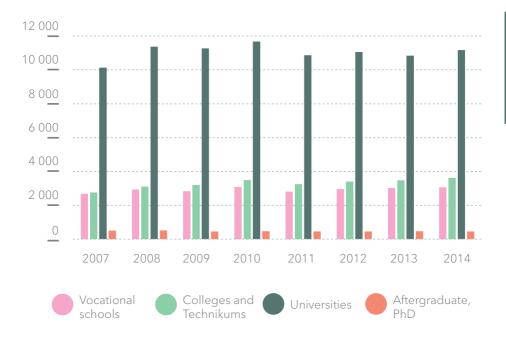
#### AMOUNT AND SIZE OF PRIVATE UNIVERSITIES



Source: Unified state electronic database on education, without colleges and technikums

## 2.2 PUBLIC AND PRIVATE FUNDING OF HIGHER AND VOCATIONAL EDUCATION, MLN UAH IN 2007 PRICES, (2007-2014)

#### **Public funding**



Source: State Statistics Service of Ukraine. Author's calculations based on the Consumer Price Index

Public and private expenditures on higher education nominally increased in Ukraine during 2007-2014. At the same time, indicators in prices of 2007 reveal that mainly state funding was growing. The state increased expenses on vocational and technical training (+14%), on colleges and technikums (+31%) and on universities (+10%). While households and business increased expenses only on aftergraduate education (+14%) and cut expenses colleges (-38%) and universities (-34%). Growth of public expenditures in colleges and technikums questions a stereotype about the low level of its state funding. During 2007-2014 colleges and technikums share grew from 17% to 20% in the structure of public expenditures on the higher education while the share of other decreased or remained the same. Looking ahead in the planned reform of professional education (combing vocational schools, colleges

and technikums in professional education branch), it is possible to say that planned professional education branch can accumulate up to 37% of all public expenditures and up to 18% of all private investments on post-secondary education.

#### Private funding

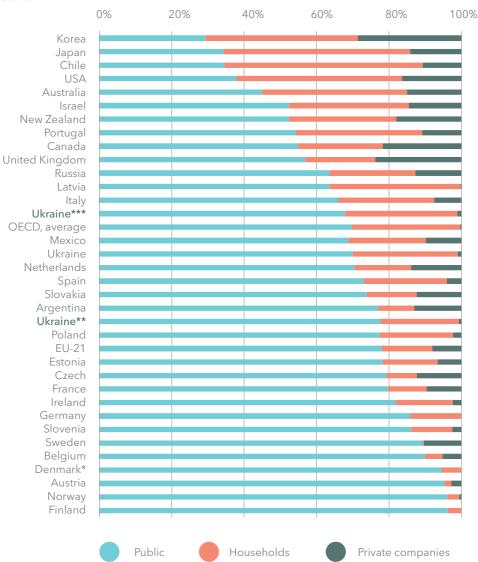


Source: State Statistics Service of Ukraine. Author's calculations based on the Consumer Price Index

### 2.3 PUBLIC AND PRIVATE FUNDING OF HIGHER EDUCATION, % (2012)

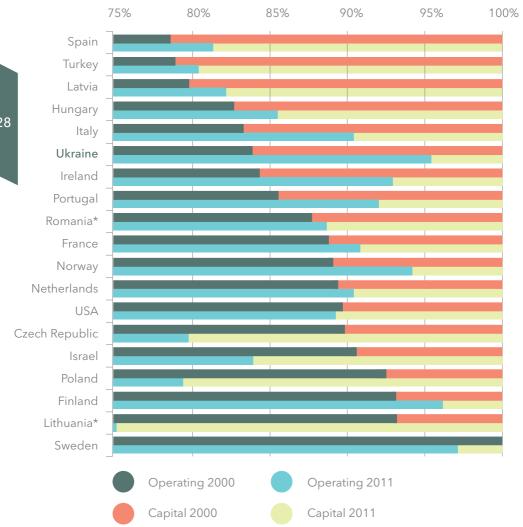
Ukrainian HEIs received mainly public financing (69.9%). This figure coincides with the average level in the developed countries of OECD (69%), however it is below the average EU-21 (79%). The closest neighbours of Ukraine finance their universities mainly from state funds: Czech Republic (79.3%), Estonia (78.2%), Slovakia (73.8%), Poland (77.6%), Russia (63.5%), and Latvia (63.6%). Yet universities in the USA, Great Britain, Australia, Korea, and Japan are mostly financed by households. Share of households was 29% in Ukraine in

2012. At the same time there are countries where business actively invests in higher education: Korea (28.6%), Canada (21.7%), Israel (18%), USA (16.4%), Japan (14.1%), Netherlands (13.9%), Russia (12.7%), Czech Republic (12.3%), and Sweden (10.4%). Ukrainian business investments in higher education are extremely low and make up about 1% of all financing of the higher education.



Source: State Statistics Service of Ukraine; OECD \* - data of 2011, \*\* - Universities, \*\*\* - Colleges and Technikums

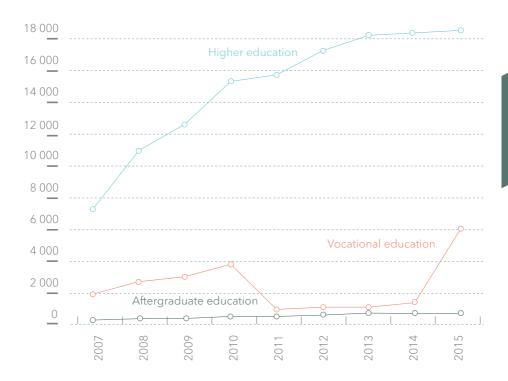
#### 2.4 THE STRUCTURE OF EXPENDITURES IN PUBLIC INSTITUTIONS OF HIGHER EDUCATION, % (2000-2011)



<sup>\*</sup> for Romania and Lithuania operating and capital for 2001 instead of 2000 Source: UNESCO

Ukraine has reduced the share of costs on equipment, construction and modernization in the general structure of expenditures on higher education from 17% to 4% during 2000-2011, while neighbouring countries of the Central Europe have increased it: Czech Republic (up to 20%), Poland (up to 22%), and Lithuania (up to 25%). Lacking proper capital expenditures Ukraine will not be able to launch modern medical, engineering and natural science programs.

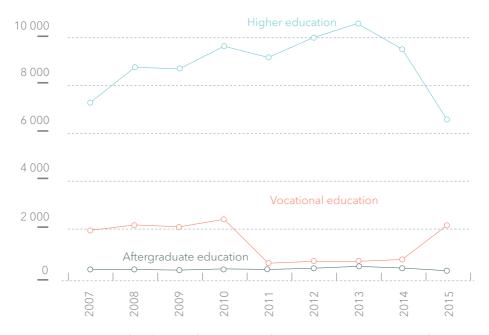
### 2.5 EXPENDITURES ON STATE-FUNDED PLACES, MLN UAH (2007-2015)



Source: Decrees of Cabinet of Ministers of Ukraine on the amount of state-funded places

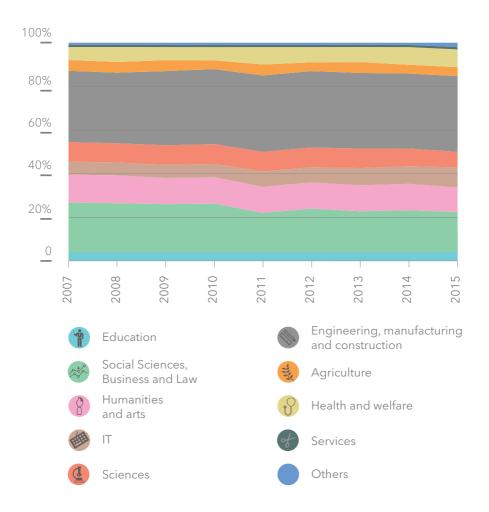
Nominal expenditures on the state-funded places are growing on all levels. The decline in costs spent on vocational education in 2011-2014 is explained by transfer of financing sources from the level of the state (central) budget to the level of local budgets. However, funding of higher and aftergraduate education in the prices of 2007 was dramatically reduced after 2013 due to high inflation level. A certain level of stability in real prices remained only in vocational training.

### 2.6 EXPENDITURES ON STATE-FUNDED PLACES, MLN UAH IN PRICES OF 2007 (2007-2015)



Source: Decrees of Cabinet of Ministers of Ukraine on the amount of state-funded places

### 2.7 STATE-FUNDED PLACES FOR BA FULL-TIME PROGRAMS ACCORDING TO ISCED, \*\*\* (2007-2015)



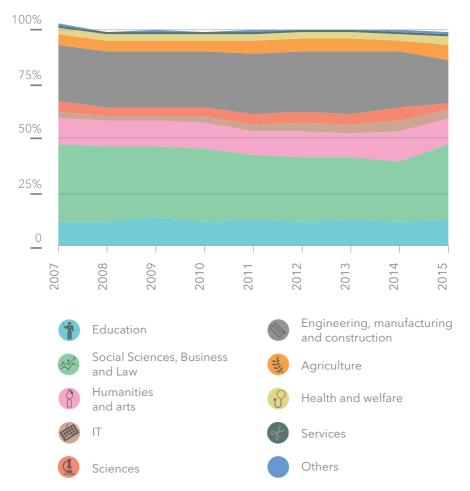
Source: Decrees of Cabinet of Ministers of Ukraine on the amount of state-funded places

Branches are united according to ISCED-2011. IT is separated from Sciences \*\* including Medicine and Pharmacy programs for Specialists level

Total amount of state-funded places has significantly changed within the last 9 years, but the distribution of places among fields of learning remained

constant. There was an insignificant reduction of Social sciences' share in favour of Engineering and Health Care at full-time programs. However, leaders remain the same: Engineering (34%), Social sciences (19%), and Humanities (12%). Changes are more notable at distance learning. For example, in 2015 the weight of Social sciences increased a little. Leaders of the distance form are Social sciences (35%), Engineering (20%), Humanities (12%), and Education (12%). Long-term status quo in the conditions of dynamic changes in labour market leads to the deepening disagreements between universities, economy and society demands. Hence, one could confirm the need to redesign current model of so-called post-soviet state order system and distribution of public funds.

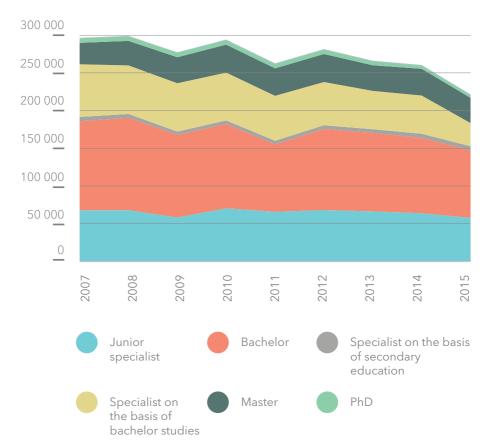
# 2.8 STATE-FUNDED PLACES FOR BA DISTANCE LEARNING PROGRAMS ACCORDING TO ISCED, %\*\* (2007-2014)



Source: Decrees of Cabinet of Ministers of Ukraine on the amount of state-funded places

Branches are united according to ISCED-2011. IT is separated from Sciences \*\* including Medicine and Pharmacy programs for Specialists level

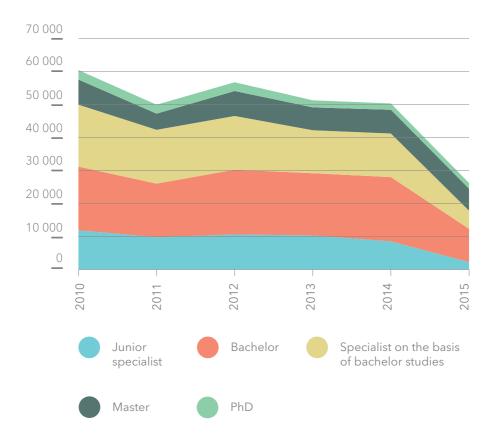
### 2.9 STATE-FUNDED PLACES FOR DIFFERENT DEGREES, FULL-TIME PROGRAMS (2007-2015)



Source: Decrees of Cabinet of Ministers of Ukraine on the amount of free of charge places

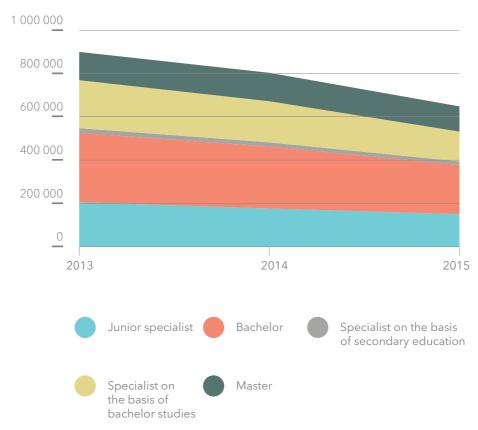
The quantity of entrants has been falling faster than the quantity of state-funded places. Therefore, even within the reduction of state-funded places during the last four years, the competition among entrants for state-funded places at various educational levels did not grow in general terms.

### 2.10 STATE-FUNDED PLACES FOR DIFFERENT DEGREES, DISTANCE LEARNING (2010-2015)



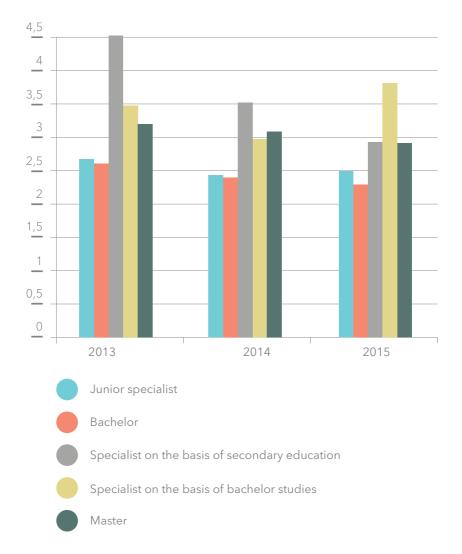
Source: Decrees of Cabinet of Ministers of Ukraine on the amount of state-funded places

### 2.11 AMOUNT OF APPLICANTS, FULL-TIME AND DISTANCE LEARNING ALTOGETHER (2013-2015)



Source: Unified state electronic database on education

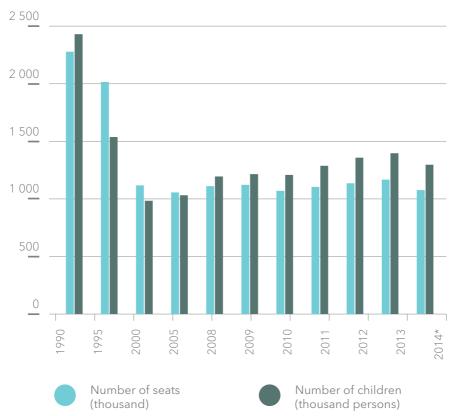
## 2.12 COMPETITION FOR STATE-FUNDED PLACES, FULL-TIME AND DISTANCE LEARNING ALTOGETHER (2013-2015)



Source: Unified state electronic database on education. Decrees of Cabinet of Ministers of Ukraine. Author's calculations

## SCHOOLS

### 3.1 OCCUPANCY OF INSTITUTIONS OF PRESCHOOL EDUCATION, THS (1990-2014)



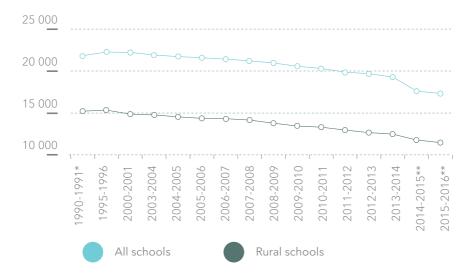
Source: State Statistics Service of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

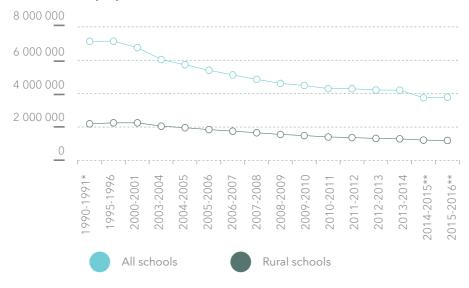
The number of places in kindergartens was greater than the number of children during the first 15 years of Ukraine's independence, even despite more than double reduction of the number of such places during this period. This situation is explained by the sharp birthrate fall in the early and mid-1990s. However, when the birthrate increased significantly in the second half of the 2000s, the number of children in preschool institutions started to prevail the number of places, since then this shortage of places had continued to grow.

#### 3.2 SCHOOLS, THEIR PUPILS AND TEACHERS (1990-2015)

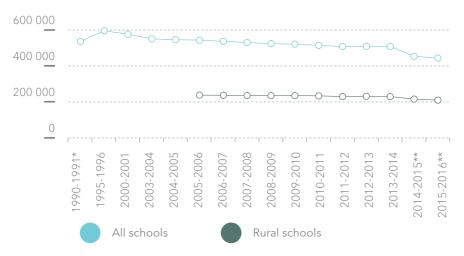
#### Number of schools



#### Number of pupils

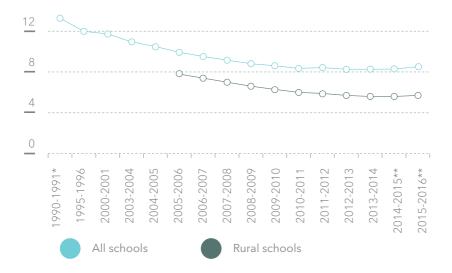


#### Number of teachers



The number of pupils has been gradually reducing in Ukrainian schools since mid-1990s despite the moderate end of so-called "demographic gap" that began in the mid-2000s. At the same time, a reduction of the number of schools and teachers was observed, but it significantly lagged behind the rate of pupils' reduction. The number of pupils has decreased by 47%, number of schools - by 22%, and teachers - by 25,5%. Thus, the average number of students per school declined from 327 in 1990-1991 school years to 218 in 2014-2015 school years. The pupil-teacher ratio changed from 13.3 (1990) to 8.5 (2015) pupils per teacher. This index is lower than in the majority of developed countries. It should also be taken into account that the dramatic reduction in the number of schools was affected by the occupation of Ukraine's territories. Thus, 3% of Ukrainian schools with 4.3% of students enrolled and 3.7% of teachers employed at them were in the Autonomous Republic of Crimea at the beginning of 2013-2014 academic year. 5.7% of Ukrainian schools with 8% of pupils and 6.4% of teachers were in Donetsk oblast at the beginning of the year 2013-2014. Those numbers reduced to 3.2%, 4% and 3.4% respectively. Luhansk region: from 3.6%, 4% and 3.6% to 1.8%, 1.4% and 1.4% respectively. Some students and teachers left the temporarily occupied territory, as for the number of schools - we may conclude that a reduction by almost 7.3% (out of 10.1% compared to 2013-2014 academic year) is explained by occupation.

#### Pupil-teacher ratio



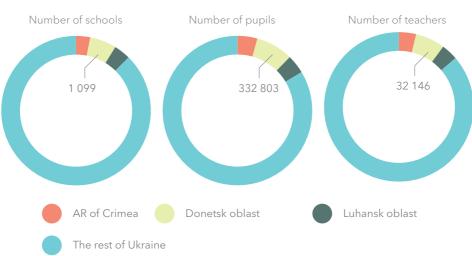
Source: State Statistics Service of Ukraine

\*in 1991-2003 data on some academic years are missing

\*\*Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

Despite the fact that 70% of Ukraine's population lives in cities, most schools used to be and still remain rural. Since gaining independence, their share had declined somewhat, but it still accounts for almost two thirds of all secondary schools. Moreover, less than a third of pupils are studying in these schools. The slight increase in the proportion of rural schools took place in early and mid-2000s, but then this index began to fall and returned to 30%. This is consistent to the general trend of rapid reduction of the number of rural population compared to the urban one - since 1990 the urban population has decreased by 10%, rural population - by 17%. It should be noted that the proportion of teachers in rural areas has gradually increased since 1990, and they make up almost a half of Ukrainian educators now. This means that there is a small number of pupils at rural schools, but they are taught by many teachers. Such organization of educational network is highly resource-consuming.

## 3.3 SCHOOLS, THEIR PUPILS AND TEACHERS OF AR OF CRIMEA, LUHANSK AND DONETSK OBLAST (2013/2014)



Source: State Statistics Service of Ukraine

## 3.4 AGE DISTRIBUTION OF SUBJECT-TEACHERS, THS PERSONS (2000-2014)



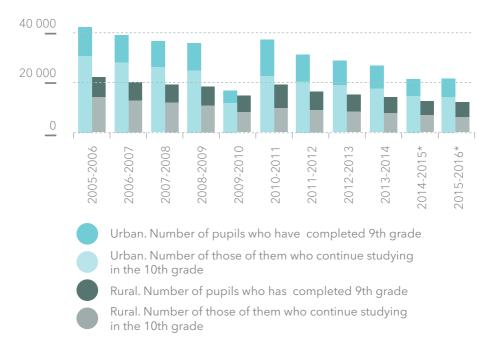
Source: Ministry of Education and Science of Ukraine

The age distribution of subject-teachers since 2000 has changed quite noticeably – the proportion of teachers aged over 55 has almost doubled (from 11.8 to 21.8%), while the proportion of those under 30 fell from 22.7 to 17.9% and the teachers aged 31-40 years decreased from 27.6 to 21.9%. That means that today one of every five subject-teachers is of pre-pension or pension age.

<sup>\*</sup> Pension reform

<sup>\*\*</sup> Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

#### 3.5 PUPILS WHO ENTER 10TH GRADE (2005-2015)

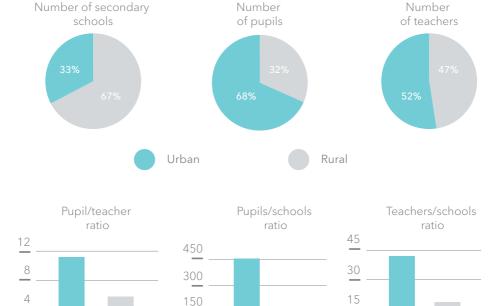


Source: State Statistics Service of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

Over the past 10 years the proportion of pupils who continue education in the 10th grade of secondary schools decreased by 8.8 percentage points. In rural areas, where the percentage of students who remain in school, was quite low, this reduction is much more manifested, so the gap between urban and rural areas has increased: from 7.9 percentage points in 2005-2006 school years to 14.5 percentage points in 2015-2016. Also, one could note a sharp decline (by 9.1 percentage points) in proportion of pupils of city schools who have continued their education in the 10th grade in 2010-2011 academic year. Perhaps this is connected with the new policy of entering universities according to the results of external independent testing (EIT), introduced two years earlier. Whereas college graduates can enrol in universities without testing, studying in colleges and technikums after the 9th grade became the method to avoid independent external testing on the way to higher education

## 3.6 TEACHERS, PUPILS, URBAN AND RURAL SCHOOLS (2015/2016)\*



Source: State Statistics Service of Ukraine

Rural

Urban

Urban

Rural

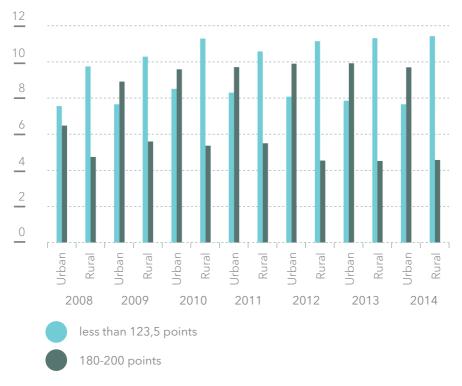
Urban

Rural

The number of teachers per pupil in rural schools was twice less than in urban ones at the beginning of the last school year. The average number of students in the Ukrainian rural school is about 100, while in the city this number is 4.5 times bigger. One rural school accounts 18 teachers, and one city school - 41.

<sup>\*</sup> Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

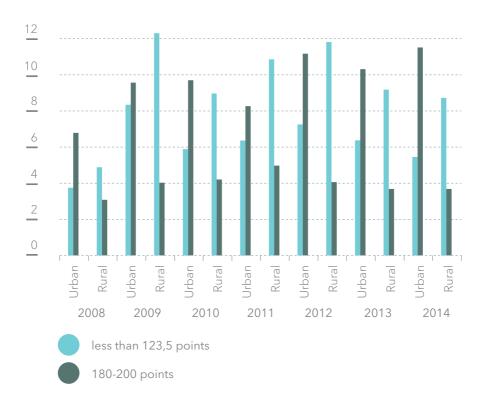
3.7.1 THE RESULTS OF EXTERNAL INDEPENDENT TESTING
(EIT) IN THE UKRAINIAN LANGUAGE AND LITERATURE:
A SHARE OF GRADUATES FROM RURAL AND URBAN
AREA WITH RESULTS ABOVE 123.5 (INCL.) AND 180
AND MORE COMPARED TO ALL THE STUDENTS WHO
TOOK THE TEST (2008-2014)



Source: Ukrainian Centre for Educational Quality Assessment

Throughout all the period of existence of the external independent testing the results of graduates from rural and urban areas have differed considerably. Graduates from rural schools show worse results every year - share of those who receive less than 150 points is greater among them than among urban ones, and vice versa - a larger percentage of graduates from city schools receives 150 points and more. For some subjects this disparity is different. We took the results of testing in basic subjects that are required by most universities for admission, and minimally depend on material and technical condition of the school

# 3.7.2 THE RESULTS OF EXTERNAL INDEPENDENT TESTING IN MATHEMATICS: A SHARE OF GRADUATES FROM RURAL AND URBAN AREA WITH RESULTS LESS THAN 123.5 (INCL.) AND 180 AND MORE COMPARED TO ALL THE STUDENTS WHO TOOK THE TEST (2008-2014)



Source: Ukrainian Centre for Educational Quality Assessment

## 3.8 VOCATIONAL SCHOOLS, THEIR PUPILS AND TEACHERS (1990-2014)

#### Number of vocational schools\*



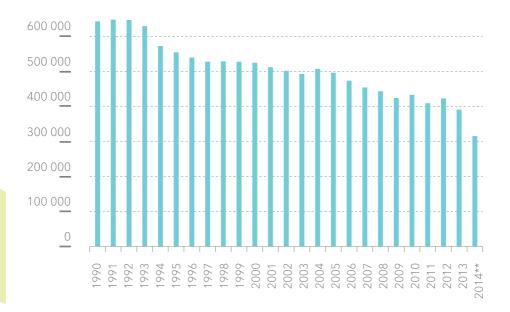
Source: State Statistics Service of Ukraine

\*Data for the period of 1990-1994 are presented as vocational schools of Ministry of Education and Science of Ukraine (MES), from 1995 - institutions of MES and other Ministries are included.

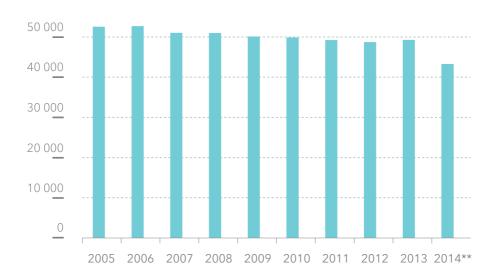
\*\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

Unlike the higher education system, which has been rapidly expanding, professional education has declined since 1990: the number of schools and the number of those who studied there has significantly reduced (by 35% and 50% respectively). This is partly explained by the transformation of vocational schools into the units of universities and colleges and technikums. However, such noticeable reduction of the number of vocational students alongside with the immense increase in the number of university students indicates applicants' loss of interest in vocational education.

#### Number of people who studied in vocational schools



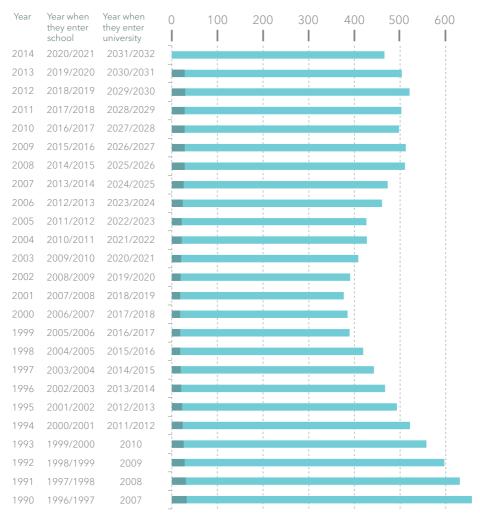
#### Number of teachers in vocational schools



Source: State Statistics Service of Ukraine

## ADMISSION TO UNIVERSITIES

#### 4.1 BIRTHRATE IN UKRAINE (1990-2014)



Number of births in Ukraine, ths persons

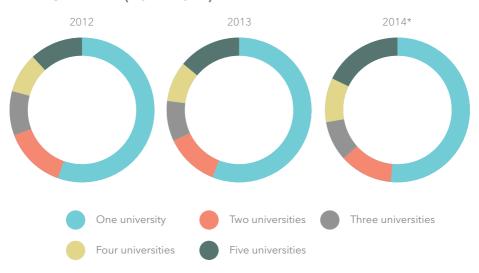
Number of births in Crimea and Sevastopil city, ths persons

Source: State Statistics Service of Ukraine

Birthrate had been declining in Ukraine since the beginning of 1990s, and it reached the lowest point in 2001. 43% less children were born that year compared to 1990. The fertility had been increasing in 2000s until the last years when the economic crises of 2009 and 2014 stroke. Before 2001, the vast ma-

jority of children in Ukraine began studying at secondary school at the age of seven and studied there for 10 years skipping the 4th grade. However, some children went to school at the age of six and studied for 11 years so that the six- and seven-year-old finished schools simultaneously. The 12-year school system was introduced in 2001, and according to it children started school at the age of six. Meanwhile, parents were granted a right to send their kids to school at the age of seven if referring to the peculiarities of their development. Nevertheless, Ukrainian pupils did not have a chance to complete the 12-years of schooling because in 2010 the 11-year school system was returned. This time, it considered all pupils without consideration of the age they have started school. Thus, children who had started with 12-year school program in action mechanically "jumped" to the 11-year school program and were studying in high school for two years instead of three.

### 4.2 HOW MANY UNIVERSITIES APPLICANTS CHOOSE TO ENTER (2012-2014)

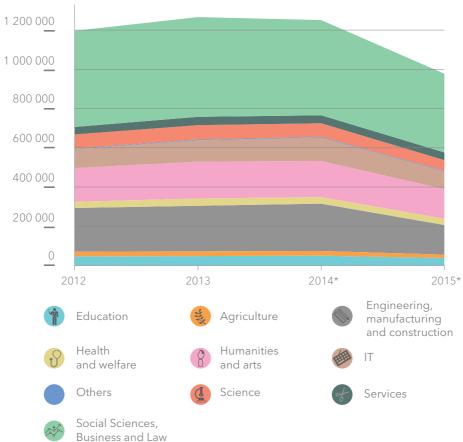


Source: Unified state electronic database on education

Most entrants choose only one university to enter, nearly 43% choose only one study program in this university, 5.5% choose two, and 3.6% - three programs. Nonetheless, a tendency to apply to five universities is growing every year. The proportion of such applicants has increased from 12 to 18% during 2012-2014. While the share of those who, apply to the one same study program in several universities remains unchanged - 6%.

<sup>\*</sup> Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

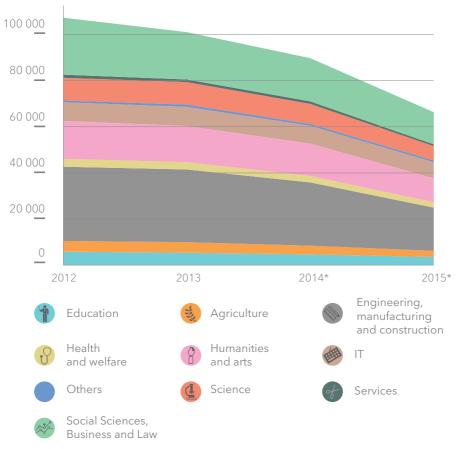
#### 4.3 NUMBER OF APPLICATIONS TO FULL-TIME BACHELOR PROGRAMS IN DIFFERENT FIELDS OF EDUCATION, PERSONS (2012-2015)



Source: Unified state electronic database on education Branches are united according to ISCED-2011. IT is separated from Sciences \* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

The demand for different programs among graduates has quite an invariable division. Interestingly, Education receives 9% of all applications in distance studying, while only 4% in full-time programs. Most full-time applications in 2015 were submitted to Social Sciences (41%), Humanities (15%), and Engineering (15%). At the same time, demand for Engineering has slightly fallen from 19% to 15% over the past year, what can be explained by disappointing results of external independent testing in mathematics: in 2015 "pass/fail" barrier overcame only 22% of graduates.

## 4.4 ADMISSION TO STATE-FUNDED PLACES OF BACHELOR PROGRAMS IN DIFFERENT FIELDS OF EDUCATION, PERSONS (2012-2015)

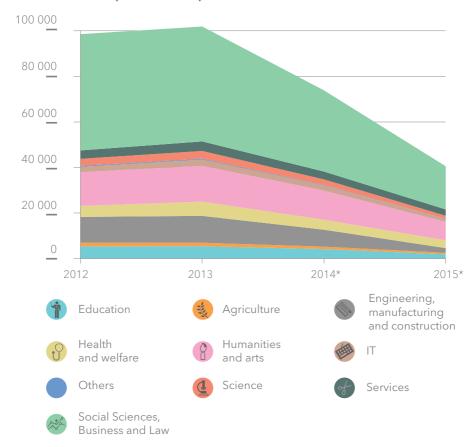


Source: Unified state electronic database on education Branches are united according to ISCED-2011. IT is separated from Sciences \* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

The total number of newly enrolled in full-time state-funded higher education fell by 38% over 2012-2015: from 107,282 to 66,314 people. The decline in the amount of enrolled to tuition fee programs was even greater - by 59% from 98,555 to 40,548 people. The overall decline in full-time programs is 48%. The trend is caused by the demographic crisis, deterioration of secondary education, which is manifested in low testing results, and occupation of Ukrainian territory. The share of students from Crimea among the enrolled in

both state-funded and tuition free forms was 4% in 2012-2013 years. The share of potential students who stayed in the territory of ATO is difficult to calculate due to the lack of data. In general, considering the aligning of amount of faculty wages to the number of students, the reduction in number of wages becomes inevitable, and replaced by further spread of part-time faculty employment and short-term contracts.

## 4.5 ADMISSION TO TUITION FEE PLACES OF BACHELOR PROGRAMS IN DIFFERENT FIELDS OF EDUCATION, PERSONS (2012-2015)



Source: Unified state electronic database on education Branches are united according to ISCED-2011. IT is separated from Sciences \* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

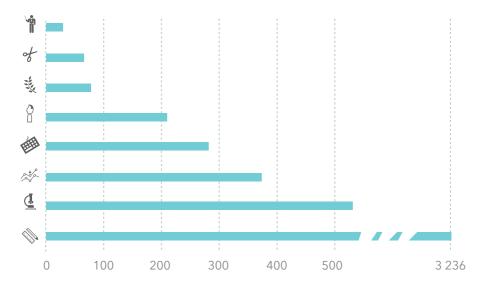
## 4.6 STATE-FUNDED VS TUITION FEE: ADMISSION TO FULL-TIME BACHELOR PROGRAMS, PERSONS (2012-2015)



\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

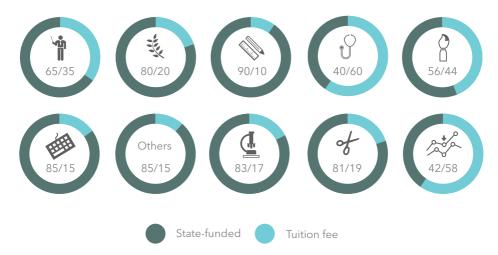
The share of newly enrolled to state-funded places of full-time BA programs has decreased to 50% in 2013. Yet, in the last entrance campaign state-funded outranked the tuition fee places: 62% and 38% respectively. Moreover, the rate of newly enrolled to the state-funded places could be even higher because the number of unused ones was almost 5 000 as of August 17, 2015. Poor quality of secondary education in Mathematics and Natural Sciences (consequently, underperformed EIT) and the lack of proper equipment in most technical universities resulted in low demand among entrants and the "failure" to use 3200 places in Engineering and 300 in IT.

### 4.7 UNUSED STATE-FUNDED PLACES IN 2015 AS OF 17.08.2015\*



Source: Unified state electronic database on education Branches are united according to ISCED-2011. IT is separated from Sciences \* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

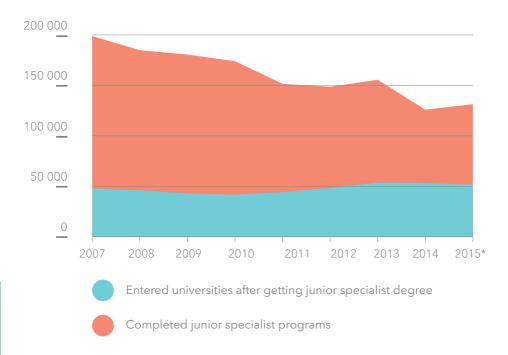
## 4.8 ADMISSION TO FULL-TIME BACHELOR PROGRAMS ACCORDING TO PAYMENT STATUS (2015\*)



Source: Unified state electronic database on education Branches are united according to ISCED-2011. IT is separated from Sciences \* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

As usual, a number of new students who pay prevails in Social Sciences, Services and Health Care. Instead, most state-funded students are mastering in Engineering, IT, Sciences or Education. Almost equal number of newly enrolment was observed in Humanities. These data prove that if state funding is assigned according to entrants' choice (voucher system), a radical reduction in funding of mathematics and natural sciences related programs will take place.

## 4.9 NUMBER OF THOSE, WHO ENTER BACHELOR PROGRAMS WITH JUNIOR SPECIALIST DEGREE, THS PERSONS (2007-2015)



Source: State Statistics Service of Ukraine

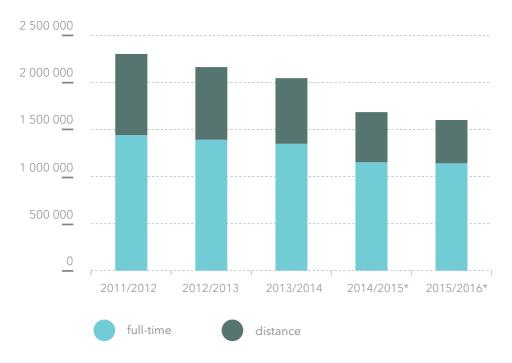
\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

The amount of those applying to the shortened bachelor programs with junior specialist (JS) degree grows steadily. It reached over 39% of all who graduated with JS in 2015. It contradicts the idea that colleges and technikums by giving JS degrees cover an unsatisfied demand for mid-level professionals (JS degree) in the labour market. More and more young people use JS degree to continue their studies applying to BA programs.

## STUDENTS

#### 5.1 NUMBER OF STUDENTS BY LEVELS (2011-2015)

#### Total number of students of all levels

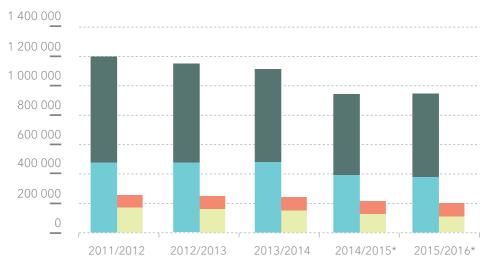


Source: State Statistics Service of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

Due to the demographic decline of recent years, the number of students has decreased at both full-time (-21%) and distance (-47%) programs. In the last years, the decline was rapid due to the occupation of Ukrainian territory. For instance, the share of Crimean students in 2013/2014 academic year was 4%. In general, the largest decline is observed within the specialist programs, as more universities start to offer only master programs. However, reduction of the number of full-time teaching and research-teaching staff in the same period of 2012-2016 years took place at a slower pace: 13% and 20% respectively. However, the occupation of the Eastern Ukraine's territories has led to a sharp decline (16%) in the number of faculty members in colleges and technikums - from 30 to 25 thousand people in one year.

#### Full-time programs by years



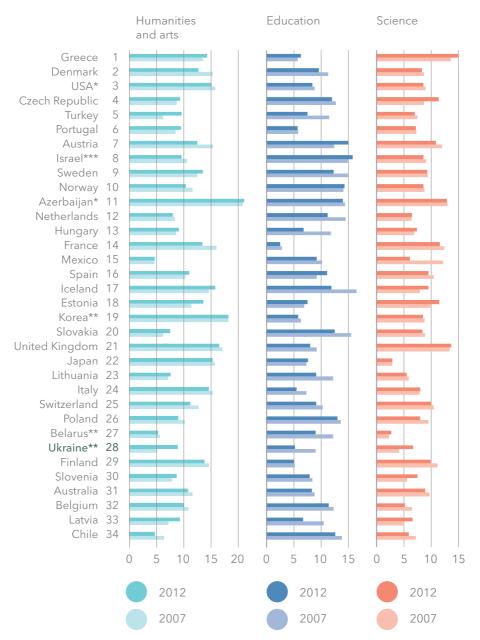
#### Distance learning programs by years



Source: State Statistics Service of Ukraine

<sup>\*</sup> Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

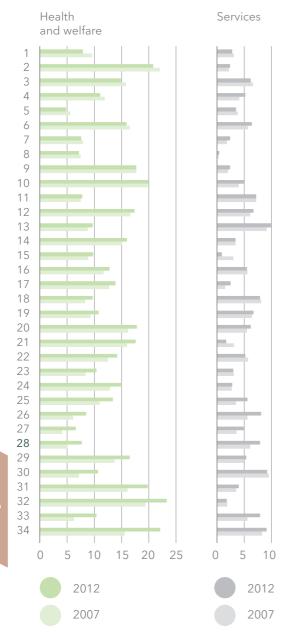
#### 5.2 NUMBER OF STUDENTS BY FIELD OF EDUCATION, % (2007, 2012)



The division of students by fields of education is different for various countries. However, there are some common features. In all countries, except Korea and Finland, most students choose programs in Social Science, Economics, and



Law: from 27% in Sweden to 54% in Turkey. Second place: Health and welfare (Belgium, Chile, Denmark, Norway, Australia, Slovakia, Sweden, UK); Engineering (Belarus, Mexico, Portugal, Ukraine, Slovenia, Israel, Greece, Lithuania, Hungary);



Humanities (Azerbaijan, Japan, USA).

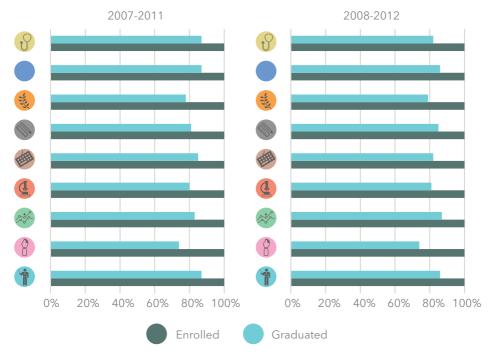
A lot of countries have their own peculiarities. For example, the United Kingdom, Azerbaijan, France, Estonia, Czech Republic, and Austria have the highest average proportion of students studying Natural Sciences, Physics and Mathematics, and IT - 11-14%. Belarus has a distinct priority of Agricultural Sciences - 8%, which is twice as high as in other countries. Education is more popular in Israel, Austria, Norway, Azerbaijan, and Poland - 13-16%. Engineering is often chosen by the students from Belarus, Korea, Mexico, Finland, Portugal, and Ukraine - 22-28%. Korea also has one of the largest percent of Humanities students - 18%.

The trend of 2007-2012 years demonstrates that in most of the developed countries the share of Education and Social Science enrolment has decreased, while the share of students studying Engineering and Medicine has increased.

Source: UNESCO institute for Statistics

- \*2008 instead of 2007
- \*\*2013 instead of 2008
- \*\*\* Services 2008 instead of 2007 Classification according to ISCED-2011

### 5.3 DIFFERENCE BETWEEN ENROLMENT AND GRADUATION, FULL-TIME BACHELOR PROGRAMS

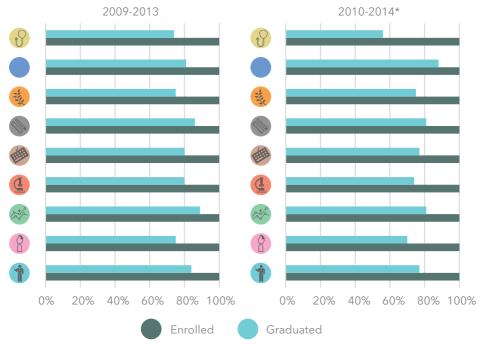


Classification according to ISCED-2011. IT is separated from Science. In Health and welfare both bachelor and specialist are included. Services, that includes hotel and restaurant business, tourism and domestic services, is absent due to the lack of data.

Source: State Statistics Service of Ukraine, author's calculations

The difference between the number of entrants and graduates does not necessary mean dropout as there are many ways to study that go beyond the admission and graduation within 4 years. For example, the admission to a shortened program after getting junior specialist or expulsion with later readmission, the transition from the state-funded to tuition fee or vice versa. This calculation takes into account shortened program applicants. Despite the common stereotype that the Ukrainian universities rarely expel their students, the share of those that had not completed the program at all or in time for various reasons reached 15-18% during 2011-2013. This amount is much lower for state-funded students - 8-11%, while in tuition fee sector it is higher - 24-25%. To some extent, such figures could refute a very common view about stronger motivation and better marks among tuition fee students.

However, one must remember that regulations on so-called state procurement encourage universities to keep state-funded places always occupied. So, if a stu-



\* Без урахування тимчасово окупованої території Автономної Республіки Крим і м. Севастополя та частини зони проведення антитерористичної операції.

dent who studies for free gets expelled than the best tuition fee student on the program will occupy this state-funded place. Stats will register it as 1 drop-out from tuition track and won't register anything about state-funded place. In addition, the state often pays for a place more than a private consumer. Therefore, universities are interested in curbing dropouts of state-funded students rather than those who pay for themselves. This relationship is confirmed by the figures in the Law. This area is an exception, when the state pays less than the level of tuition is. Thus, the dropout of the state-funded students conversely exceeds the dropout of those who pay for themselves. At the same time, applicants' preparation also affects the dropout. For example, the best entrants usually occupy the programs with a small number of state-funded places. So, even if such program has many tuition fee students who pay more than the state (for example, International relations), the dropout among state-funded students would still be less common. Let's look at the dropout rate for 2011 and 2013 in terms of ISCED fields. There is a drastic decline in two major fields of Engineering and Social sciences. At the same time, this figures for Humanities and Science is guite high and stable - 20-25%. Instead, in Education, IT, Agriculture and especially Health and welfare dropout rates have increased in 2011-2013. In 2014, the figure has increased dramatically in almost all fields, what could be explained by the occupation of Ukrainian territories. The proportion of entrants from Crimea in 2010 was 2%, while from Donetsk and Luhansk regions - 11%.



## 6.1 LARGEST DONOR COUNTRIES OF INTERNATIONAL STUDENTS TO UKRAINE AS OF JANUARY 1, 2015\*



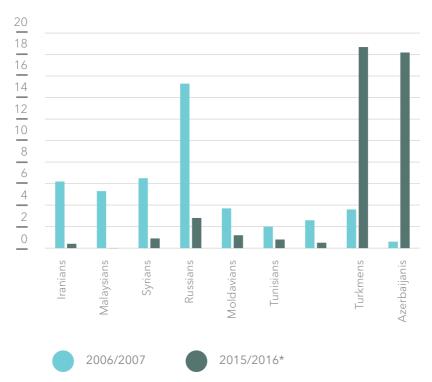
Source: State centre of international education of Ministry of Education and Science of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

Given the fact that the three state agencies submit annual statistics, please pay attention to the source of the submitted data. The majority of foreign students come from former Soviet countries, mostly from Turkmenistan, Azerbaijan, and Georgia. Overall, post-Soviet countries gave the largest increase of foreign students during 2012-2014 - 28%. Due to the war, the popularity of Ukrainian universities is going to decrease. However, at least 60% of foreign students from the occupied territories transferred to other Ukrainian universities.

#### 71

### 6.2 A SHARE OF INTERNATIONAL STUDENTS IN UKRAINIAN HEIS, % (2006-2015)

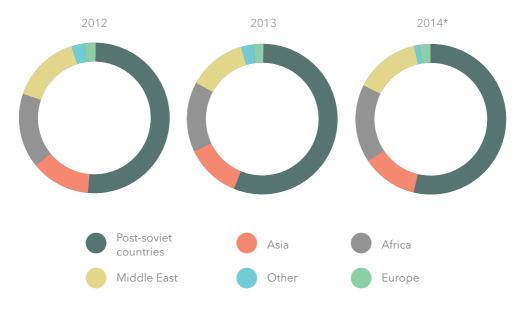


Source: State Statistics Service of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

In the last 9 years Ukrainian universities have been losing some of the international markets but have found new ones instead. For example, the shares of students from Malaysia and Iran have decreased. Malaysian government has stopped recognizing the diplomas of Ukrainian medical universities. The number of Tunis students have decreased as a result of newly opened French programmes in Romanian universities, which made them more attractive. The share of Russians and Moldovans has decreased as well, the latter have also to choose Romanian universities after Romania entered the EU. At the same time, the shares of students from Turkmenistan and Azerbaijan have radically increased.

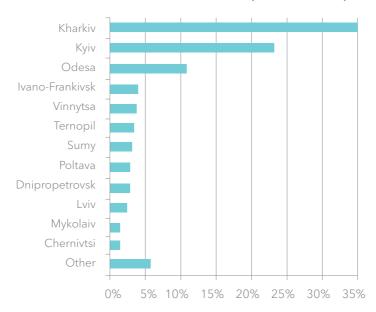
## 6.3 INTERNATIONAL STUDENTS IN UKRAINE (BY REGION OF ORIGIN), AS OF THE END OF THE YEAR (2012-2014)



Source: State centre of international education of Ministry of Education and Science of Ukraine

Regionalization corresponds to United Nations Standard, country or area code, geographical regions with the separation of Post-Soviet countries http://unstats.un.org/unsd/methods/m49/m49regin.htm

### 6.4 CITIES WITH THE BIGGEST AMOUNT OF INTERNATIONAL STUDENTS (2014/2015\*)



Source: Unified state electronic database on education

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

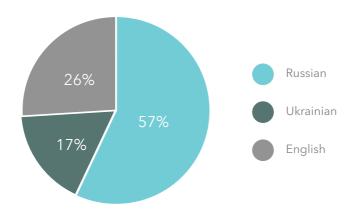
Universities of Kharkiv, Kyiv, and Odesa cover almost 70% of foreign students in Ukraine. Remarkably, out of almost 6 000 foreign students who were transferred from the occupied territories the biggest part came to Odesa universities, while capacity of Kharkiv and Kyiv universities appeared to be more limited.

# 6.5 WHERE INTERNATIONAL STUDENTS WERE TRANSFERRED FROM TEMPORARILY OCCUPIED TERRITORIES



Source: State centre of international education of Ministry of Education and Science of Ukraine

### 6.6 LANGUAGE OF STUDIES OF INTERNATIONAL STUDENTS (2014/2015\*)

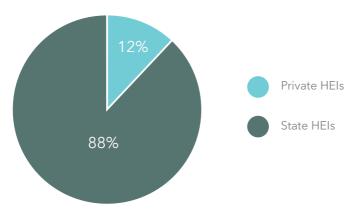


Source: State centre of international education of Ministry of Education and Science of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

Most foreign students study in Ukraine in Russian, which is still widespread in major donor countries. Programs in English require more resources for personnel and logistics. Thus, in the war-caused financial crisis Ukrainian universities do not risk to increase their presence in the international education market within the segment of English programs. Almost a quarter of foreigners study in distance learning programs which often cover the demand for low-quality education.

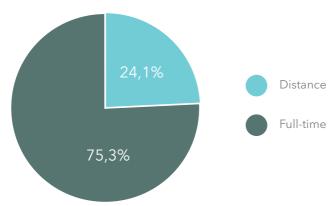
### 6.7 DISTRIBUTION OF INTERNATIONAL STUDENTS (2014/2015)



Source: State centre of international education of Ministry of Education and Science of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

## 6.8 DISTRIBUTION OF INTERNATIONAL STUDENTS BY FORM OF STUDYING (2014/2015)

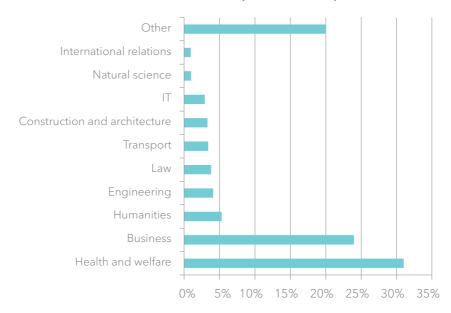


Source: State centre of international education of Ministry of Education and Science of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

76

### 6.9 DISTRIBUTION OF INTERNATIONAL STUDENTS BY FIELDS OF EDUCATION (2014/2015\*)

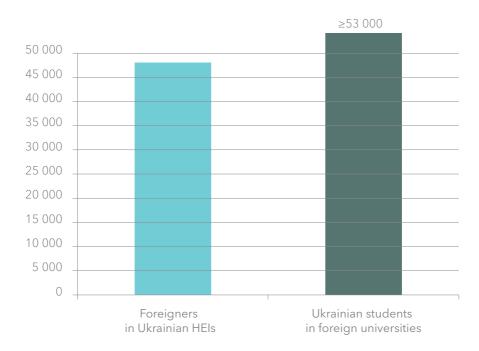


Source: State centre of international education of Ministry of Education and Science of Ukraine

\* Without temporarily occupied territory of AR of Crimea and Sevastopil city, and territories of anti-terrorist operation

More than half of foreign students are enrolled in the medical and economic programs. Typically, the students from the former Soviet Union are more interested in economic programs, while students from Asia and Africa - in medicine.

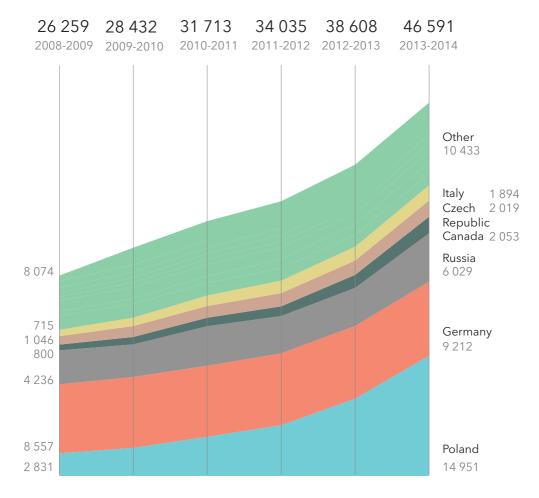
### 6.10 STUDENT IMMIGRATION AND EMIGRATION BALANCE, FULL-TIME (2014/2015)



Source: CEDOS, State centre of international education of Ministry of Education and Science of Ukraine

Until recently the number of Ukrainian youth who has been going abroad to study was smaller than the number of foreign students who study in Ukrainian universities. According to the early data, the situation has changed in 2014/2015 - more students left Ukraine than came. The war in Ukraine is only one of the factors of such change as the number of Ukrainians in the universities abroad started increasing faster than the number of foreign students in Ukraine far earlier than Russian military aggression against Ukraine had started.

### 6.11 NUMBER OF UKRAINIAN STUDENTS ABROAD, FULL-TIME (2008-2014)



Source: CEDOS

Given that the methodology of data gathering does not always coincide in different countries, the submitted figures sometimes have different meanings. The number of Ukrainian students enrolled in the full cycle programs (i.e. as a result of its completion graduate gets a degree) is reflected in data

from most of the countries: Australia, Austria, Azerbaijan, Belgium, Belarus, Bulgaria, Georgia, Denmark, Estonia, Ireland, Italy, Latvia, Lithuania, Moldova, Netherlands, Poland, Russia, Serbia, Slovenia, Turkey, Croatia, Finland, France, and Czech Republic. The number of Ukrainian students who are either enrolled in the full cycle programs or are members of various non-degree programs (exchange programs, internships, language schools, etc.), is reflected in the data of the following countries: United Kingdom, Canada, Germany, Slovakia, USA, Hungary, Switzerland, and Sweden. France: The number of Ukrainian students, excluding the ones enrolled in institutions known as tertiary schools (grandes écoles). Tertiary schools typically specialize in one field, they enrol on a paid basis and their studies are considered to be more prestigious. 18% of all students in France study in such schools.

The number of Ukrainians studying at foreign universities was 46 591 people as of the 2013/2014 academic year. Poland, Germany, Russia, Canada, Czech Republic, Italy, USA, Spain, France, and UK were among the countries most preferred for studying. Growth rate from 2009 to 2014 is 77%. Comparing the last two years one can see an increase by 21% or 7 983 people. Ukrainians studying in Polish universities account for almost 2/3 of these increase. They have shown the most rapid increase, both in absolute and relative numbers - from 9 620 to 14 951 people. Moreover, Ukrainian applicants are an important strategic source of income for Polish universities as they account for 42% of all foreign students in Poland. In addition, quite significant increase of Ukrainian citizens has been noted in programs in Canadian, British, Czech and Italian universities, both in relative and absolute numbers. The growth of Ukrainian students in Russian universities (1292 people) raises some doubts, particularly it could occur on account of students from the occupied territories.

#### REFERENCES

#### I. Education Finances

- 1.1. Національні рахунки освіти України у 2013 році с. 6; Education at Glance OECD 2015 р. 234
- 1.2. Основні показники діяльності ВНЗ 2005-2016
- 1.3. UNESCO Institute for Statistics
- 1.4. Національні рахунки освіти України у 2014 році с. 6
- 1.5. Національні рахунки освіти України у 2014 році— с. 72; Продовження навчання та здобуття професії 2013— с. 10; Основні показники діяльності ВНЗ на початок 2013/14 навчального року— с. 53,54
- 1.6. Національні рахунки освіти України у 2014 році с. 72
- 1.7. Національні рахунки освіти України у 2013 році с. 6, 56; Education at Glance OECD 2015 р. 233, 335
- 1.8. Національні рахунки освіти України у 2014 році с. 6
- 1.9. Національні рахунки освіти України у 2013 році с. 6, 56; Education at Glance OECD 2015 р. 235
- 1.10. Haціональні рахунки в освіті с. 11, с. 66-67
- 1.11. Національні рахунки в освіті 2014 с. 11; Національні рахунки в освіті 2008–2010 с. 11
- 1.12. UNESCO Institute for Statistics
- 1.13. Teachers' and School Heads' Salaries and Allowances in Europe, 2013/14. Eurydice facts and figures. Дані про ВВП України та кількість населення за 2014 р.— Державна служба статистики
- 1.14. Основні показники діяльності вищих навчальних закладів України на початок 2014/15 навчального року с. 89-90; Загальноосвітні навчальні заклади на початок 2014/15 навчального року с. 58; Міністерство освіти і науки

#### II. Higher Education Finances

- 2.1. Єдина державна електронна база з питань освіти
- 2.2. Національні рахунки освіти України у 2013 році
- 2.3. Національні рахунки освіти України у 2013 році с. 59; Education at Glance OECD 2015 р. 248
- 2.4. UNESCO Institute for Statistics
- 2.5. за Постановами КМУ про обсяги державного замовлення
- 2.6. за Постановами КМУ про обсяги державного замовлення

- 2.7. за Постановами КМУ про обсяги державного замовлення
- 2.8. за Постановами КМУ про обсяги державного замовлення
- 2.9. за Постановами КМУ про обсяги державного замовлення
- 2.10. за Постановами КМУ про обсяги державного замовлення
- 2.11. Едина державна електронна база з питань освіти
- 2.12. Єдина державна електронна база з питань освіти, Постанови КМУ про обсяги державного замовлення

#### III. Schools

- 3.1. Дошкільна освіта України 2012, 2014 с. 7
- 3.2. Загальноосвітні навчальні заклади 2005-2006 н.р.— с. 4; Загальноосвітні навчальні заклади 2007-2008 н.р.— с. 8; Загальноосвітні навчальні заклади, звіти за 2008-2016
- 3.3. Загальноосвітні навчальні заклади, звіти за 2013-2014 н.р. с. 14.
- 3.4. дані Міністерства освіти і науки України за статистичним звітом 83-PBK
- 3.5. Загальноосвітні навчальні заклади України 2005-2016
- 3.6. Загальноосвітні навчальні заклади 2015-2016 н.р. с. 14
- 3.7. Український центр оцінювання якості освіти, Офіційний звіт про проведення зовнішнього незалежного оцінювання у 2008-2014 роках, ст. у випуску за відповідний рік: 293, 227, 266, 268, 304, 375, 29 (Том 1)
- 3.8. Продовження навчання та здобуття професії, 2010, 2014, Міністерство освіти і науки

#### IV. Admission to Universities

- 4.1. Державна служба статистики України
- 4.2. Єдина державна електронна база з питань освіти
- 4.3. Єдина державна електронна база з питань освіти
- 4.4. Єдина державна електронна база з питань освіти
- 4.5. Едина державна електронна база з питань освіти
- 4.6. Єдина державна електронна база з питань освіти
- 4.7. Єдина державна електронна база з питань освіти
- 4.8. Едина державна електронна база з питань освіти
- 4.9. Державна служба статистики України, Основні показники діяльності вищих навчальних закладів України, звіти за період 2007-2015

#### V. Students

- 5.1 Основні показники діяльності вищих навчальних закладів України 2011-2016
- 5.2 UNESCO Institute for Statistics
- 5.3 Основні показники діяльності вищих навчальних закладів України, випуски за період 2007-2015

#### VI. Student International Mobility

- 6.1 Державний центр міжнародної освіти при МОН
- 6.2 Основні показники діяльності вищих навчальних закладів України на початок 2015/16 навчального року С.104-107; Основні показники діяльності вищих навчальних закладів України на початок 2006/07 навчального року С.105
- 6.3 Єдина державна електронна база з питань освіти
- 6.4 Державний центр міжнародної освіти при МОН
- 6.5 Державний центр міжнародної освіти при МОН
- 6.6 Державний центр міжнародної освіти при МОН
- 6.7 Державний центр міжнародної освіти при МОН
- 6.8 Державний центр міжнародної освіти при МОН
- 6.9 Державний центр міжнародної освіти при МОН
- 6.10 CEDOS, Державний центр міжнародної освіти при МОН
- Австралія Australian Education International; Австрія Statis-6.11 tik Austria; Азербайджан – Azərbaycan Respublikasının Dövlət Statistika Komitəsi; Бельгія – Observatoire de Ivenseignement supérieur Chargée de projet statistiques Secrétariat général/AGERS, Agentschap voor Hoger Onderwijs, Volwassenenonderwijs en Studietoelagen Afdeling Hoger Onderwijs; Білорусь – Министерство образования Республики Беларусь; Болгарія – Национален статистически інститут; Великобританія – Higher Education Statistics Agency; Γρεμία – Ελληνική Στατιστική Αρχή; Γργ3ία – საქართველოს სტატისტიკის ეროვნული სამსახური; Данія – Danmarks Statistik; Естонія – Statistikaamet; Ірландія – Department of Education and Skills Statistics section; Іспанія – Servicio de Estadística Universitaria. Ministerio de Educación, Cultura y Deporte; Італія – Anagrafe Nazionale Studenti; Канада – Citizenship and Immigration Canada; Латвія – Centrālās statistikas pārvaldes; Литва – Lietuvos statistikos departamentas; Молдова – Biroului Național de Statistică; Нідерланди – Vereniging van Samenwerkende Nederlandse Universiteiten; Німеччина – Statistisches Bundesamt; Польща – Główny urząd statystyczny; Росія – Центр социологических исследований, Министерства образования и науки Российской Федерации; Румунія – Ministerul Educației Naționale; Сербія – Републички завод за статистику; Словаччина – Centra vedecko-technických informácií SR; Словенія – Statistični urad Republike Slovenije; США – The Institute of International Education; Туреччина – Ölcme, Secme ve Yerlestirme Merkezi; Угорщина – Nemzeti Erőforrás Minisztérium/ Központi Statisztikai Hivata; Фінляндія – Tilastokeskus; Франція – Ministère de l'Éducation nationale; Хорватія – Državni zavod za statistiku; Yexia – Ministerstvo školství, mládeže a tělovýchovy; Швейцарія – Bundesamt für Statistik BFS; Швеція – Statistiska centralbyrån

CEDOS is an independent, non-partisan, non-commercial think tank based in Kyiv, Ukraine. We research state policy and social processes in education, migration and urban development in order to create progressive institutions and boost citizens' participation in decision making.



www.cedos.org.ua

facebook.com/CEDOS.org.ua

twitter.com/CEDOS\_UA

w vk.com/cedos