

Ukraine Education Flagship: Key Findings

May 2019



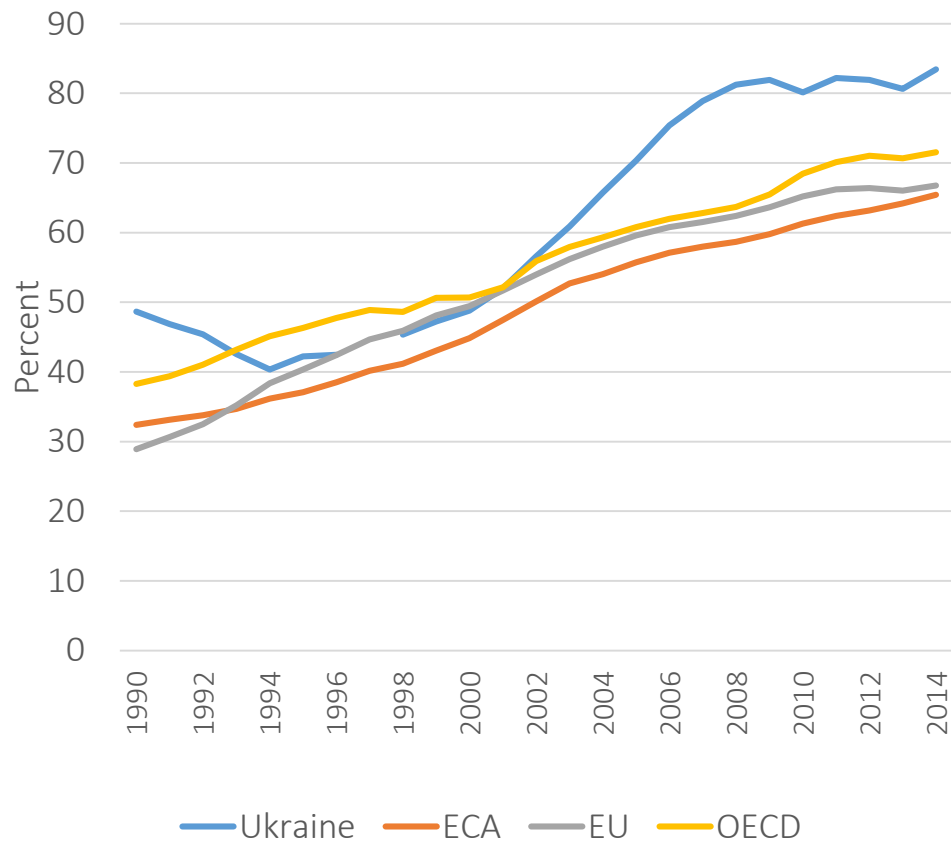
THE WORLD BANK

Motivation

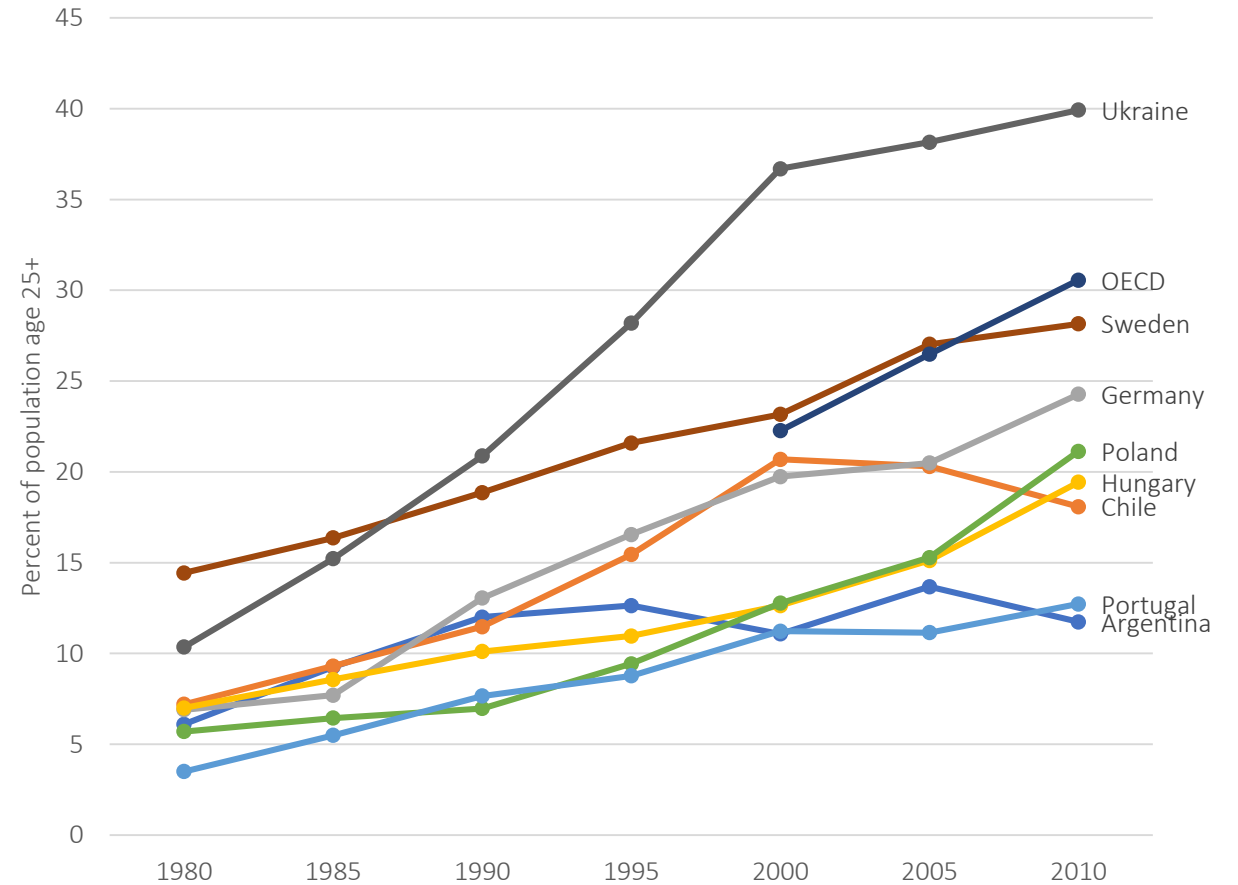
What is the context for reform?

Ukraine now exceeds many advanced economies in terms of tertiary education enrollment and attainment

Tertiary Education Gross Enrollment Ratio

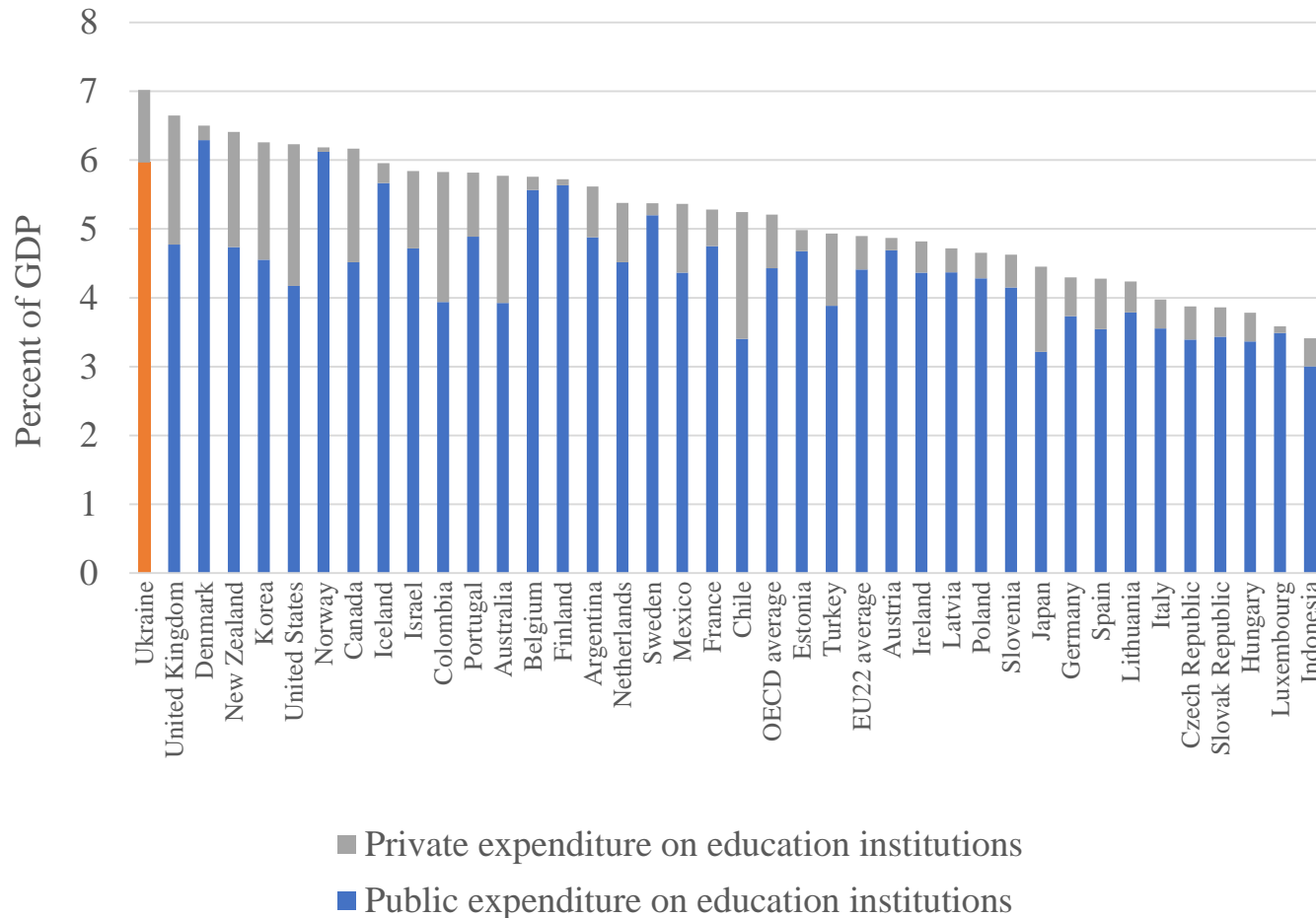


Population Age 25+ with Tertiary Education

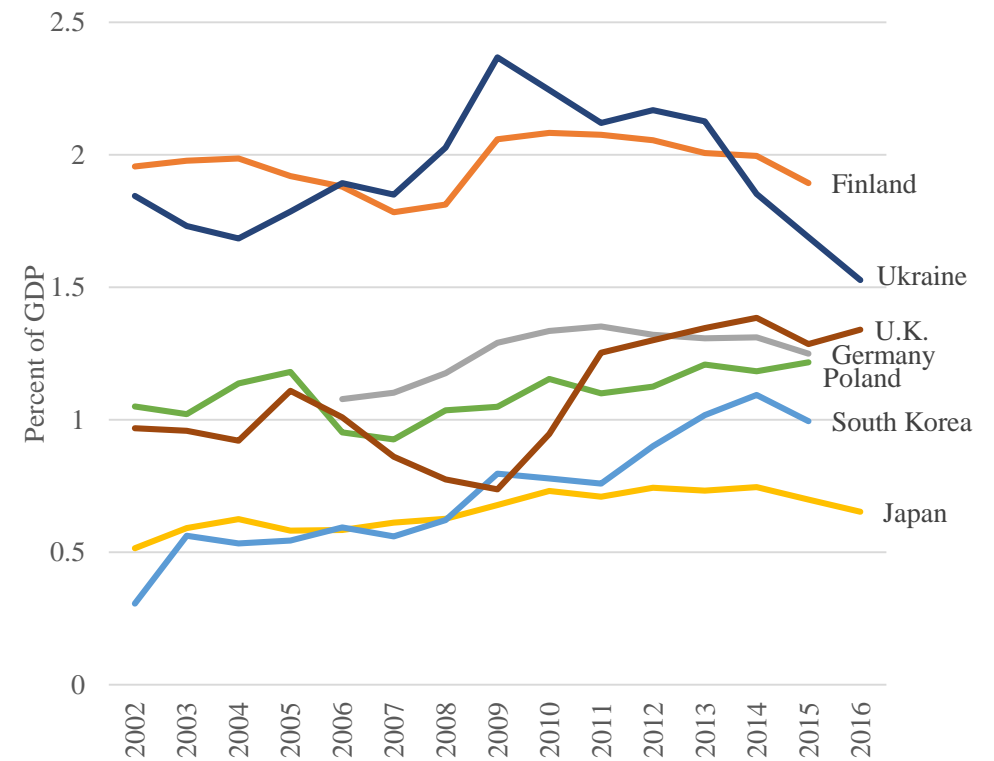


Ukraine spends a high share of its GDP on education

Public and private spending on education (% of GDP)

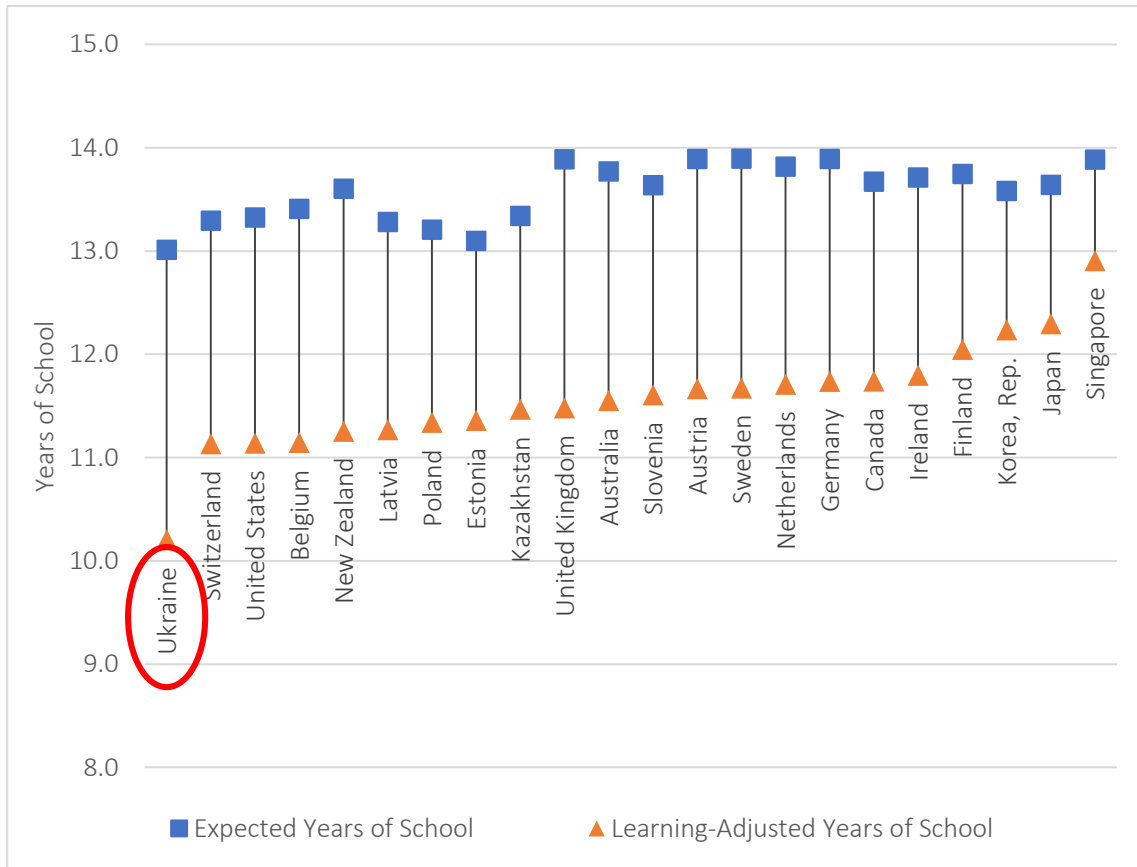


Public spending on tertiary education (% of GDP)

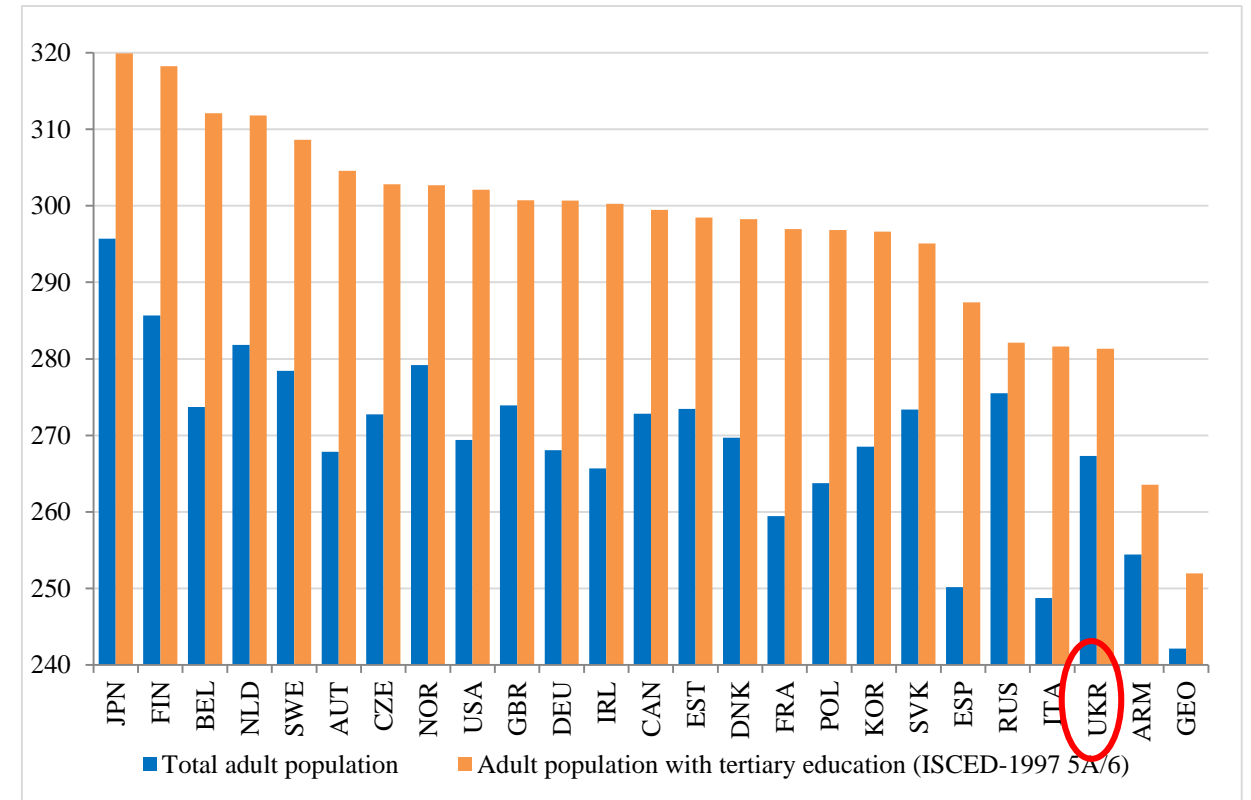


However, learning outcomes lag behind other countries, both in secondary and tertiary education

Learning Gap based on Human Capital Index



Literacy proficiency of adult population in 2011-2013



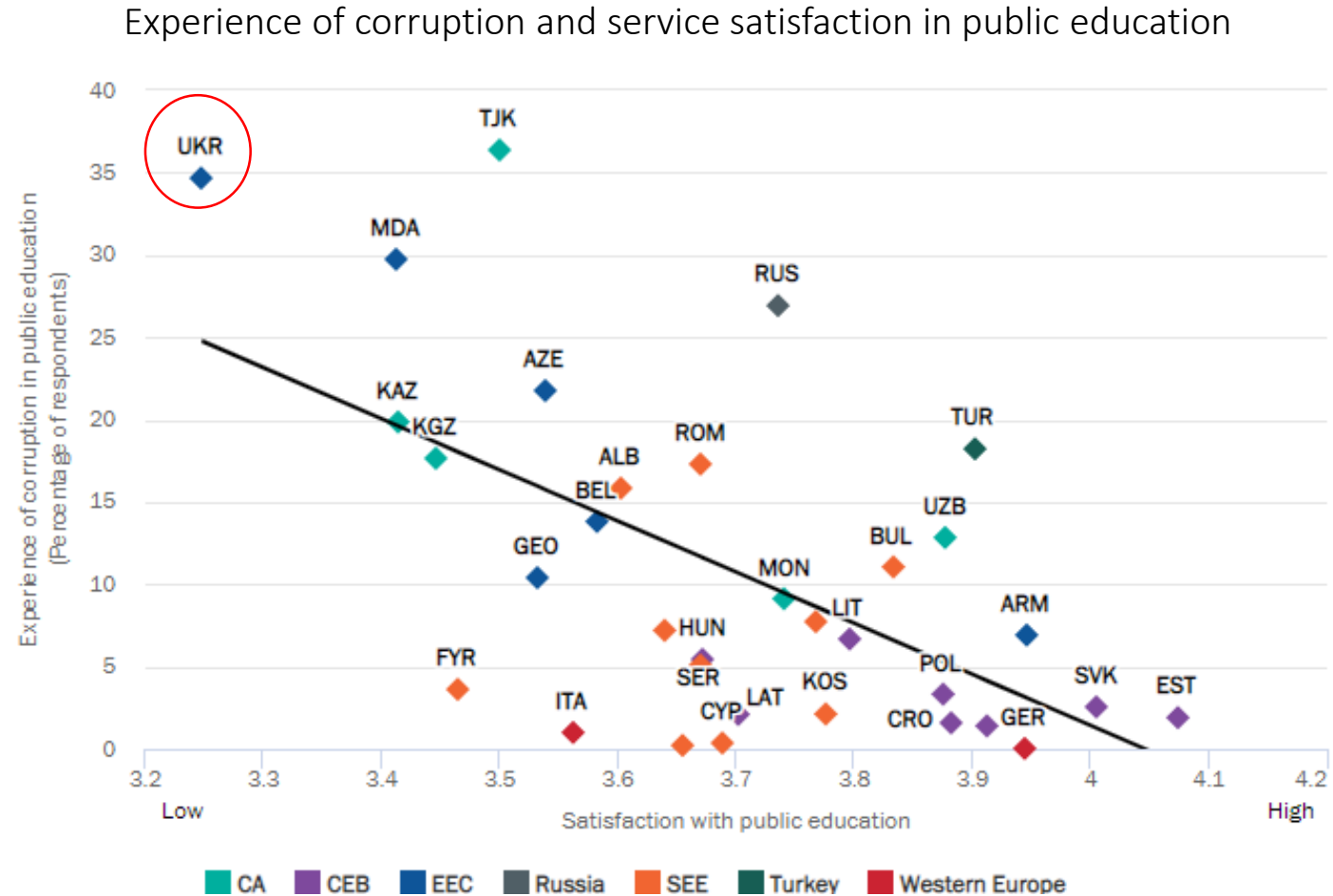
Public trust in education has deteriorated and corruption is common, particularly in higher education

77%

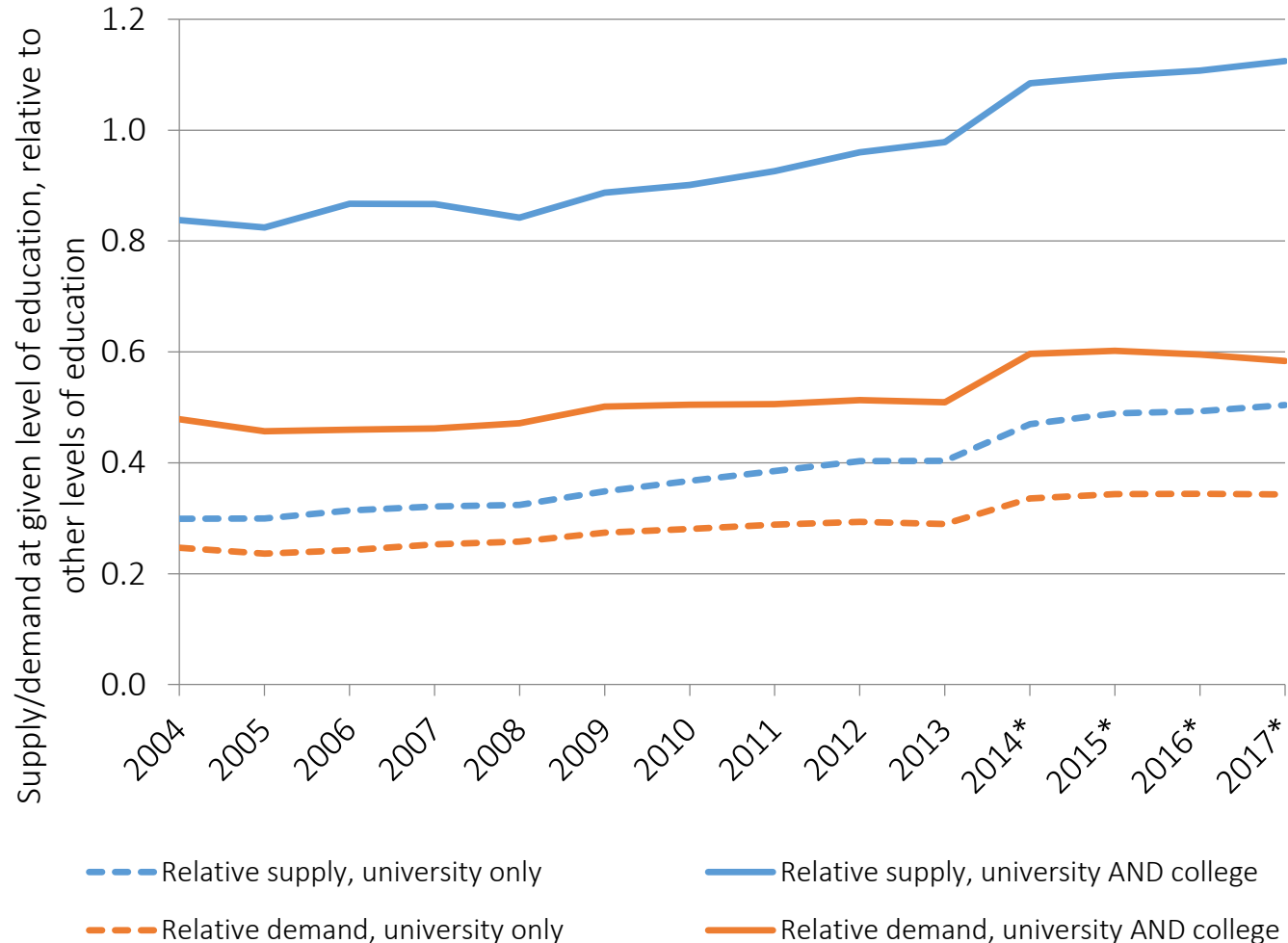
“Corruption is pervasive or widespread in higher education”

50%

“Secondary education does not provide equal opportunities to study for free”



Large supply of tertiary graduates and diminished relevance of credentials have contributed to education-job mismatch, particularly for young university graduates



- **Excess relative supply of tertiary educated workers**, compared with relative demand*
- **Greater share of tertiary educated workers among unemployed**: an increase from 32% in 2004 to 47% by 2013
- **More young university graduates working in lower-skilled jobs**: 40% in 2013, compared to 29% for prime-age and older workers
- **40% of employers reported significant skills gaps** which harm business objectives

* Estimated based on occupational structure of employment matched to categorization of occupational groups by level of education

Public dissatisfaction and revolution have prompted major transformative reforms which are underway

Higher Education (2014)

- Definition of levels and qualifications
- Creation of higher education activity standards
- Expansion of academic autonomy
- Establishment of democratic management structures in HEIs
- Development of scientific R&D
- Establishment of National Agency for Quality Assurance in Higher Education

Budget Decentralization Reform (2014)

- Transfer of control of preschools and general secondary schools to local communities
- Introduction of education subvention (funding formula)

Framework Law 'On Education' and *New Ukrainian School* (2017)

- Movement to competency-based curriculum
- Extension of general secondary education from 11 to 12 years
- Launch of State Service for Quality Education
- Greater autonomy for teachers, schools and local authorities

Flagship Objectives

- Assess progress of reform, answering two key policy questions:

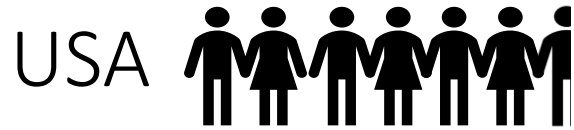
How does Ukraine's education system perform
in terms of quality and equity of outcomes?

What can Ukraine do to use resources more efficiently and productively and strengthen the reform agenda?

Findings

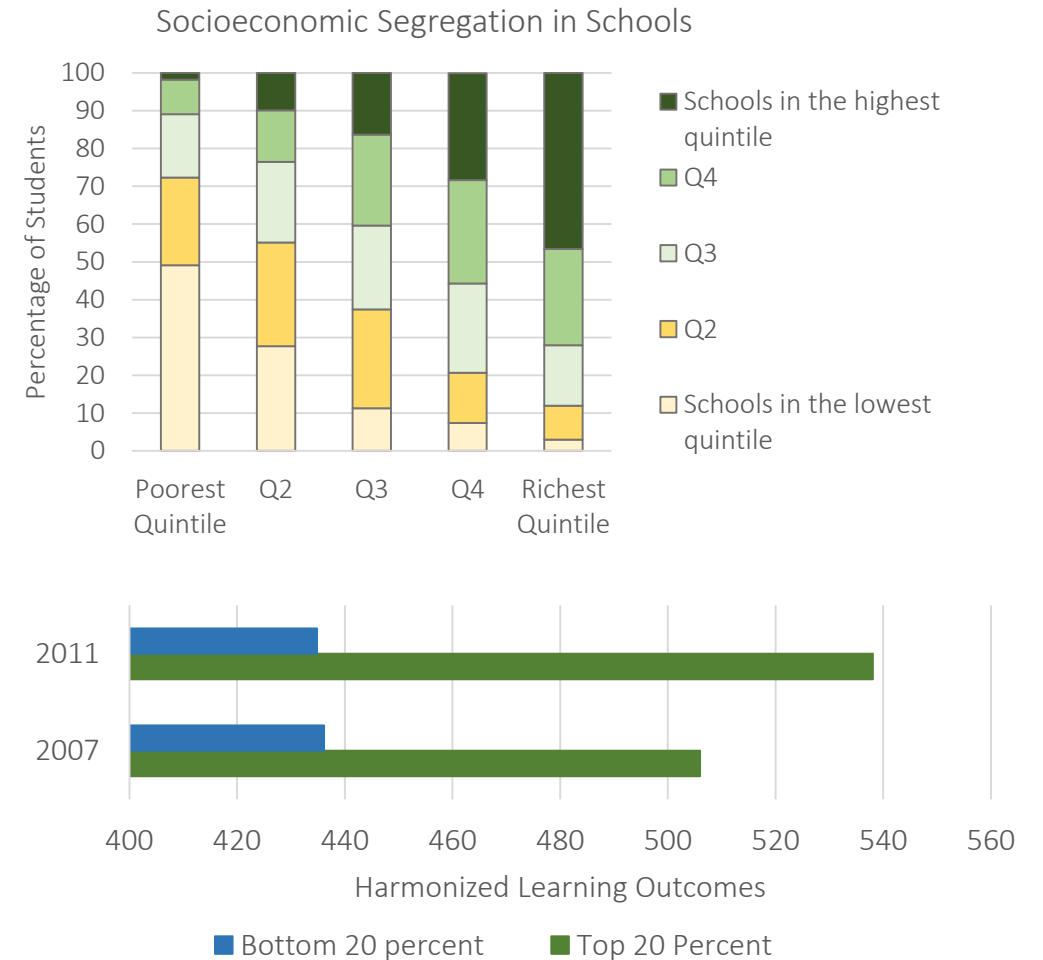
How does Ukraine's education system perform in terms of quality and equity of outcomes?

Too many low performers in Ukrainian schools, made worse by segregation



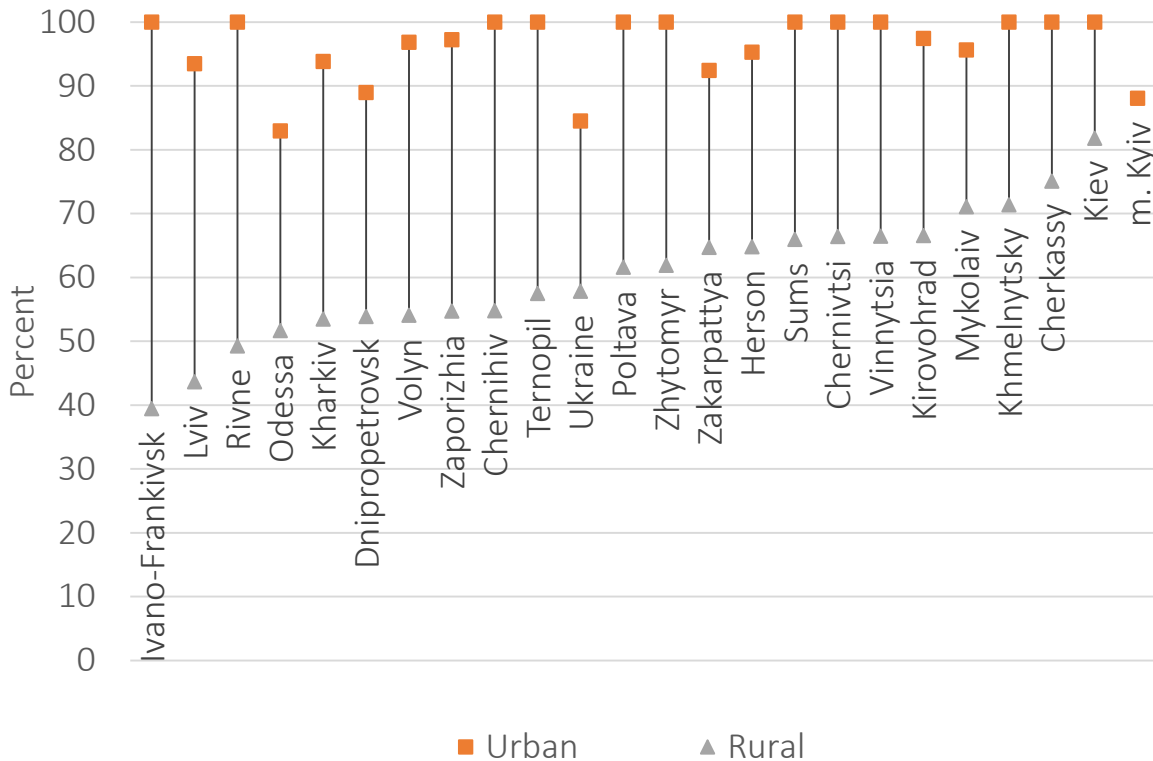
Students who met only the lowest mathematics achievement benchmark or who failed to achieve that level (TIMSS 2011)

Poor students are clustered in poor schools, and rich-poor performance gap is growing

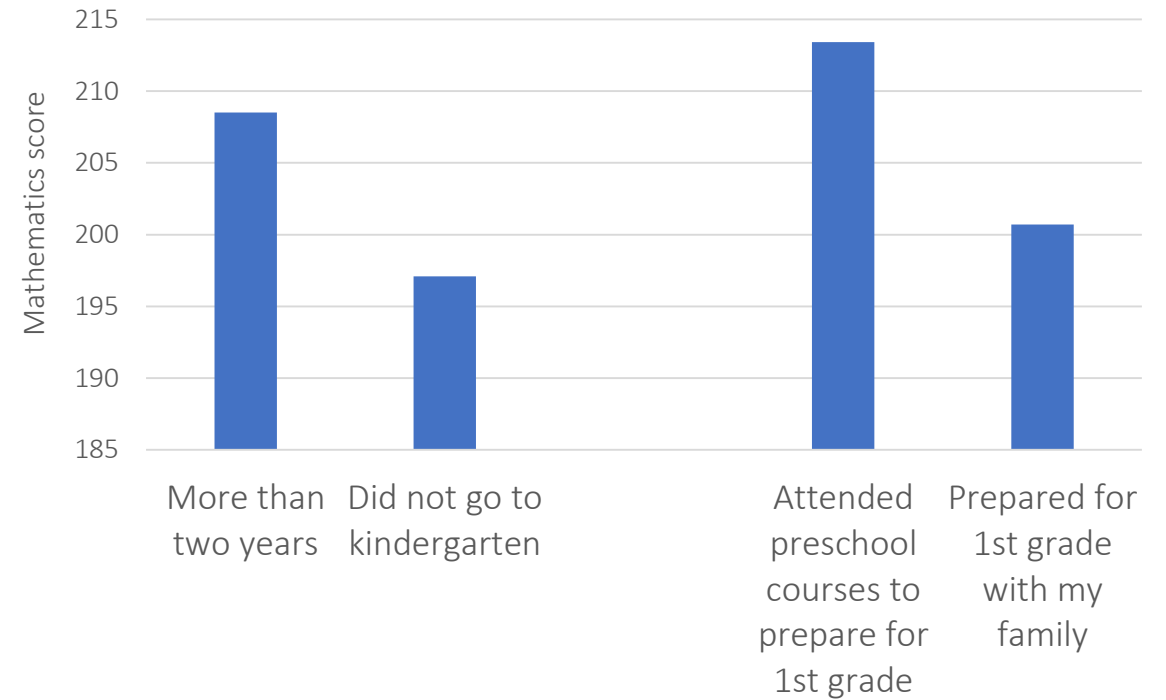


Unequal access to preschool means that inequalities start early

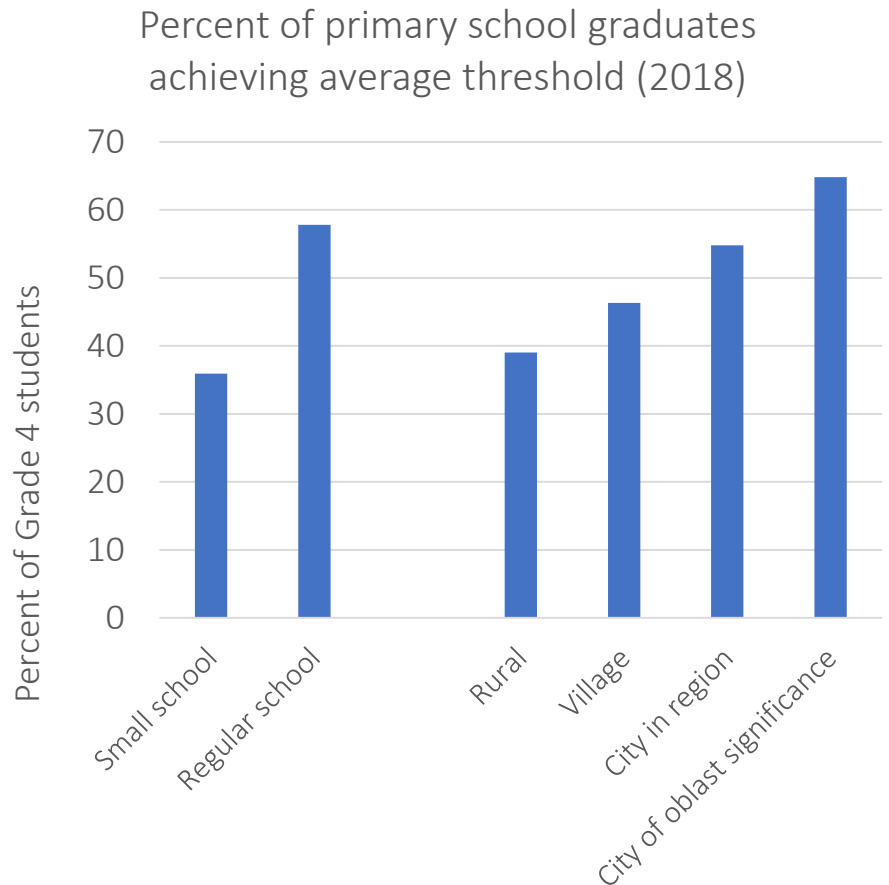
Net Enrollment Rate for Preschool Children Age 3-5 (2017)



Preschool Education and Grade 4 Achievement in Ukraine (2018)



Disparities in quality and performance persist over time

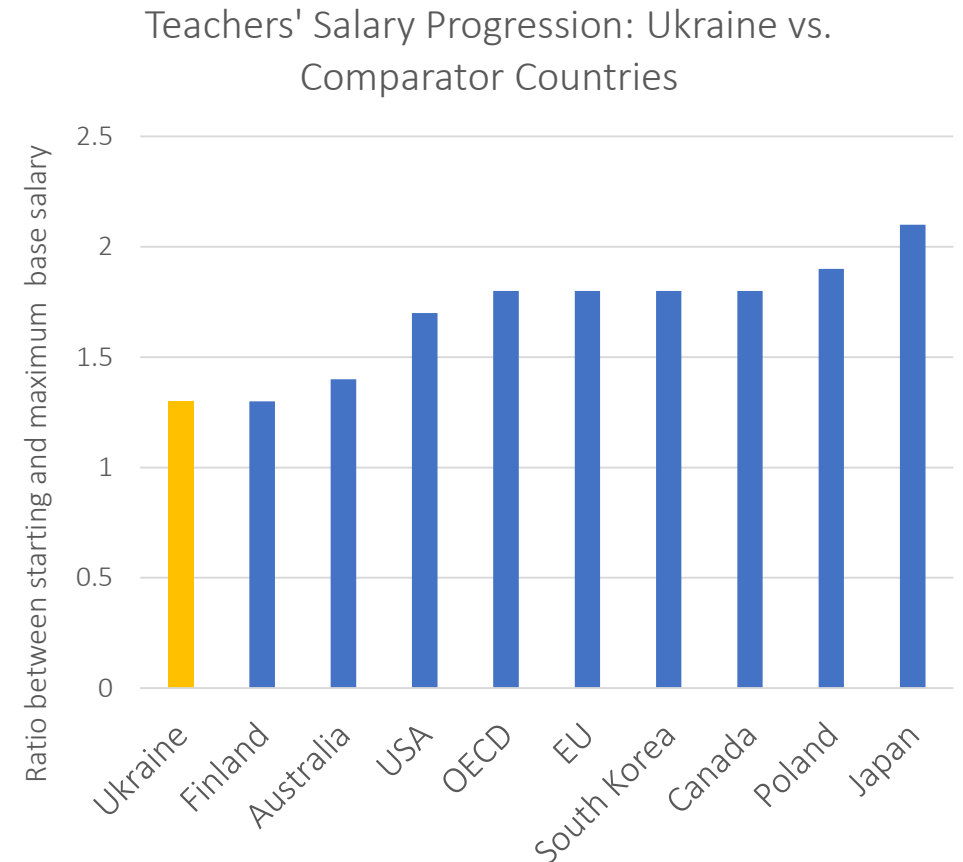


| | Urban schools | | | Rural schools | | Hub schools |
|---|-------------------|---------------|-----------------|-------------------|----------------------------|-------------|
| | All urban schools | Elite schools | Regular schools | All rural schools | Schools with small classes | |
| Mean test score in EIT in Ukrainian language / literature | 60.3 | 68 | 55.2 | 42.7 | 43.2 | 52.5 |
| Mean test score in EIT (all subjects) | 44.5 | 49.7 | 41.1 | 33.4 | 33.4 | 39.4 |
| Average class size | 23.8 | 25.6 | 23 | 13.2 | 8.28 | 16.8 |
| Share of students that took EIT in Mathematics (%) | 48.9 | 54.8 | 45.1 | 40.3 | 46.6 | 44.78 |
| Share of students learning second foreign language (%) | 70.8 | 78.7 | 64.9 | 55.4 | 41.7 | 67.5 |
| Mean of ICT index | 0.67 | 0.76 | 0.61 | 0.20 | -0.07 | 0.64 |
| Mean of material equipment Index | 0.93 | 0.96 | 0.91 | 0.33 | 0.01 | 0.94 |
| Mean of teachers characteristics index | 0.74 | 0.92 | 0.62 | 0.29 | 0.07 | 0.55 |

Based on combined analysis of DISO and EIT results

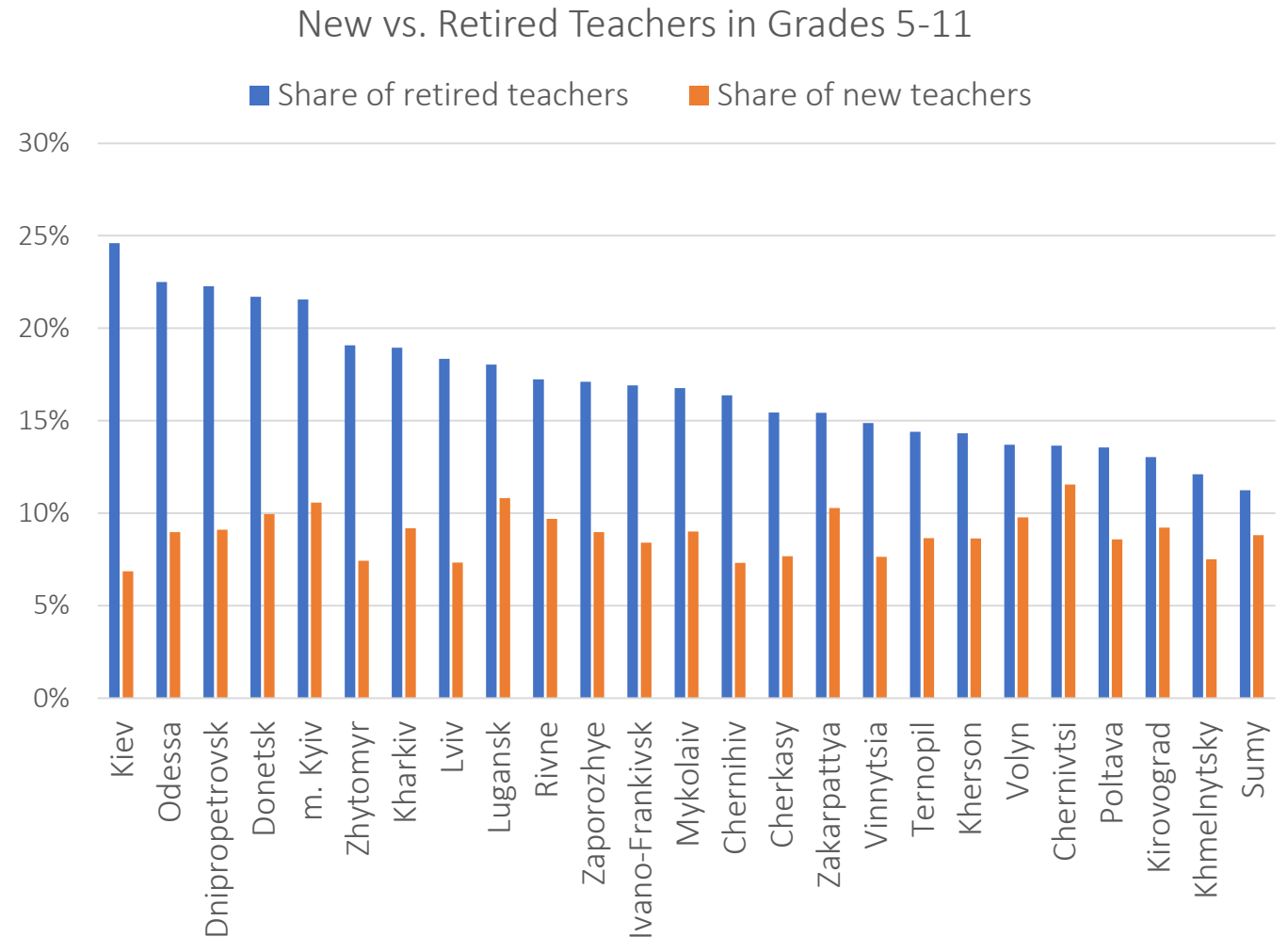
NUS requires massive paradigm shift for teachers, but teachers' incentives may not be adequately aligned

- Professional status is unappealing
 - Lower EIT scores for those entering teacher education programs
 - Relatively low salary progression
- Stavka teaching load system devalues the work of professional teachers
- Need to carefully monitor teacher certification pilot process
- Substantial need to upgrade initial teacher education and in-service training in line with NUS

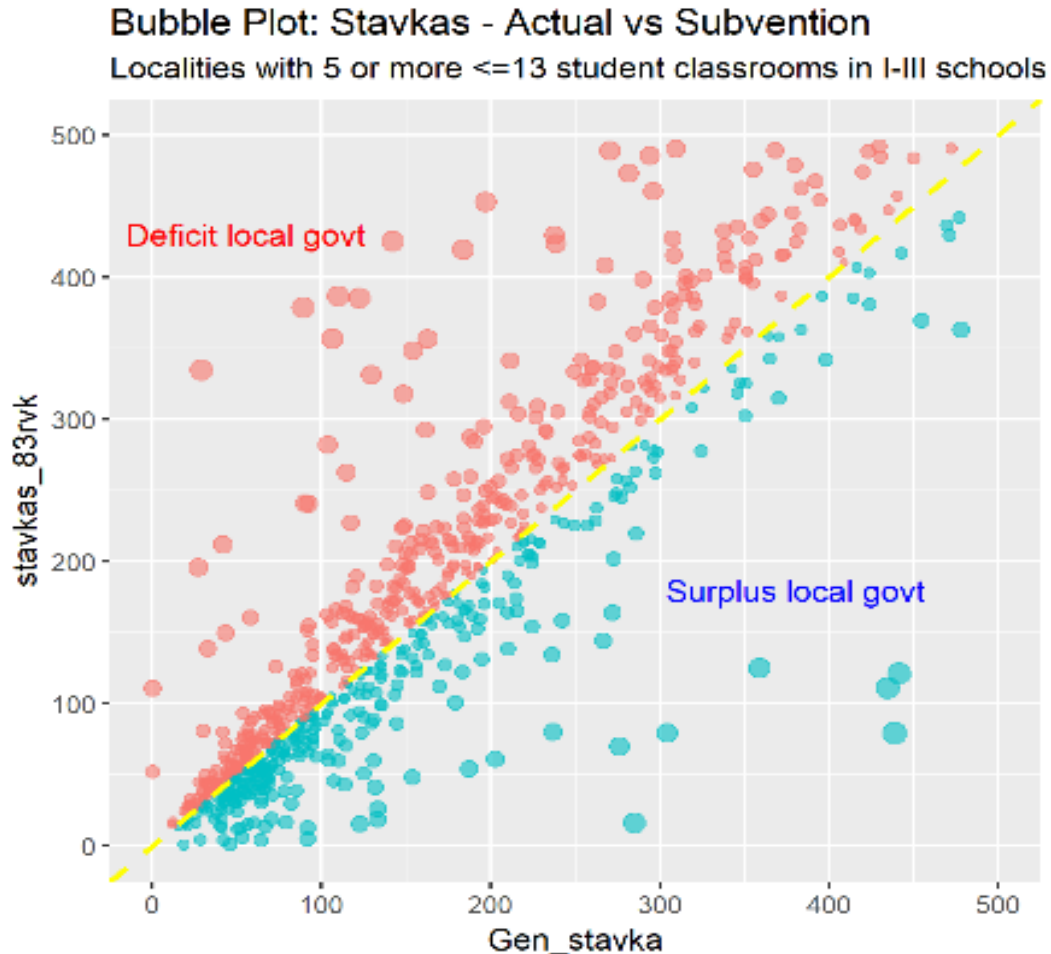


Teachers' incentives also affect size of teacher workforce

- Large and aging workforce
- 25% are age 55 and above
- 15% are working while in retirement
- Even higher for subject teachers in grades 5-11



Education financing formula presents strong economic incentives to improve efficiency

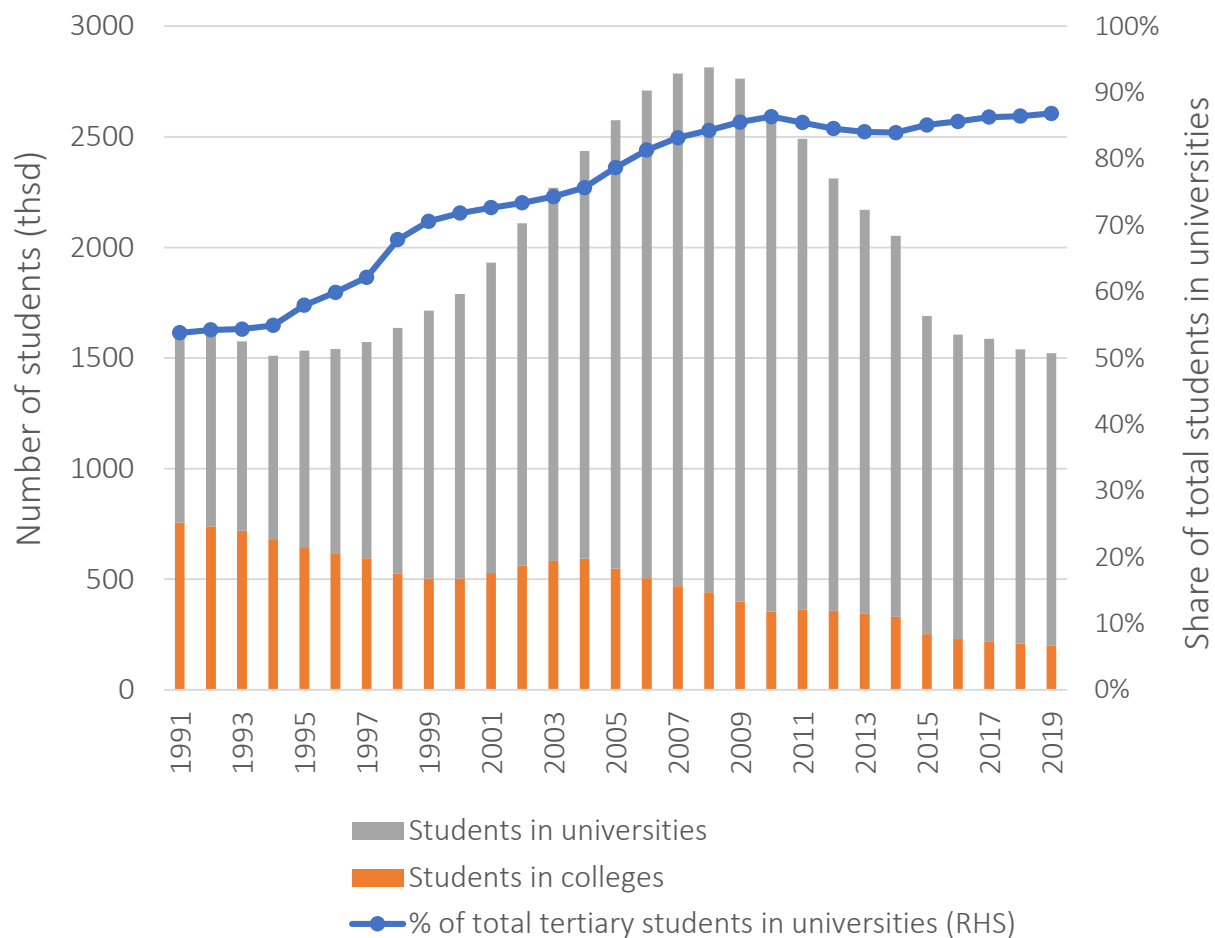


- Crucial change since 2018: formula now provides hard budget constraint if class sizes are smaller than norm in the formula
- LGs in surplus can use resources to enhance quality or expand access to preschool
- The formula should be monitored and adjusted as needed

Need to improve assessment capacity and EIT to better regulate access to higher education

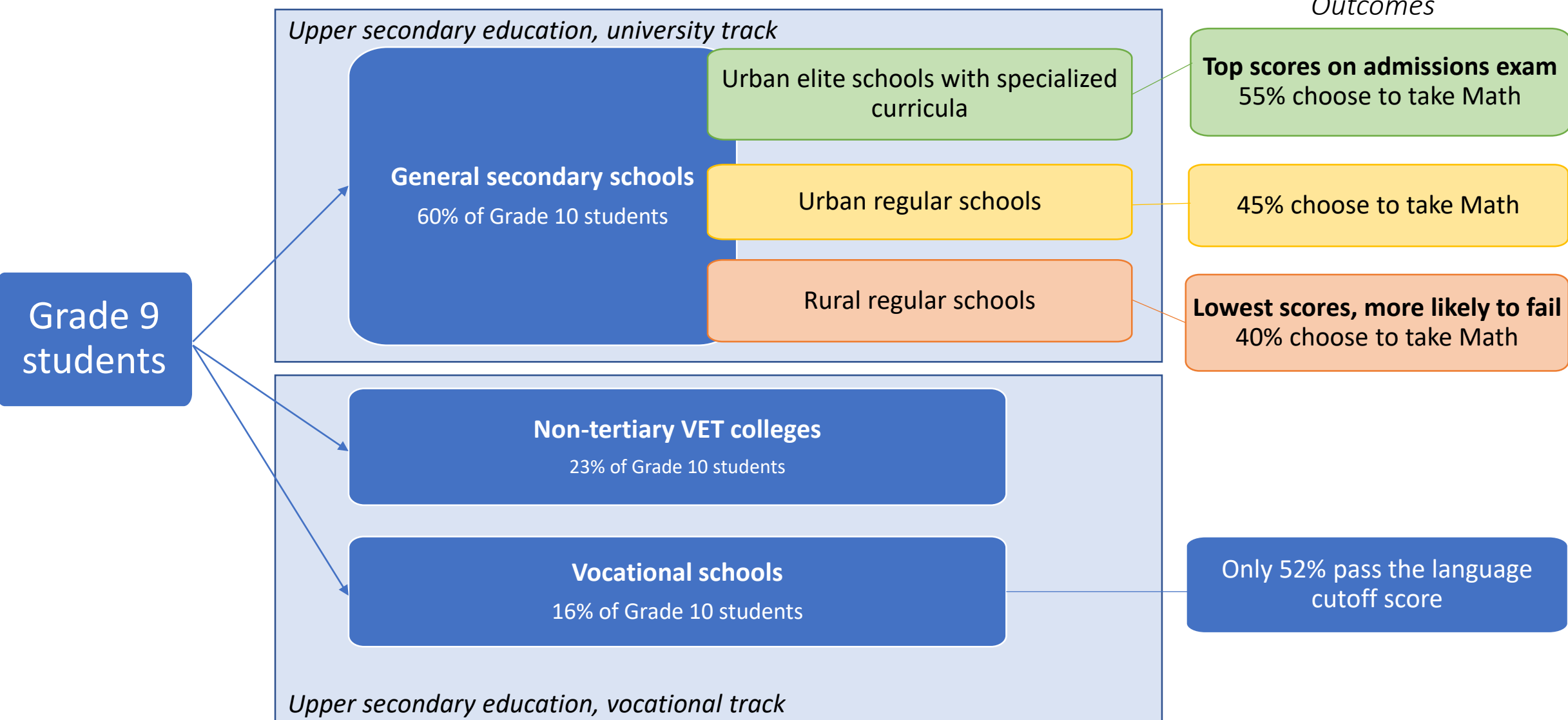
- Gr4 student assessment started only this year
- No Gr9 assessment to assess performance or help orient students for high school
 - 29 OECD countries have national summative assessments at primary level; 27 at lower secondary level
- EIT brought more transparency and trust to admissions process, but it is now being used for numerous potentially conflicting objectives:
 - **Attestation:** EIT as school leaving exam for secondary school students
 - **Transparent admission to higher education:** EIT as university admissions exam
 - **Quality of applicants:** Minimum entrance thresholds for selected programs
 - **Equity of access:** Special coefficients for rural students, certain study fields, regional HEIs
- EIT will also need to be reviewed and revised in light of *New Ukrainian School* curriculum

Higher education remains the top objective for most young Ukrainians, particularly long-cycle programs from universities



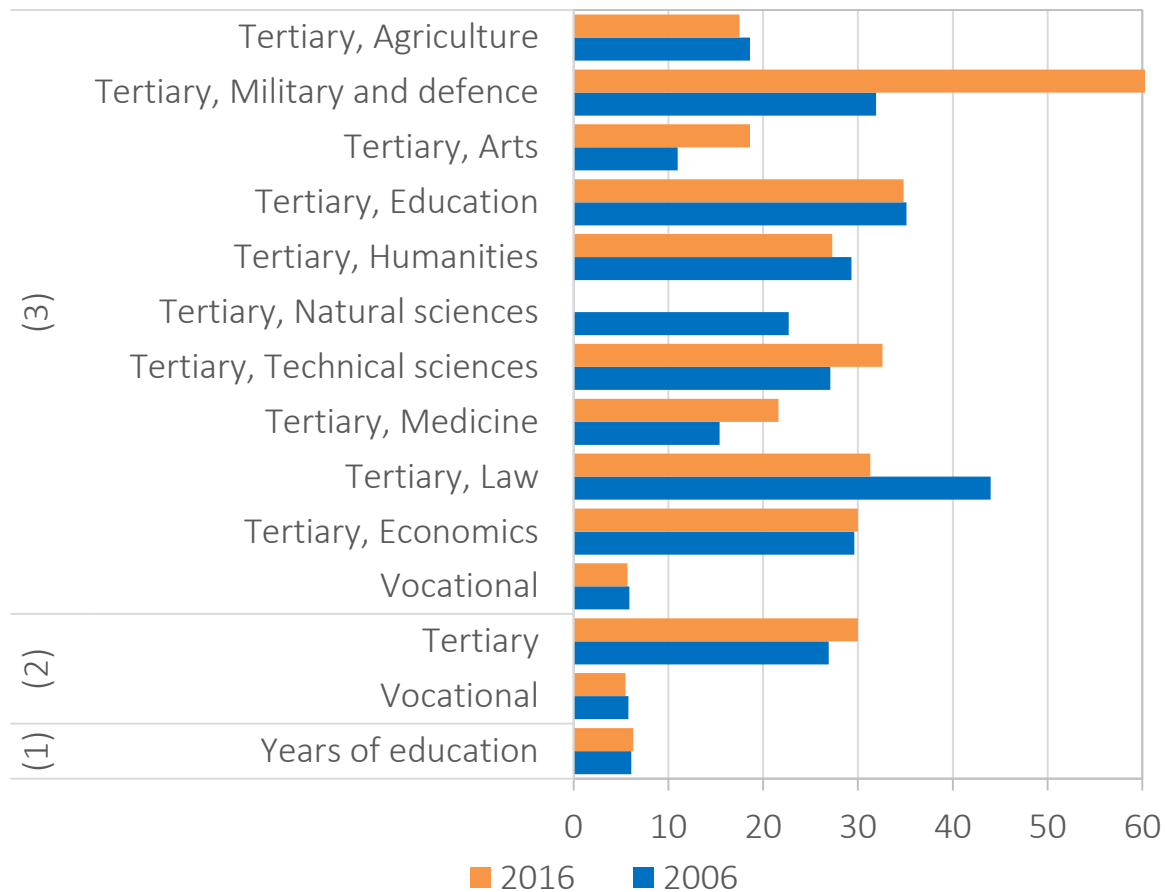
- Composition of demand has changed over time: most students today pursue BA and MA degrees in universities rather than junior specialist degrees in colleges
- BA and MA degrees are perceived as more prestigious and valuable

Unequal access to quality secondary education results in a growing equity gap in graduates' preparation for higher education and the labor market



Returns to higher education remain high, but limited academic and career guidance complicates choice of study field

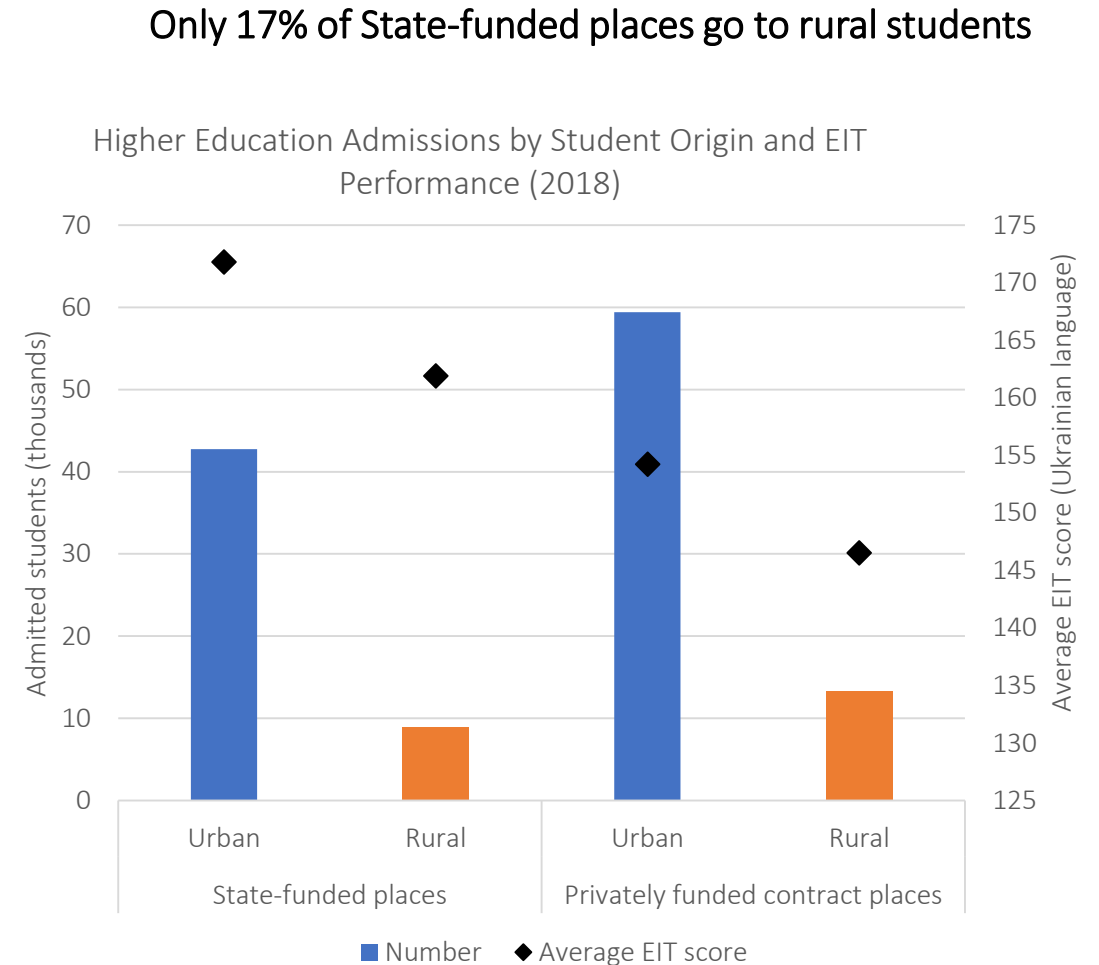
Returns to an extra year of education or a given level of education (compared to upper secondary education or less) on yearly earnings of employees at their main job (%)



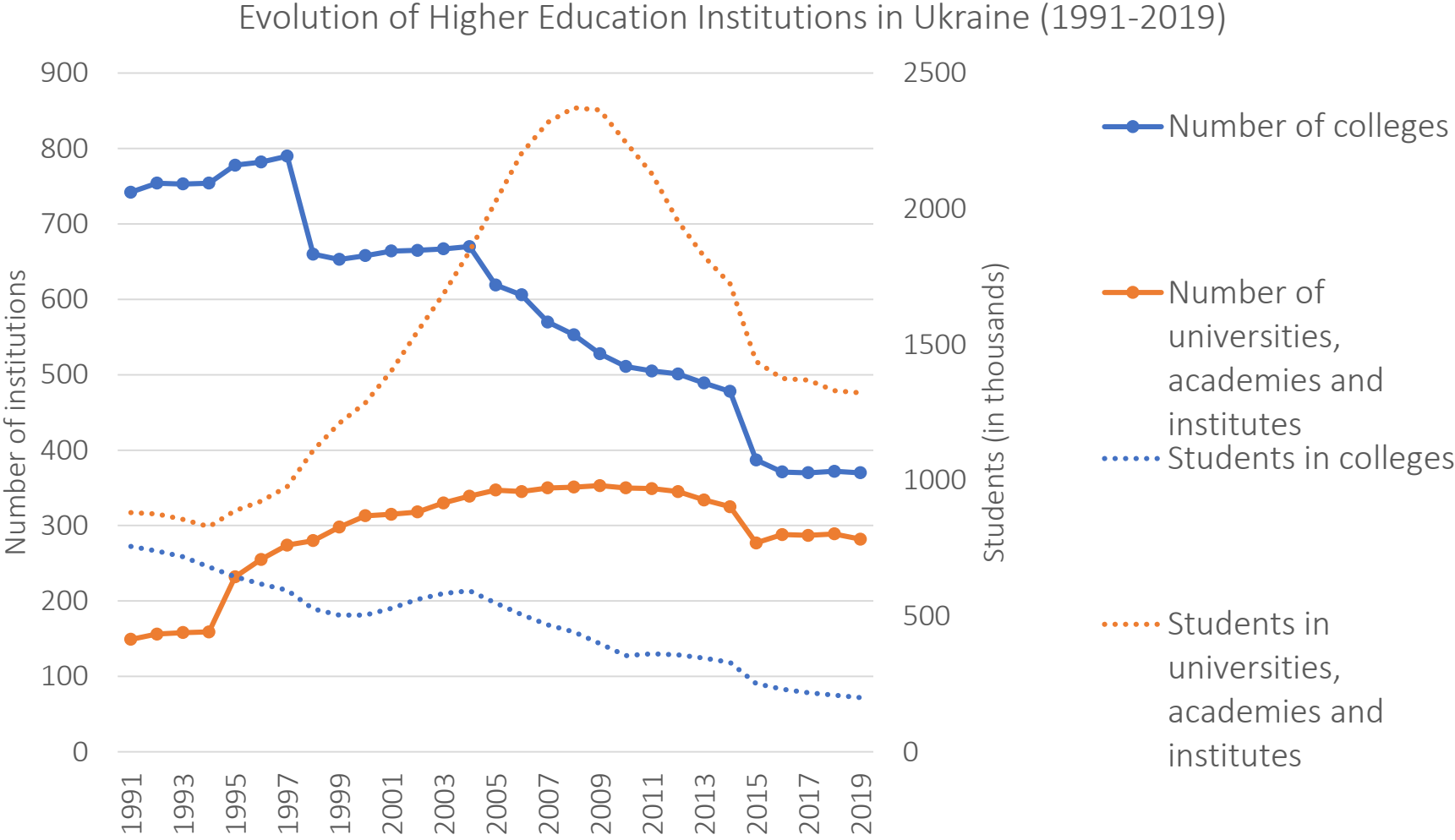
- Significant variation in returns by field of study
- Youth without access to guidance are more likely to “randomly” select study fields and occupations

Students with lower access to relevant and high-quality curricular options are less prepared to enter higher education

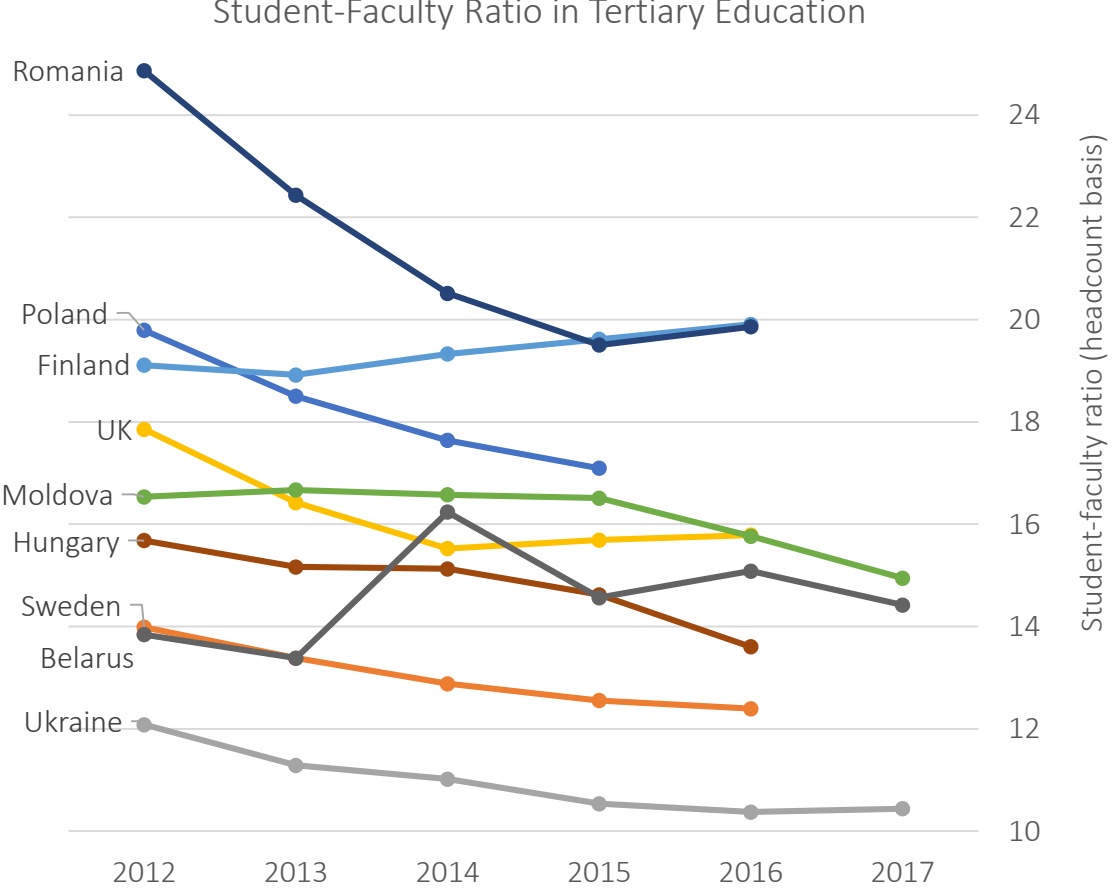
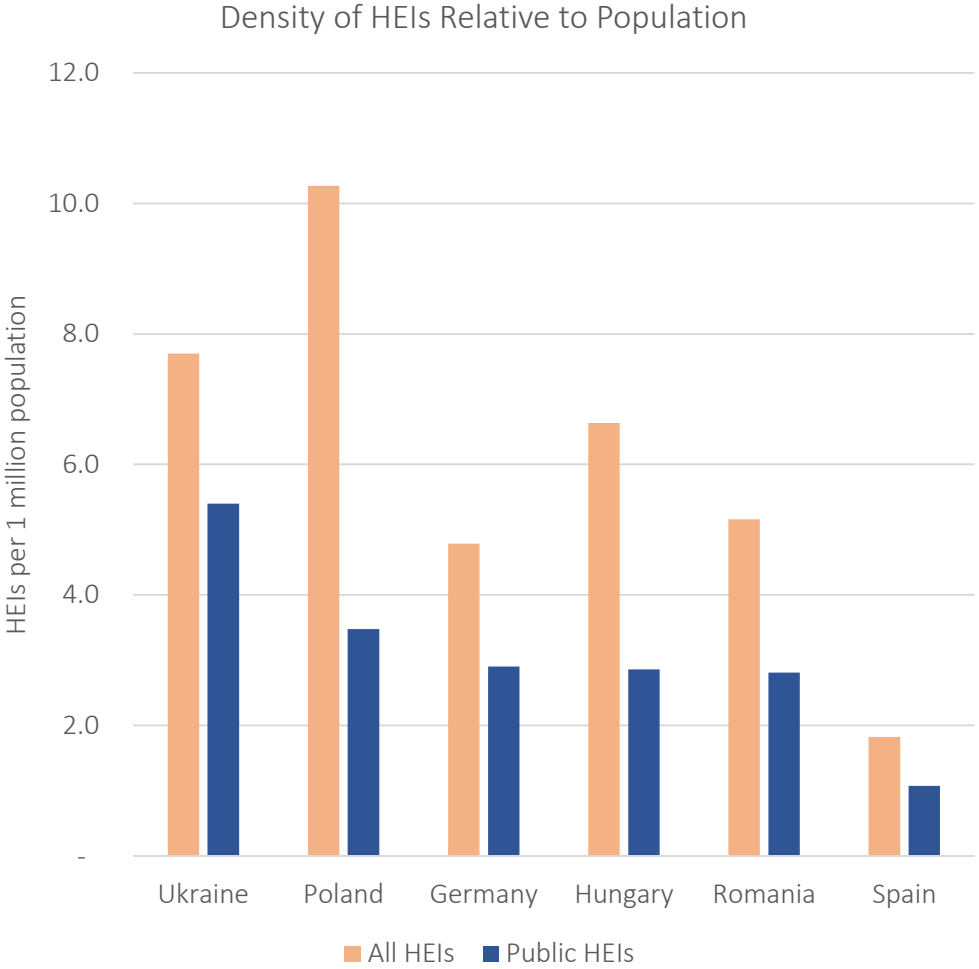
- **Rural students are less likely to transition to higher education:** only 40% of rural EIT test-takers passed, applied and ultimately enrolled (70% for urban students)
- **Situation is further complicated by:**
 - **Poor access to academic and career guidance in schools**
 - **Shifting requirements for EIT subject tests** in terms of which ones are required for which study fields



To meet a growing demand, the higher education system expanded significantly...



...but subsequent decline in students has created inefficiencies without quality improvements

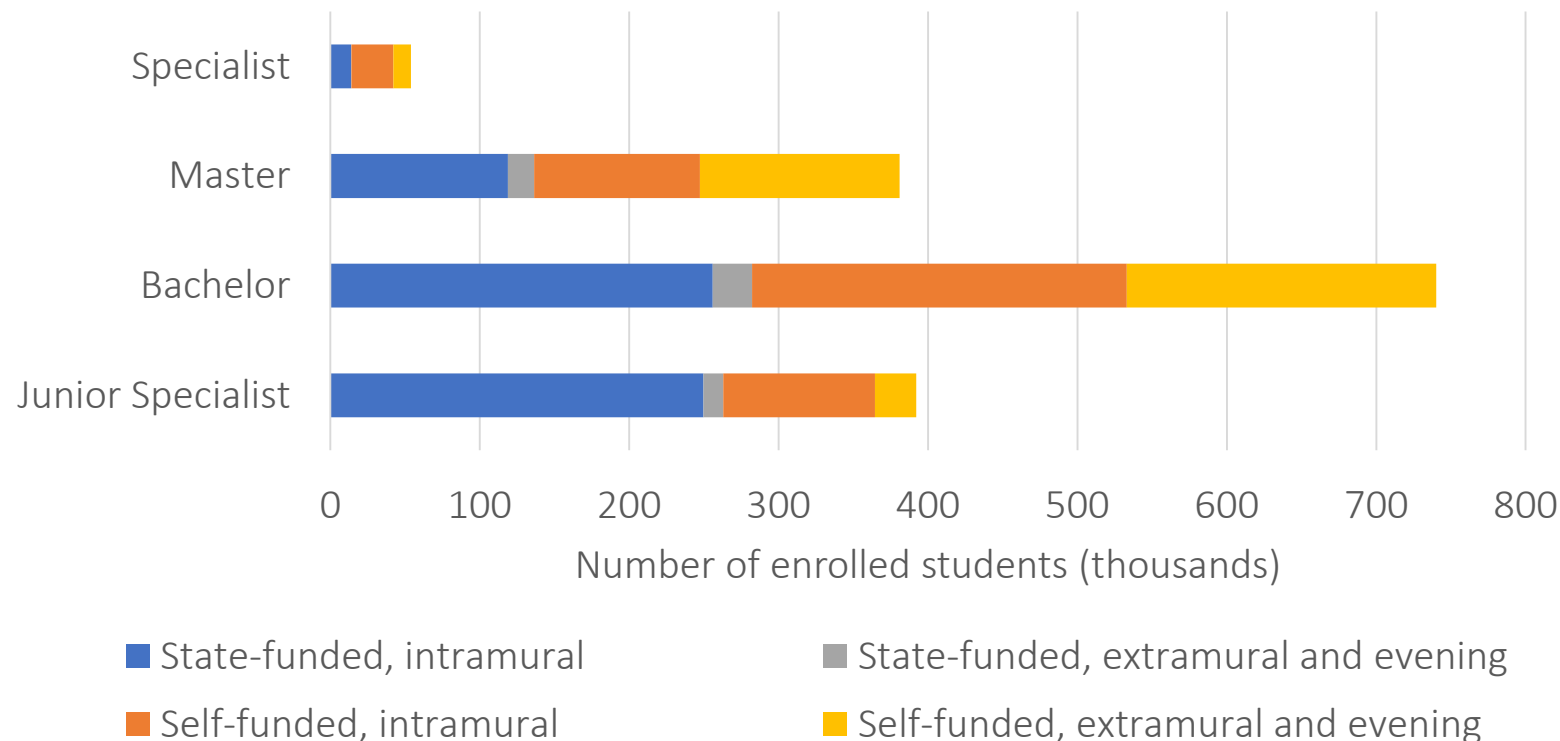


Input-based funding model in higher education has created perverse incentives to lower admissions and quality standards

- **Set by quota** for each major, then allocated to ministries
- **HEIs are more dependent on public funds** given declining student numbers
- **Historically, HEIs have sought to offset this by lowering the bar:**
 - Admitting more students with lower levels of preparation (State- and privately funded)
 - Watering down entrance requirements by accepting irrelevant (easier) EIT subject tests
 - Passing under-performing students to keep them enrolled and ensure funding stream

HEIs have financial incentives to maximize fee-paying students to compensate for declining public funds

Enrolled Students, by Program, Type of Funding and Form of Study



- 55-60% of current higher education students are paying fees (roughly constant over time)
 - *Particularly in social sciences and humanities*
- About half of those fee-paying students are in distance/evening programs
- Dual track system disadvantages poorer students, even though fees are relatively low

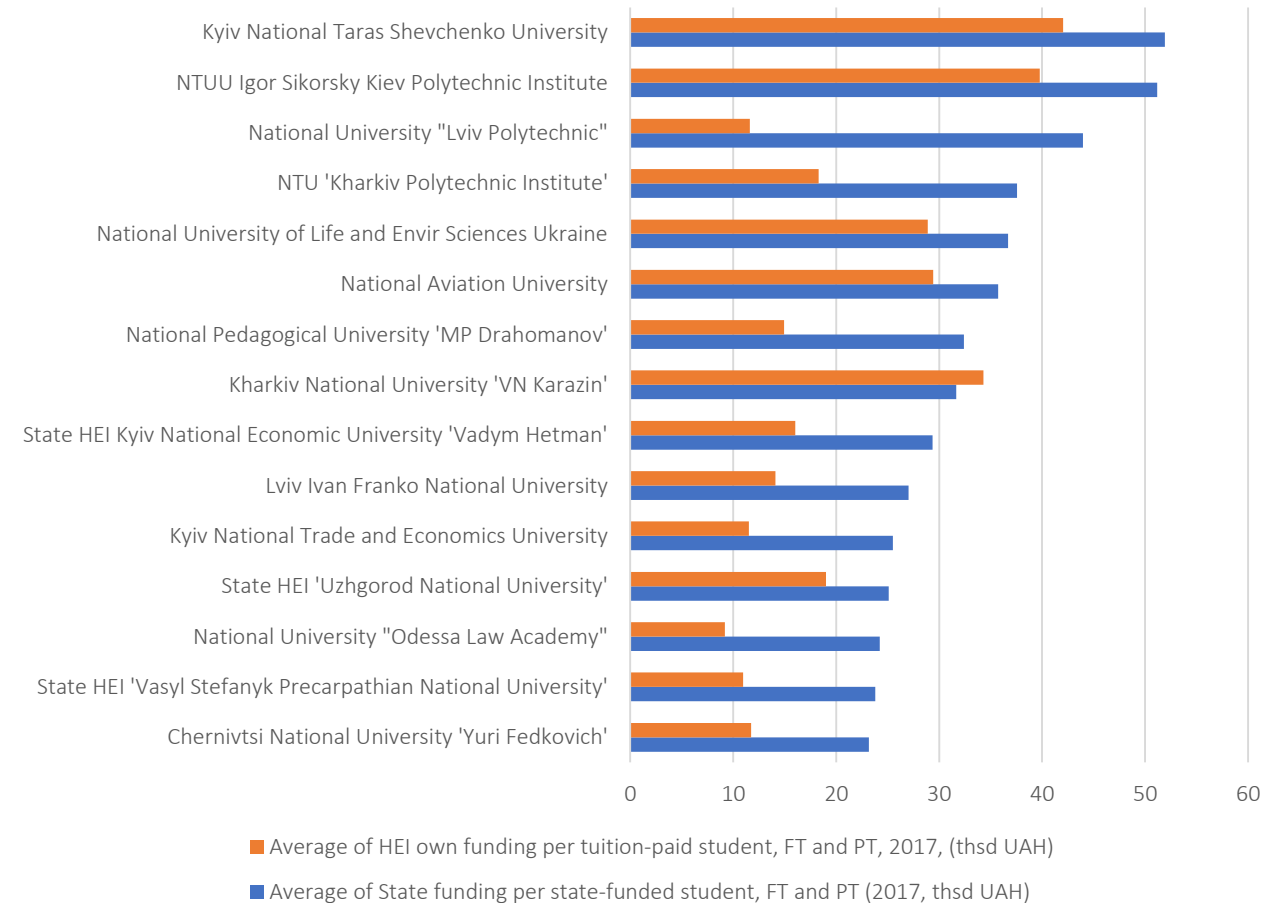
Several positive steps have been taken to improve transparency of funding and create competitive pressure to improve quality

- **BA Admissions Algorithm:** Significant change in 2016 to improve transparency: BA places are now distributed based on an algorithm-based ranking: money follows applicants, creating competition among HEIs
- **MA University Ranking** based on output-based indicators to allocate publicly funded seats
- **EIT Standardization:** MoES started in 2018 to determine the specific EIT certificates which universities had to demand for applicants for each major
- **Closing the 'College Loophole':** Students entering BA programs from colleges will take EIT starting from 2019

However, funding model remains unsustainable as it is disconnected from cost of service delivery

- Amount of budget funding and number of state-funded places are decided independently
- Some HEIs receive special coefficients which have increased salaries (and total spending)
- Result is funding gaps even for the same study field:
 - For medicine, per-student funding under MoES university is 12% higher than under MoH university, despite same curricula
- Good practice reflects differences in actual cost of delivery as a principle for ensuring financial sustainability (e.g. Netherlands, Latvia)

Per-Student Funding in 15 Largest Universities



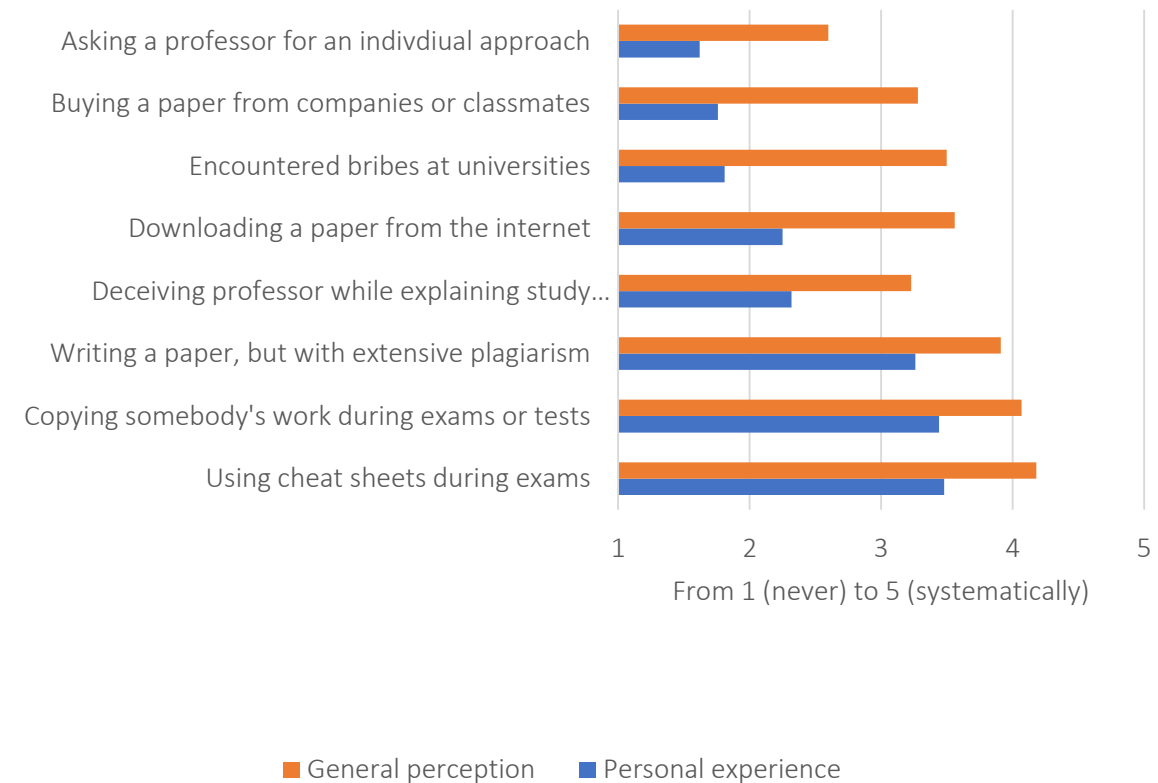
With limited information on quality and relevance in specific HEIs, funding remains focused on quantity

- Little systematic information for students, employers, or policymakers to compare quality and relevance of respective HEIs, such as:
 - Retention, completion and dropout rates
 - University rankings
 - Graduate tracer studies
 - Research output (if applicable)
- 2014 law gave HEIs more autonomy (but not financial autonomy)
- Without more information on their performance vis-à-vis their mission, it is difficult to hold HEIs accountable

Corruption and academic integrity violations are prevalent; both students and faculty have incentives to participate

- 25-30% of students have directly engaged in academic misconduct or bribery, with larger shares exposed
- Academic integrity concept is relatively new
- **Students at risk:** under-prepared students, dormitory residents and part-time workers
- Intense testing regimen may contribute, and students with State-funded scholarships fear losing that status
- **Low faculty salaries** also a contributing factor
 - Faculty members required by law to receive equal salaries regardless of study field

Experience and Perception of Academic Misconduct



Recommendations

What can Ukraine do to better use its resources and strengthen the reform agenda?

Extend NUS vision for competency-based inclusive learning to other segments of the system, particularly higher education



- Align secondary and tertiary enrollment and graduates over the longer term with market needs and labor demand
 - Starting with reforms in upper secondary education



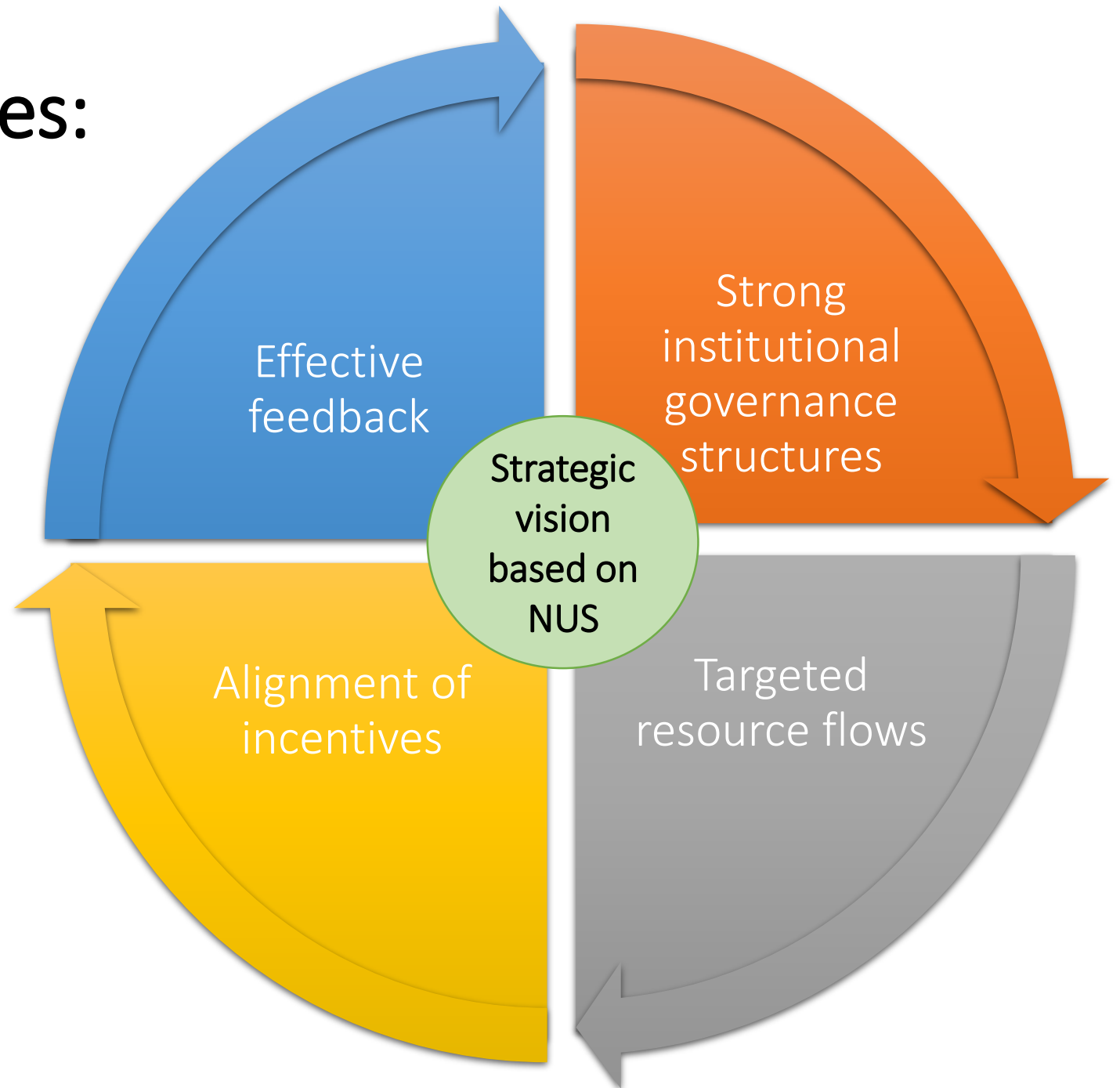
- Align curriculum and pedagogy towards 21st century skills demanded by the market
 - In upper secondary and higher education



- Maintain focus on equity by expanding access to early learning for vulnerable groups and promoting inclusive education

Address four imbalances:

- Reforms have decentralized and democratized the education system
- With more autonomy comes more requirements for **accountability, responsibility, and assessment**



Specific Areas for Action: *Governance and Financing*

- **Strengthen institutional governance structures**

- Strengthen managerial capacity for decentralization at regional, local and school levels
- Develop internal governance capacity of HEIs
- Strengthen internal and external quality assurance functions
- Better communication, outreach and stakeholder engagement to facilitate reform process

- **Target resource flows towards sustainable growth**

- Reform public funding of model higher education to consolidate resources while incentivizing competition, performance and excellence
- Introduce additional financial incentives to reward or penalize HEIs depending on efficiency of resource use
- Monitor and adjust secondary school financing formula to monitor impact on school network optimization and equity

Specific Areas for Action: *Incentives and Information*

- **Align incentives and capabilities**

- Reform teachers' career path, including teaching load (Stavka) system for organization and compensating teachers' work and opportunities for professional development
- Harmonize External Independent Test with NUS and broader vision for higher education
- Review and reform career path for university faculty with movement away from teaching load system
- Strengthen incentives and tools for academic integrity and anti-corruption in universities

- **Provide effective feedback and information on systemic results**

- Strengthen systems for monitoring quality and assessing learning in preschool and secondary education
- Develop programs for counseling and guidance services as key pillar of upper secondary reform
- Improve data collection and monitoring of HEI performance through introduction of student surveys, university rankings, graduate tracer studies, etc.

Ukraine *Improving Education for Results* Project

- Project scope *may* include:
 - Improve quality and equity in upper secondary education with a focus on college readiness
 - Strengthen systems for assessing learning outcomes, monitoring system performance and ensuring equity in both upper secondary and higher education
 - Increase efficiency, equity, transparency of resource use through adjustment of secondary financing formula and introduction of institutional finance reforms in higher education
 - Strengthen capacity for decentralized service delivery in line with ongoing reforms