



# Building an effective and equitable upper secondary system

A Framework for Analysis and practices across OECD countries

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# FUNDAMENTAL POLICY COMPONENTS FOR AN **EFFECTIVE UPPER SECONDARY EDUCATION SYSTEM**

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**1 – Defining objectives, learning goals and establishing the governance framework**

**2 – Ensuring effective transitions into upper secondary education**

**3 – Diversifying the school offer to accommodate diverse student achievement and career interests**

**4 – Supporting the learning within upper secondary education**

**5 – Certifying learning and ensuring successful transitions from upper secondary education**

# DEFINING OBJECTIVES, LEARNING GOALS AND ESTABLISHING THE GOVERNANCE FRAMEWORK

**Agreeing on  
clear and  
well-  
articulated  
learning goals**

**Instituting  
effective  
governance  
arrangements  
in upper  
secondary  
education**

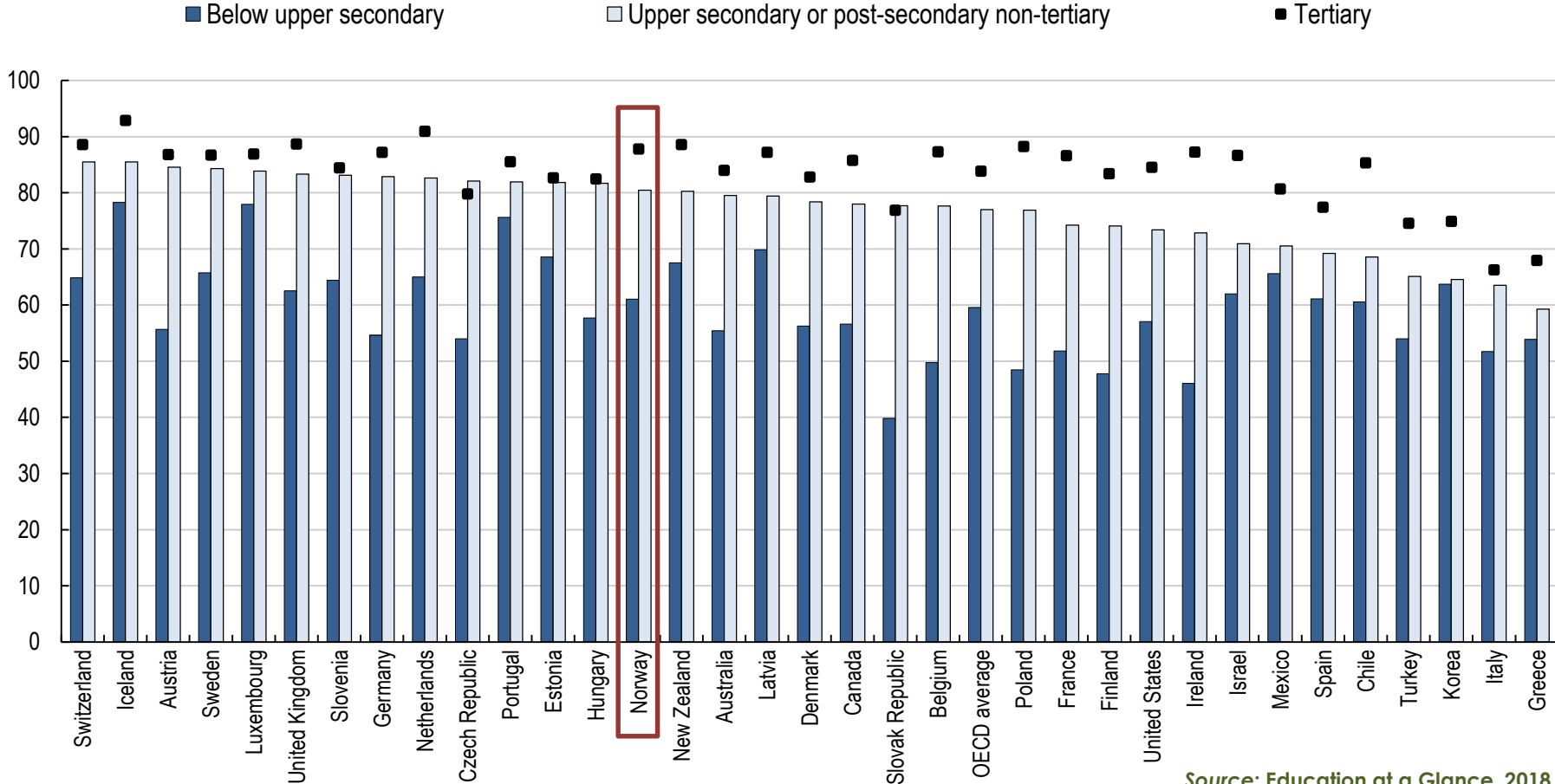
**Using funding  
mechanisms  
strategically**

# DEFINING OBJECTIVES, LEARNING GOALS AND ESTABLISHING THE GOVERNANCE FRAMEWORK

Agreeing on clear and well-articulated learning goals

- **Defining objectives for upper secondary education** also vis-à-vis other education levels
- **Curriculum to provide** knowledge, skills, attitudes and values needed – including higher-order competencies, essential for advanced learning and a modern economy (21<sup>st</sup> century skills); development of social and emotional skills
- Core **subjects**, optional subjects, degree of specialization of subjects – is sufficient time allocated to core competencies in the curriculum?
- **Mandatory** or not?
- **Objectives:** prepare students for successful transition into the labour market or tertiary education and develop engaged citizens - minimum level of attainment for full economic and social participation in advanced economies
- **Upper secondary education** should: ensure all students **master core cognitive competencies**; engage the aspirations and interests of **all learners**; and prepare **students to shape** their own and their nation's future.

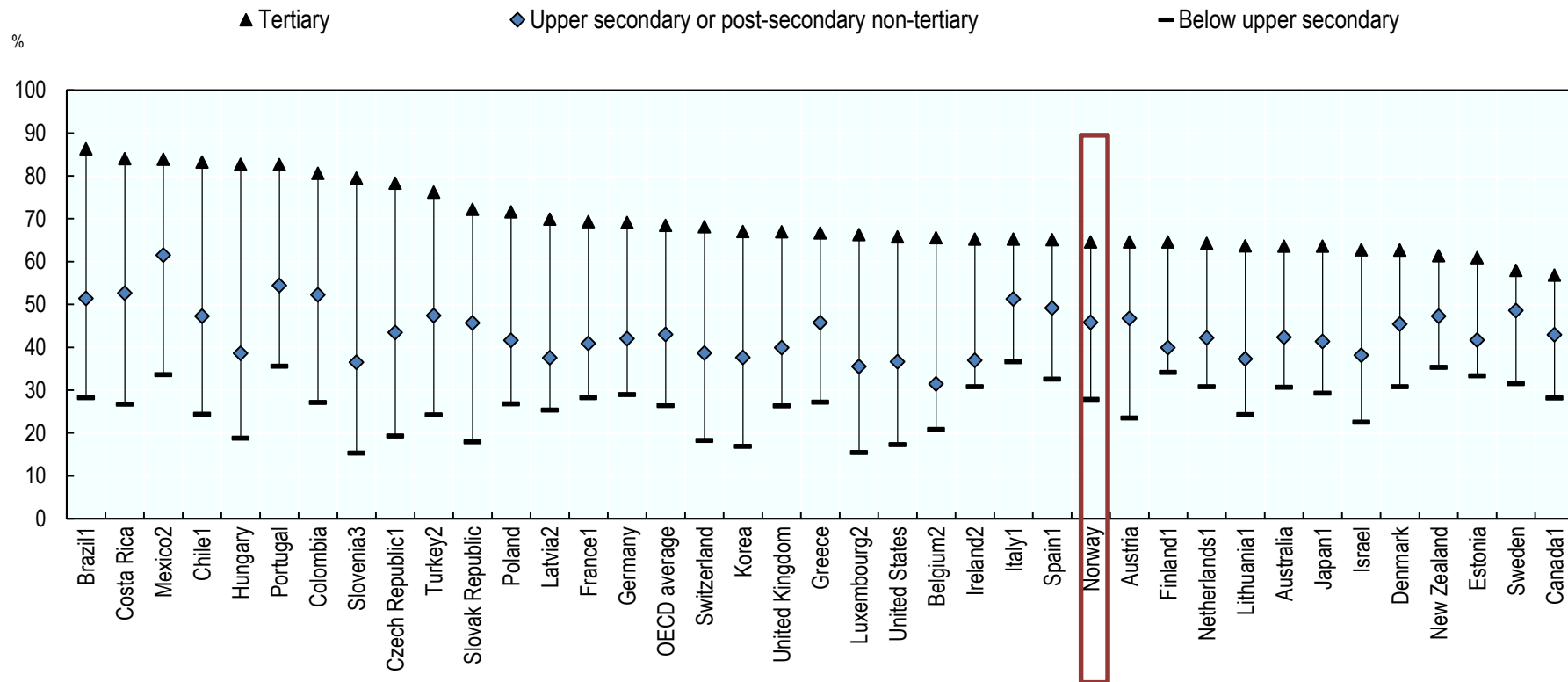
# Employment rates of 25-34 year-olds, by educational attainment (2017)



Source: Education at a Glance, 2018

# Percentage of adults earning more than the median, by educational attainment (2016)

25-64 year-old workers (full- and part-time workers)



## Ending age of compulsory education (2016)

Age	Countries
14	Korea, Slovenia
14-15	Greece
15	Austria, Czech Republic, Japan, Switzerland
16	Denmark, Estonia, Finland, France, Hungary, Iceland, Ireland, Italy, Latvia, Luxembourg, New Zealand, Norway, Poland, Slovak Republic, Spain, Sweden, United Kingdom
17	Australia, Israel, Mexico, Turkey, United States
18	Belgium, Chile, Germany, Netherlands, Portugal

# DEFINING OBJECTIVES, LEARNING GOALS AND ESTABLISHING THE GOVERNANCE FRAMEWORK

Instituting effective governance arrangements in upper secondary education

- **Clarify the distribution of responsibilities** for education outcomes – central, regional, local, school levels; different ministries
- Ensure **participatory mechanisms** for all agents in the system, namely **actors of the labour market, tertiary education institutions, society at large**
- Establish the **monitoring of the education system** (data information systems, learning outcomes, labour market outcomes) and inform policy development **on the basis of evidence**

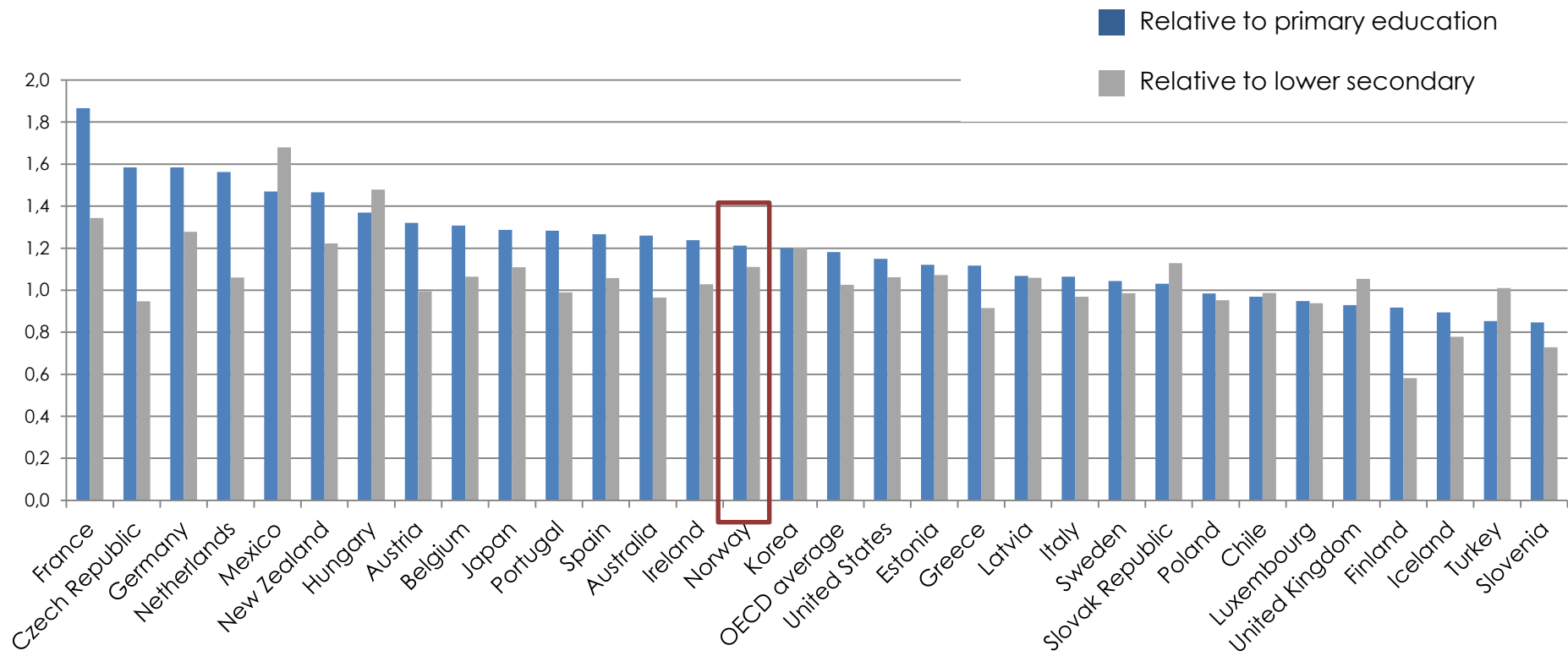


# DEFINING OBJECTIVES, LEARNING GOALS AND ESTABLISHING THE GOVERNANCE FRAMEWORK

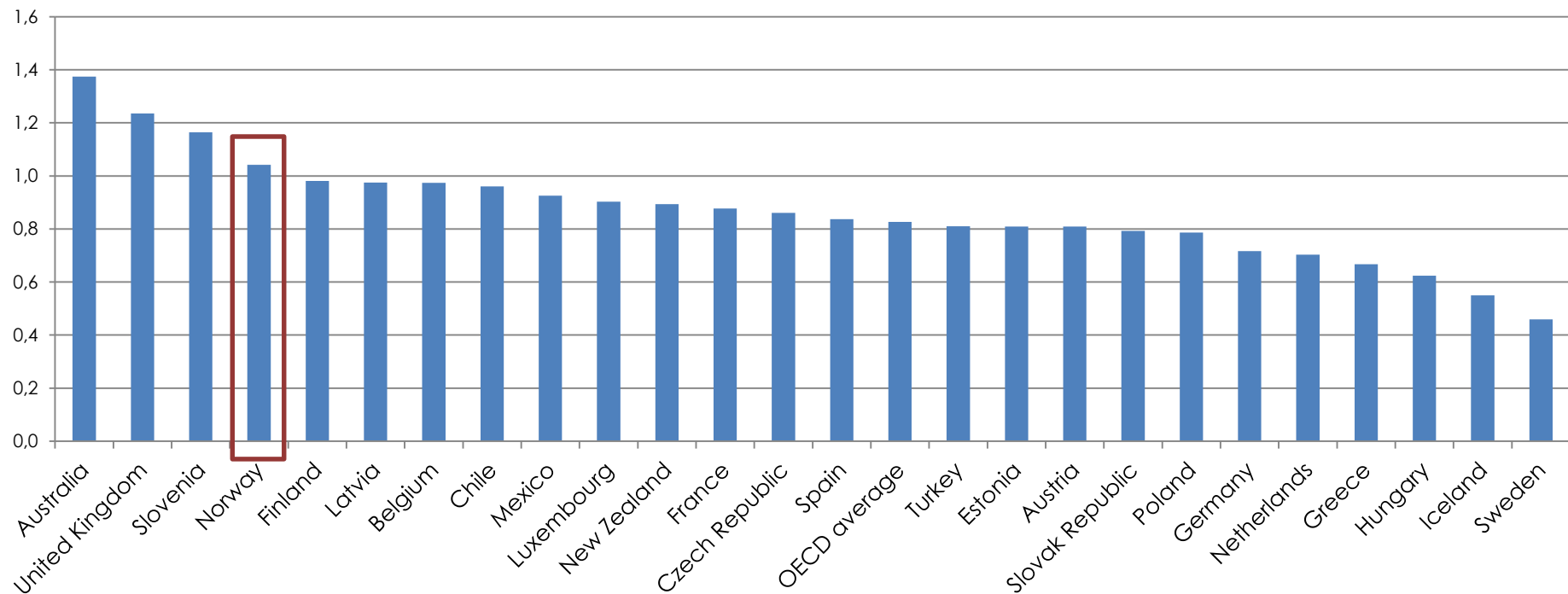
Using funding mechanisms strategically

- Assess the **level of resources invested in upper secondary education** – is funding adequate? Overall, compared to other education levels, across expenditure items?
- Identify **spending inefficiencies** (e.g. school drop-out, small schools/courses/classes, dead-ends, ineffective transitions)
  - Important issue is degree of specialization in upper secondary education versus cost of providing specialised courses (number of students per class)
- **Scholarships for disadvantaged students** (to compensate for opportunity cost)
- **Private expenditure/sources of funding** in upper secondary education (e.g. philanthropy, sale of services in VET schools)

## Expenditure per student on upper secondary educational institutions relative to that on primary and lower secondary institutions (2015)



## Expenditure per student on general programmes relative to that on vocational programmes, upper secondary educational institutions (2015)



# ENSURING EFFECTIVE TRANSITIONS INTO UPPER SECONDARY EDUCATION

**Reducing  
achievement  
disparities  
prior to upper  
secondary  
education**

**Effectively  
selecting into  
upper  
secondary  
education**

**Supporting  
transition into  
upper  
secondary  
education**

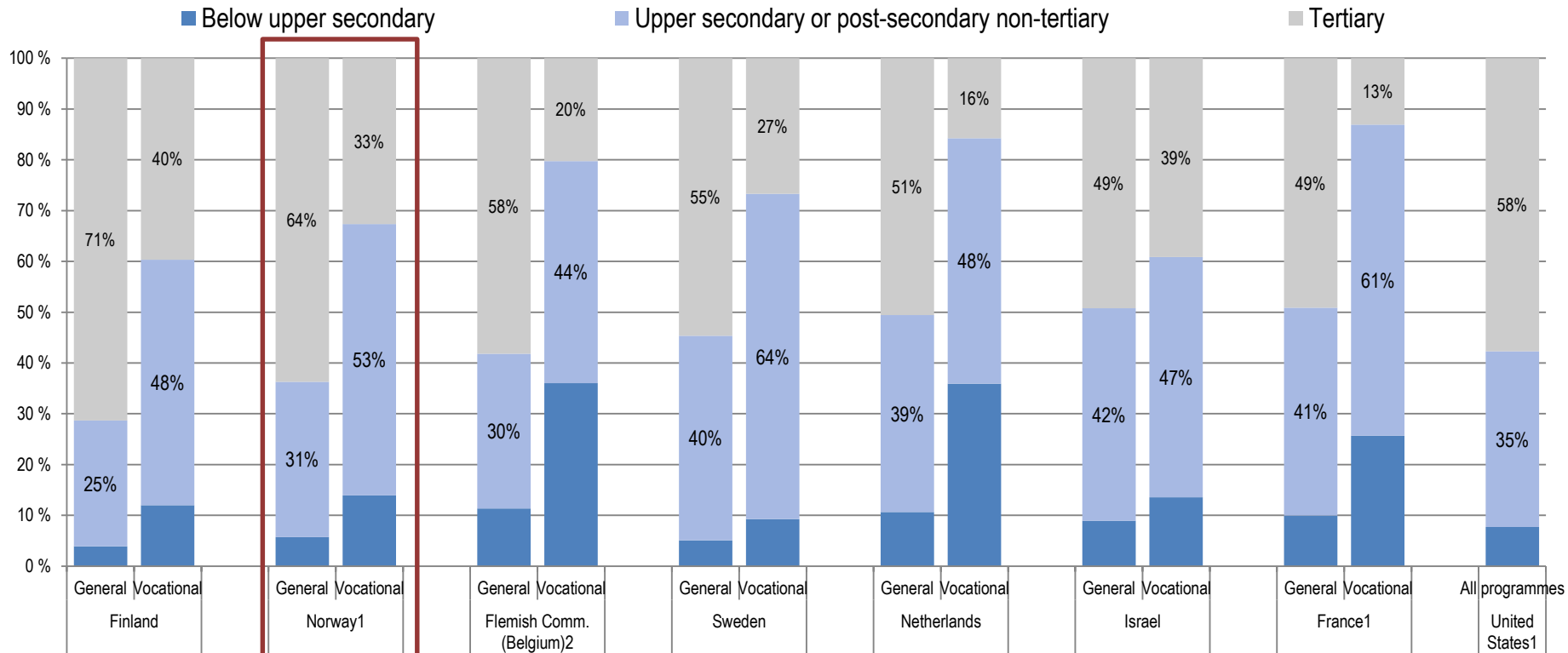
# ENSURING EFFECTIVE TRANSITIONS INTO UPPER SECONDARY EDUCATION

Reducing  
achievement  
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prior to upper  
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education

- **Minimize spectrum of student achievement** at the point students transition to secondary education – facilitates organisation and structure of secondary education
- **Invest early on** to compensate educational disadvantage, achieve educational potential of every student and minimise learning disparities
- The lasting effects of early learning are **particularly strong among disadvantaged students**
- **Early identification** of learning difficulties and **extra support**

# Share of first-time entrants to upper secondary education, by programme orientation and parents' educational attainment (2015)

Parents' highest level of educational attainment:



# ENSURING EFFECTIVE TRANSITIONS INTO UPPER SECONDARY EDUCATION

## Effectively selecting into upper secondary education

- **Age/grade of transition** into upper secondary education
- **School tracking: Early tracking** from primary school (e.g. Austria, Czech Republic, Germany, Lithuania, Luxembourg, the Netherlands and, to some extent, Belgium, Switzerland); **late tracking** at upper secondary level (e.g. Canada, Denmark, Estonia, Finland, France, Iceland, Ireland, Korea, Latvia, Mexico, Norway, Portugal, Spain, Sweden, United Kingdom,
- **Requirements to access** upper secondary education
- **Admission and selection criteria**; selective upper secondary schools; selective tracks/schools; use of external examinations at lower secondary level

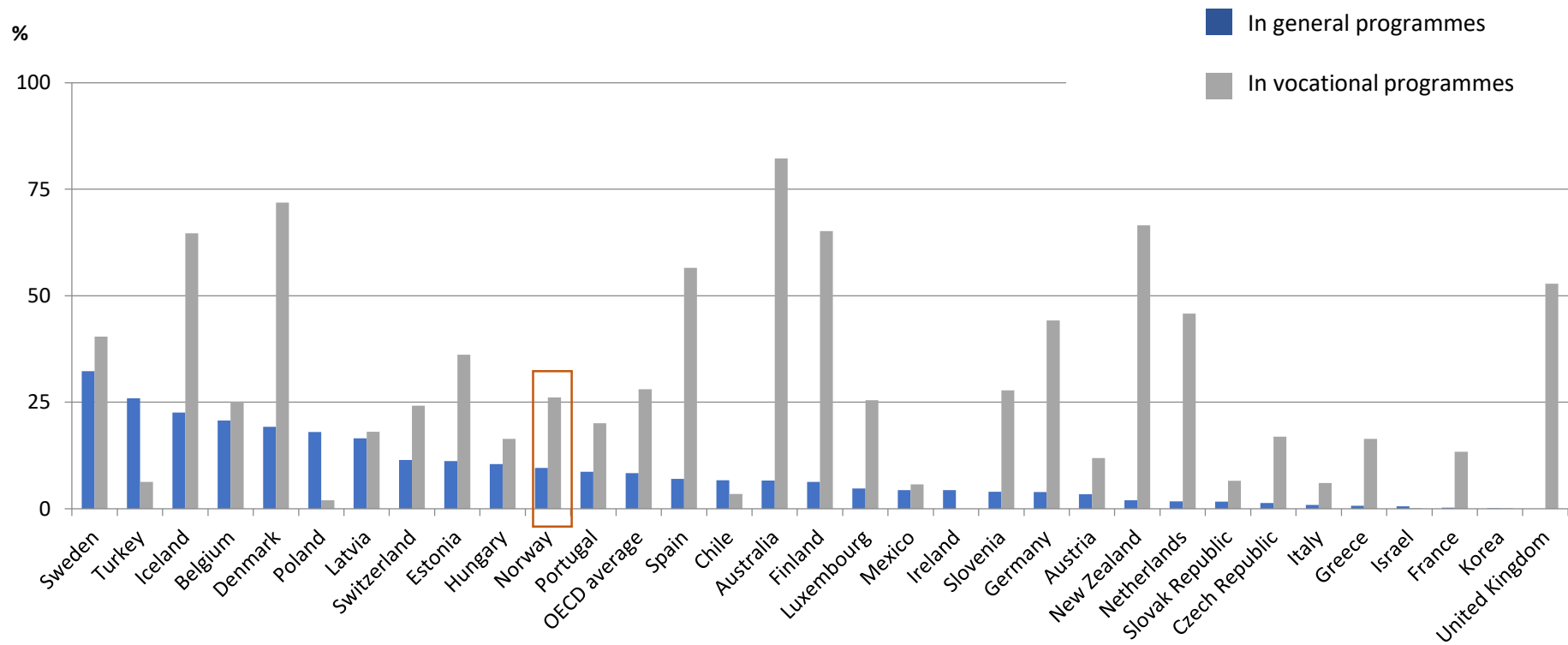
# ENSURING EFFECTIVE TRANSITIONS INTO UPPER SECONDARY EDUCATION

## Supporting transition into upper secondary education

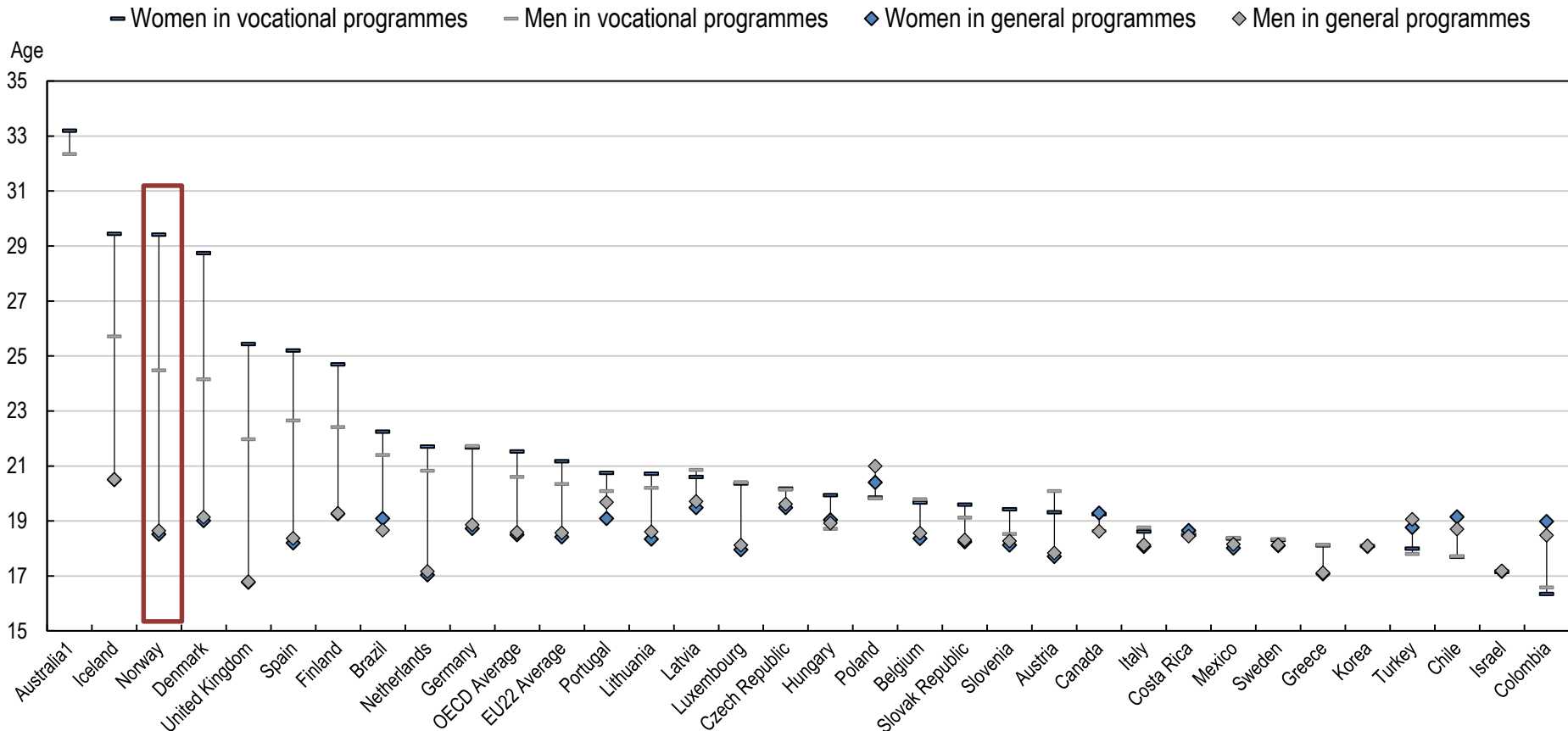
- **Articulation between lower and upper secondary education:** are educational offerings well aligned to facilitate transition?
- **Diagnostic student assessment;** teacher preparation for formative assessment
- Providing **remedial classes** for students not fully prepared for upper secondary education
- **Special arrangements for adults / 2<sup>nd</sup> chance opportunities**



# Percentage of students above typical age (20 years old), upper secondary education (2016)



# Average age of first-time upper secondary graduates, by programme orientation and gender (2016)




# DIVERSIFYING THE SCHOOL OFFER TO ACCOMMODATE DIVERSE STUDENT ACHIEVEMENT AND CAREER INTERESTS

**Diversifying  
paths in  
secondary  
education**

**Strengthening  
vocational  
programmes**

**Providing  
adequate  
information  
and career  
guidance**

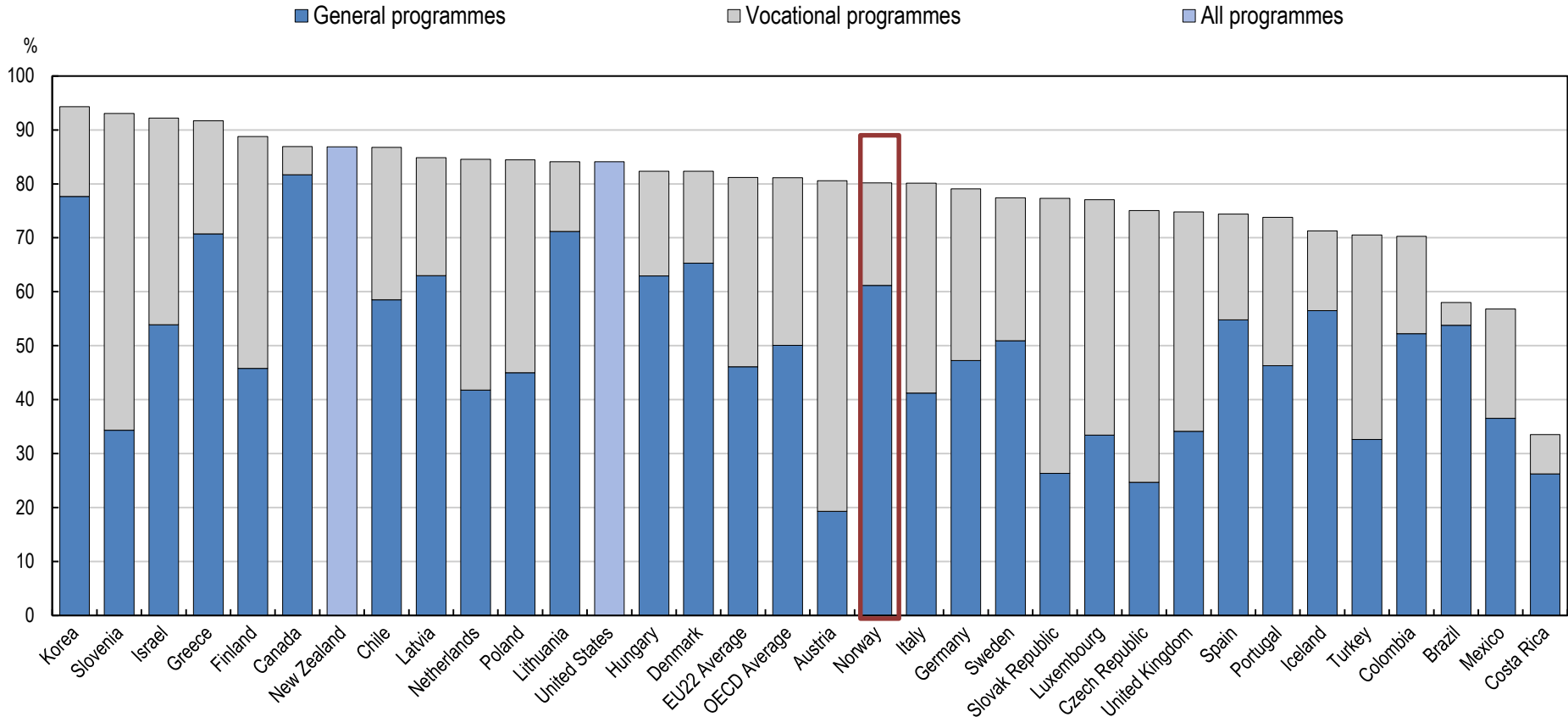
# DIVERSIFYING THE SCHOOL OFFER TO ACCOMMODATE DIVERSE STUDENT ACHIEVEMENT AND CAREER INTERESTS



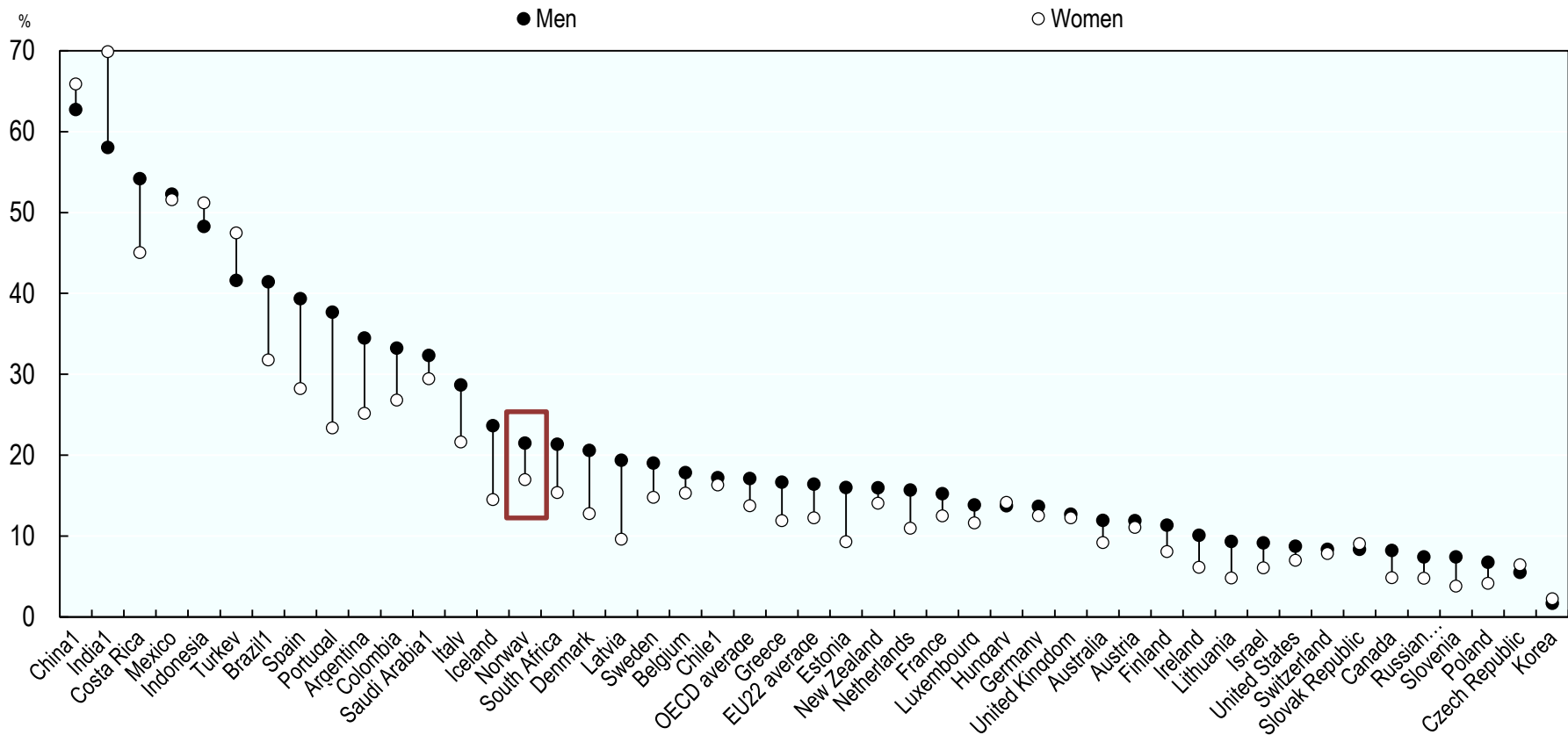
## Diversifying paths in secondary education

- Students arrive at the upper secondary level with a **range of skill levels and interests**, and diverse aspirations for the future
- Ensure **diversity of education offerings** in secondary education to accommodate spectrum of student achievement and variety of students' career interests – **relevance, flexibility and choice** are the hallmarks of an engaging upper secondary system
- **Balance between academic and professional pathways**
- **Accommodating diverse needs** versus **complexity/transparency of the system**
- Ensuring a **specialised education** while **remaining broad and relevant** to range of needs
- **Expand education provision** at secondary level as student enrolment increases (infrastructure; qualified teachers)
- **New Zealand, Ireland:** significant choice; **France:** relatively constrained pathways; **Nordic countries:** very large common core.

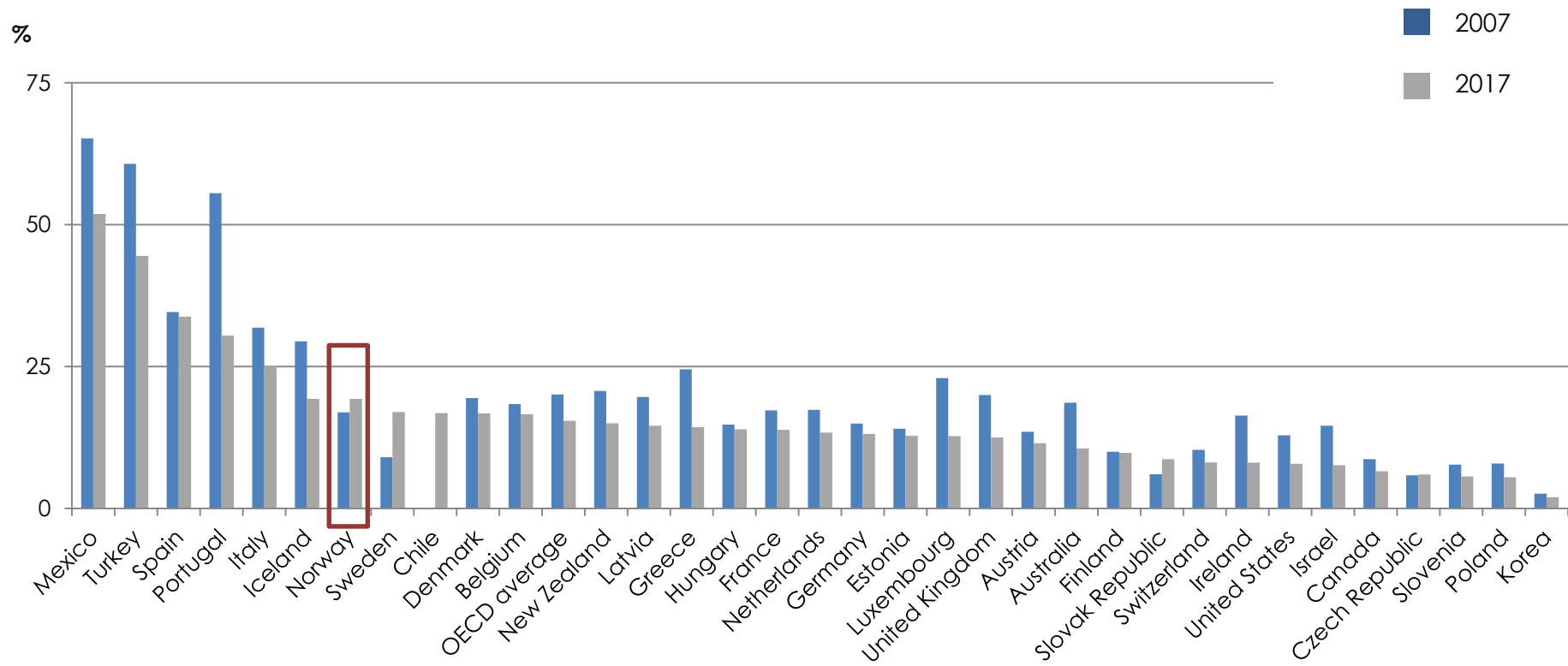
# First-time upper secondary graduation rates for students below the age of 25, by programme orientation (2016)



# Percentage of 25-34 year-olds without upper secondary education, by gender (2017)



# Percentage of 25-34 year-olds without upper secondary education, trends (2007 and 2017)



# DIVERSIFYING THE SCHOOL OFFER TO ACCOMMODATE DIVERSE STUDENT ACHIEVEMENT AND CAREER INTERESTS

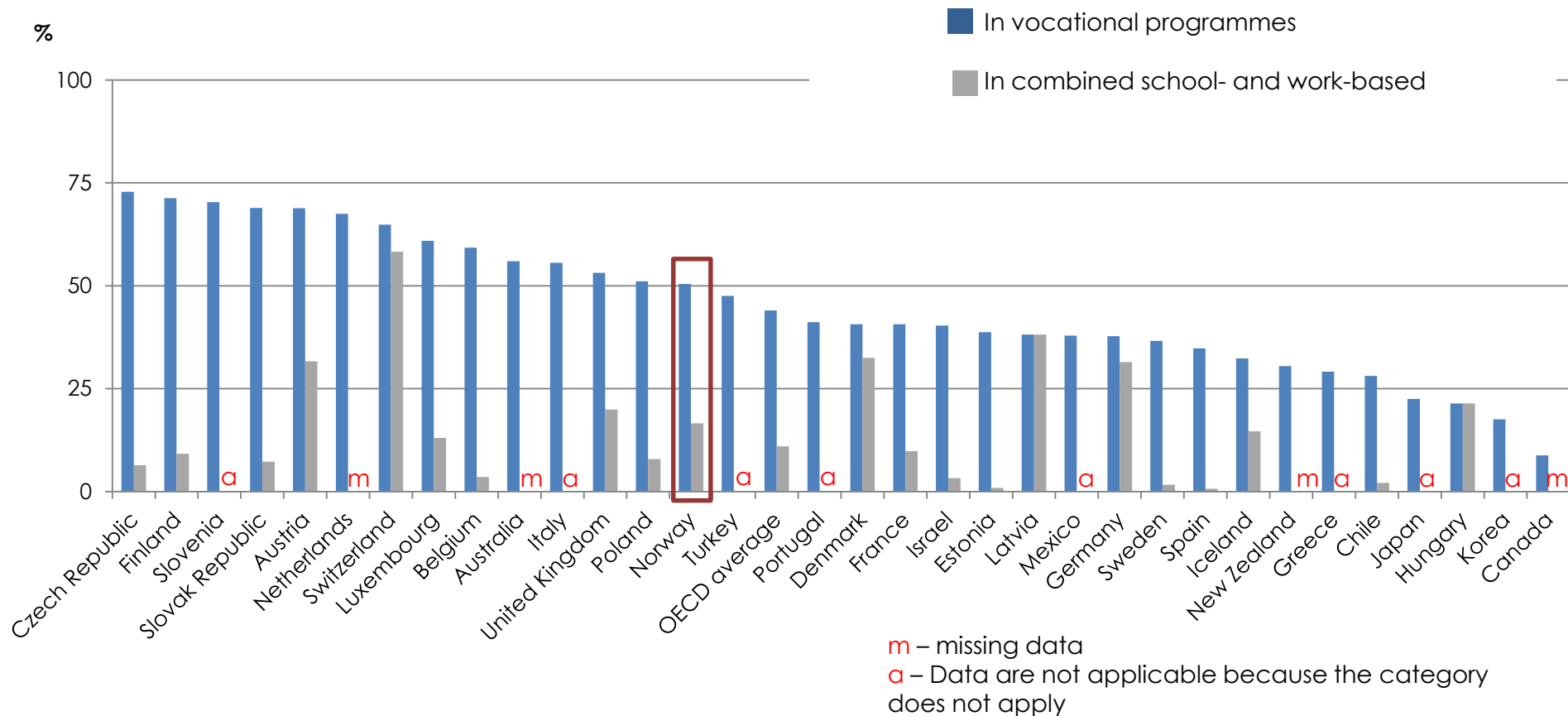


## Strengthening vocational programmes

- **Developing a strong vocational sector** in secondary education, as a valid educational option (status of VET) – curriculum to address the needs of students who do not find academic courses engaging
- **A variety of VET models:** school-based models; mixed model (academic and VET); with work-based learning; apprenticeships
- Ensuring offers within vocational education and training (VET) are **relevant for the labour market** – with strong links to employers
- Providing opportunities for **work-based learning** and ensuring **good quality general education** within VET
- **Availability of apprenticeships** as offered by employers
- Provided in same facilities as academic programmes or in **separate institution?** [**Anglo-Saxon model:** comprehensive school model; **Germany, Austria, much of Eastern Europe:** different types of schools]



# Percentage of students in vocational programmes and combined school- and work-based programmes, upper secondary education (2016)



# DIVERSIFYING THE SCHOOL OFFER TO ACCOMMODATE DIVERSE STUDENT ACHIEVEMENT AND CAREER INTERESTS

Providing  
adequate  
information  
and career  
guidance

- Providing **information about study options** in secondary education, including on outcomes in the labour market
- Ensuring students benefit from **career guidance services** so they make well-informed decisions about their future

# SUPPORTING THE LEARNING WITHIN UPPER SECONDARY EDUCATION

**Consolidating  
school  
autonomy  
and school  
leadership**

**Addressing  
learning  
difficulties**

**Providing  
pathways  
within upper  
secondary  
education**

# SUPPORTING THE LEARNING WITHIN UPPER SECONDARY EDUCATION

## Consolidating school autonomy and school leadership

- Bringing **decision-making to the local level** offers greater potential to take into account school needs [e.g. staffing decisions; instructional content; flexibility in delivery; use of school resources; partnerships with employers; links to labour market; more openness to stakeholders]
- **Can be consolidated** as school capacity increases, accountability mechanisms are in place and resources are distributed according to needs
- **Investing in the leadership of schools** is likely to be cost-effective – key link with system-level policy; role of external stakeholders in school governance

# SUPPORTING THE LEARNING WITHIN UPPER SECONDARY EDUCATION

## Addressing learning difficulties

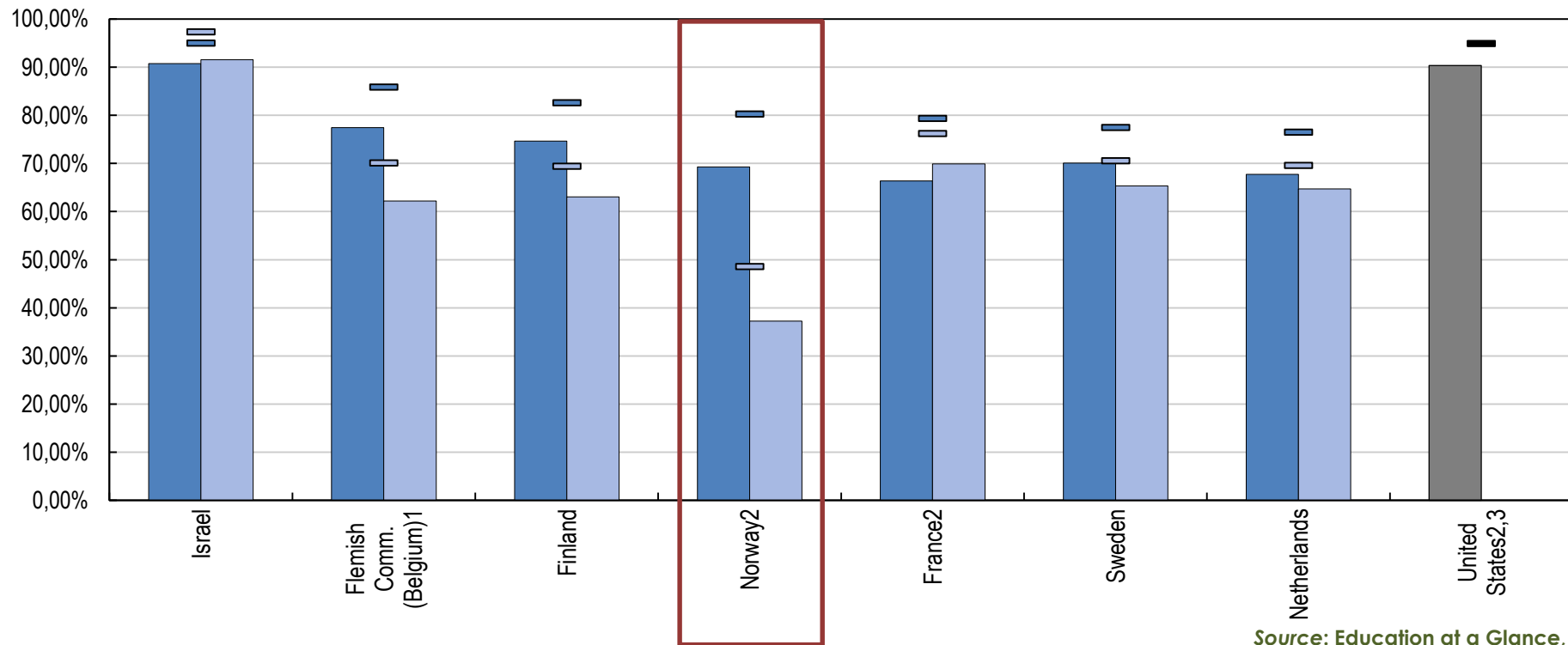
- Setting **equally high expectations** for all students
- Providing **extra support** for students with learning difficulties: individual tutoring; extra classes; smaller classes or extra classroom attention.
- **Teachers to be prepared** to teach in heterogeneous classes, individualise learning and have equal expectations of students
- Involvement of **parents and school community**; policies to re-engage **out-of-school students**

# Completion rate of upper secondary education, by parents' educational attainment and programme orientation (2015)

Completion of any upper sec. programme within the theoretical duration of the programme in which the student entered

■ Parents did not attain tertiary (General)  
 — At least one parent attained tertiary (General)

■ Parents did not attain tertiary (Vocational)  
 — At least one parent attained tertiary (Vocational)



# DEVELOPING THE CAPACITY OF LOCAL ACTORS AND SUPPORTING SCHOOLS

Providing pathways within upper secondary education

- **Offering opportunities for bridging across study options**, including between general and vocational options – can students move easily between pathways?
- **Credit recognition, supplementary courses** to transition across tracks
- Ensure students are not faced with **dead-ends**

# CERTIFYING LEARNING AND ENSURING SUCCESSFUL TRANSITIONS FROM UPPER SECONDARY EDUCATION

**Assessing  
competencies  
within upper  
secondary  
education**

**Certifying  
learning within  
upper  
secondary  
education**

**Successfully  
transitioning  
from upper  
secondary  
education**



# CERTIFYING LEARNING AND ENSURING SUCCESSFUL TRANSITIONS FROM UPPER SECONDARY EDUCATION

Assessing competencies within upper secondary education

- The need for assessment and examination practices **to recognise a broad range of knowledge and skills**
- **Summative** vs **formative** assessment:
  - **Undesired effects** of summative assessment/examinations: teaching to the test; impact on motivation; narrowing of curriculum
  - **External exit examinations:** signals about expected standards; motivate effort; positive effect on student-teacher relationships.
- **External** (standardised) vs **internal** (school-based assessment)
  - **External assessments:** high reliability (same tasks, same standards); fairness (lack of bias) and transparency.
  - **Internal assessments:** high validity, captures a broader range of competencies; provides more opportunities for students to show skills
- **Ensuring consistency of marking** through moderation procedures



# CERTIFYING LEARNING AND ENSURING SUCCESSFUL TRANSITIONS FROM UPPER SECONDARY EDUCATION

**Certifying  
learning  
within upper  
secondary  
education**

- **The role of national qualifications frameworks** – course credits, qualifications
  - Provides clarity to stakeholders regarding the academic and vocational qualifications students can obtain and the associated competencies they need to acquire
  - Transparency in progression pathways can facilitate students' progression in education, while at the same time acting as a quality assurance mechanisms for qualifications
- **Requirements for certification:**
  - In most countries, it is at least partly based on results achieved in final examination
  - In some countries, it is only based on teacher-assigned marks and work over the year (e.g. Belgium, Finland, most German Länder, Hungary, Luxembourg)
  - In several countries, it is based on a combination of school-based marks and external examinations

# CERTIFYING LEARNING AND ENSURING SUCCESSFUL TRANSITIONS FROM UPPER SECONDARY EDUCATION

Certifying learning within upper secondary education

- Modularisation and **credit-based systems**

**The case of New Zealand:** National Certificate of Educational Achievement (NCEA) in secondary education. Students gain NCEA by accumulating credits from different parts of the NZ Qualifications Framework (NZQF)

- In Years 11-13, student **assessment is guided by the NZQF**, a register of all quality assured qualifications covering both secondary and tertiary education
- Standards contributing to NCEA are listed on the Directory of Assessment Standards. There are two types of standards: **unit standards** and **achievement standards**. **Unit standards** are vocationally-based and mostly used in workplace training and the tertiary sector. **Achievement standards** are academically-based and focused on the secondary school curriculum.
- The Directory of Assessment Standards contains over 26 000 unit standards and about 850 achievement standards. Schools can design and offer their own courses mixing unit standards and achievement standards.
- Assessment can **involve both internal and external assessment approaches**. All unit standards are internally assessed. Achievement standards assessed both internally and externally.
- **External assessment is conducted by NZQA** via national examinations (or by portfolio for certain subjects). **Internal assessment** is largely based on coursework and classroom-based assessment. An **external moderation system** is in place to ensure the dependability of internal assessments in Years 11-13.

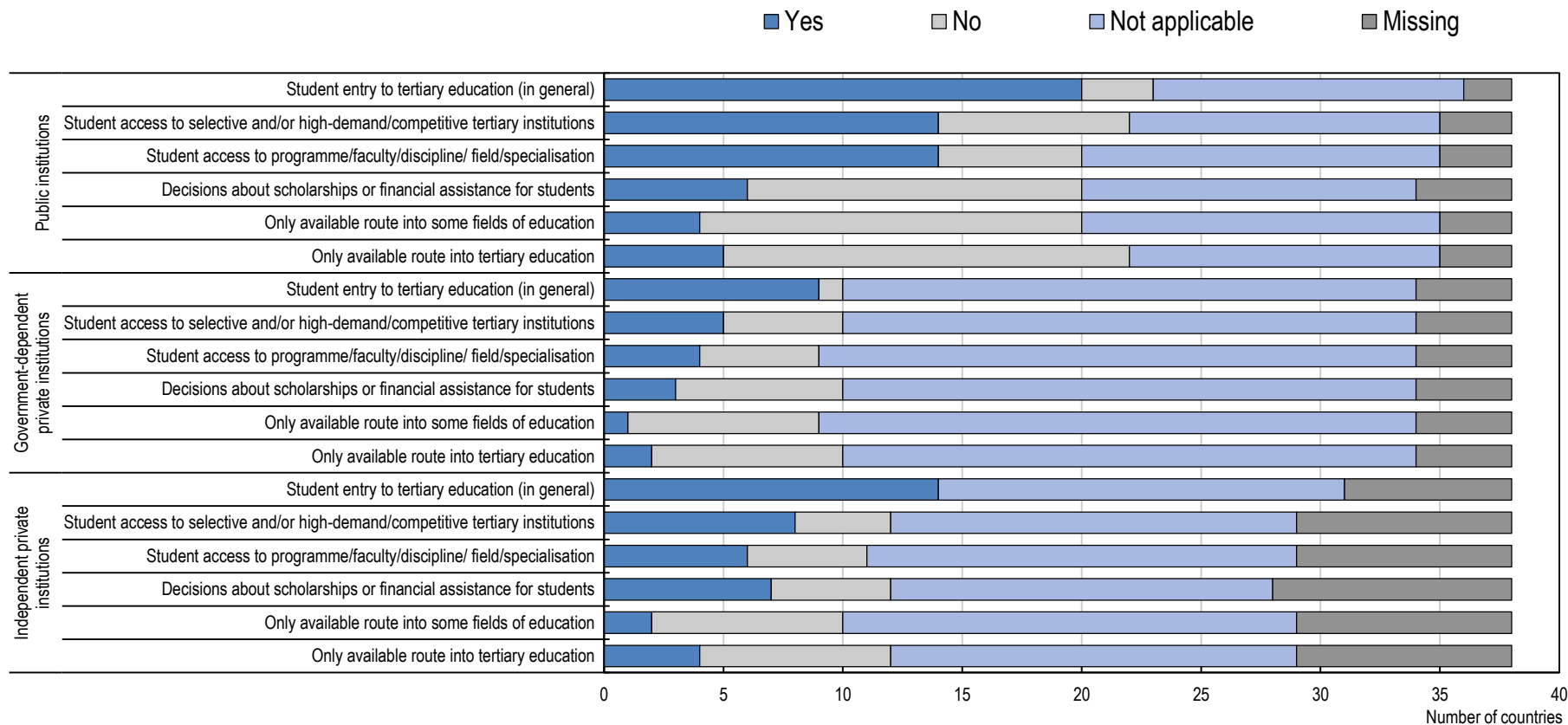
# CERTIFYING LEARNING AND ENSURING SUCCESSFUL TRANSITIONS FROM UPPER SECONDARY EDUCATION

Successfully  
transitioning  
from upper  
secondary  
education

- **Requirements to enter tertiary education** – is upper secondary education well aligned with requirements for success in tertiary education?
  - Supplementary courses in certain upper secondary education tracks to access tertiary education
- **Articulation between upper secondary education and tertiary education:** are educational offerings well aligned to facilitate transition? Supply of programmes at the tertiary level also needs further diversification
- **Selection into tertiary education** – respective roles of secondary system and tertiary education institutions
- **Transition into the labour market** - reflecting labour market needs
  - In secondary curricula
  - In national qualifications frameworks
  - Importance of producing information on labour market outcomes of secondary graduates

# Purposes and uses of national/central examinations as admission criteria to tertiary institutions (2017)

National/central examinations refer to examinations for students at the end of upper secondary level



# Many thanks for your attention

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- **Education GPS:** <http://gpseducation.oecd.org/>

(In particular, see Diagrams of Education Systems)