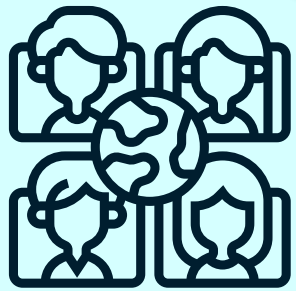
Trend Compendium **2050**

Megatrend 1

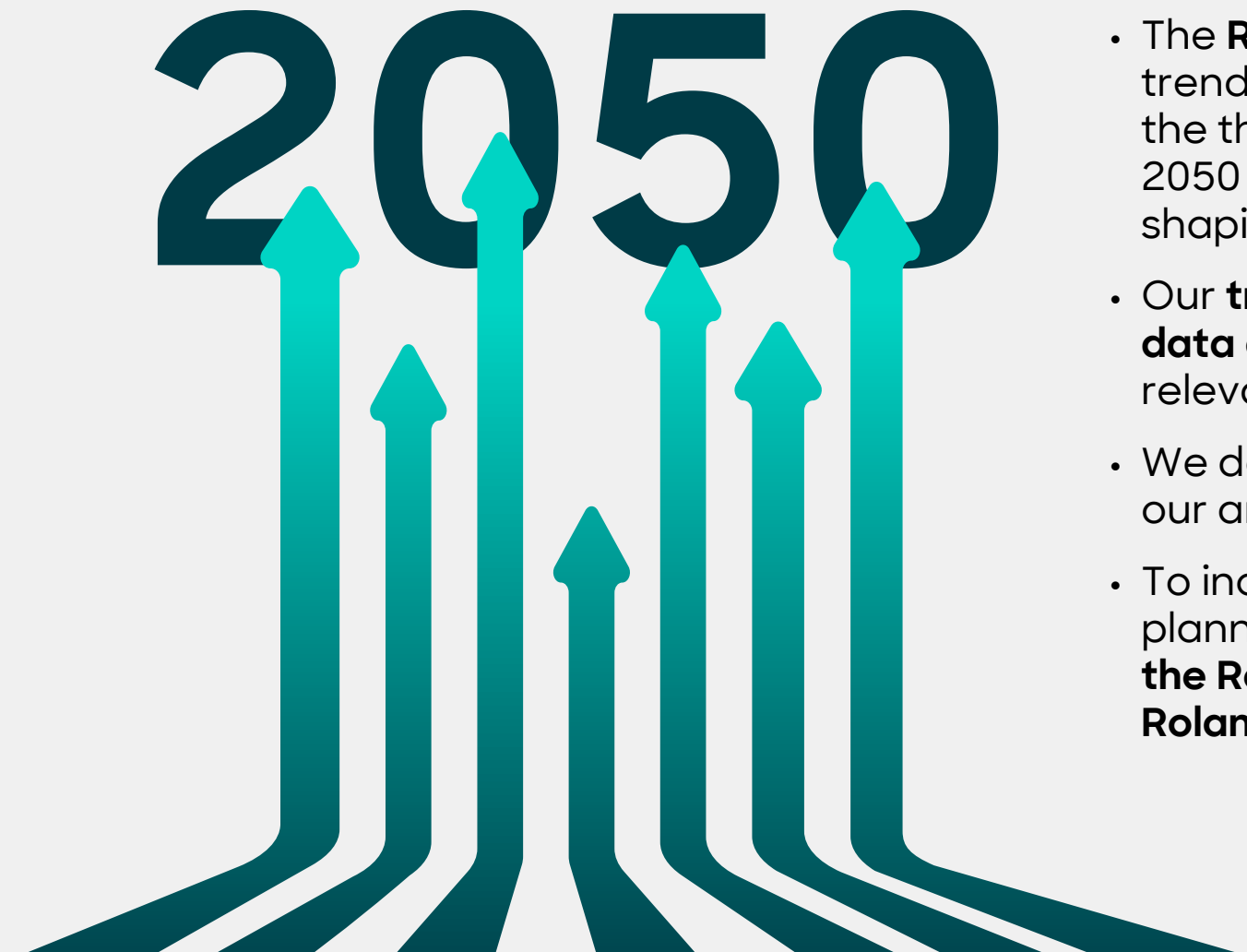
People & Society

2026 Edition



Roland Berger

The Roland Berger Trend Compendium 2050 focuses on stable, long-term developments …



- The **Roland Berger Trend Compendium 2050** is a global trend study compiled by the **Roland Berger Institute (RBI),** the think tank of Roland Berger. Our Trend Compendium 2050 describes the **most important megatrends** that are shaping the world between **now and 2050**
- Our **trend views are based on the most recent studies, data and analyses.** We critically examine the results for relevance, plausibility, and reliability
- We deliberately use **publicly available sources** to make our analyses verifiable
- To incorporate today's uncertainties into strategic planning, we recommend **combining the megatrends of the Roland Berger Trend Compendium 2050** with the **Roland Berger scenario planning approach**

… and explores seven megatrends that will shape the future development of our world by 2050

1 People & Society

- Population
- Migration
- Education & Labor
- Values & Culture

2 Politics & Governance

- Global Risks
- Geopolitics
- Future of Democracy

3 Energy & Resources

- Energy
- Metals & Minerals
- Water
- Food

4 Environment & Sustainability

- Climate Change
- Biodiversity
- Pollution
- Circular Economy

5 Economics & Business

- Economic Power Shifts
- Debt, Growth & Distribution
- Sectoral Transformation

6 Technology & Innovation

- Value of Innovation
- Frontier Technologies
- Humans & Machines

7 Health & Care

- Global Health Challenges
- Healthcare of the Future
- Caregiving

1.1 Population
1.2 Migration
1.3 Education & Labor
1.4 Values & Culture

Megatrend 1, "People & Society", is the focus of this publication – The topic is explored in depth through four subtrends

Subtrends of megatrend "People & Society"

1

Population

2

Migration

3

Education & Labor

4

Values & Culture

Population trends toward 2050 point to a myriad of changes worldwide, affecting regions as well as countries, their growth rates, and age structures

Global population trends – Selected facts and figures

World population growth is fueled by growth in less developed countries: **Sub-Saharan Africa's population will almost double** from 2025 to 2050

Our world is **aging:** By **2050**, there will be nearly 1.6 billion people over the age of 65 (2025: 856 million), as well as **2.6 million aged 100+**

In 2050, **1.4 billion more people** will inhabit our planet (2025: 8.2 billion 2050: 9.6 billion)

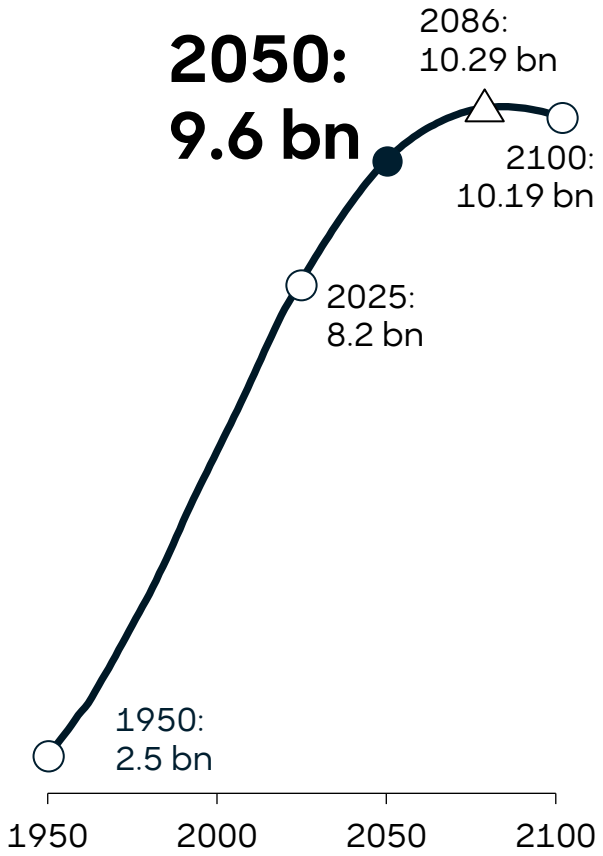
In April 2023, with a population of 1.43 billion, **India** overtook China as the world's **most populous country.** In 2050, India will have around 1.68 billion inhabitants

Despite global aging, huge **differences** in the **median age** of countries persist in 2050: **Niger: 21.2 years vs South Korea: 56.7 years**

Source: UN Population Division; UN Population Fund; UN; Roland Berger

The population growth rate is falling due to lower fertility rates, and by 2050, the vast majority of the 9.6 billion will live in less developed regions

Evolution of world population 1950-2100 [bn]

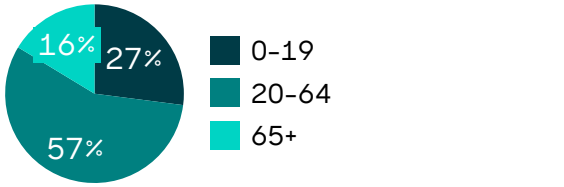


Global population characteristics 2050 [%]

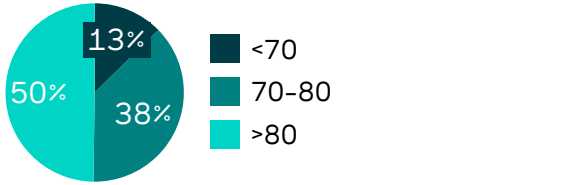
Economic origin of inhabitants

Residential area of inhabitants[1)]

Age of inhabitants



Life expectancy at birth



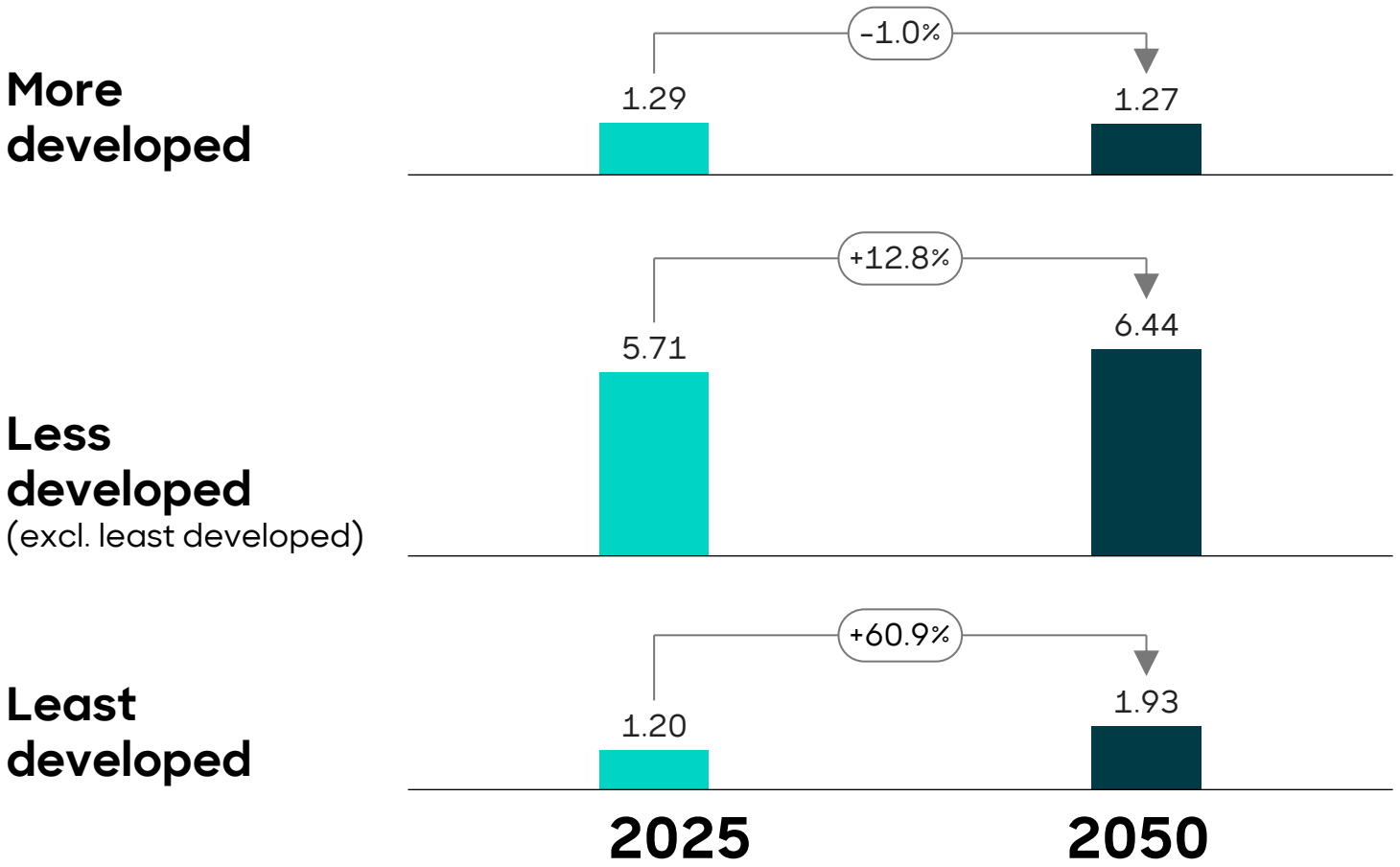
- According to the UN medium variant prediction, the **global population will grow at a slower pace** between 2025 and 2050 compared to previous decades, reaching a population of **9.6 billion in 2050.** In 2086, global population will peak at **10.29 billion**
- The **evolution of the world population is driven by two factors:** the evolution of fertility rates and the evolution of life expectancy
  - **Global fertility rates** are expected to **decrease** from 2.24 births per woman in 2025 to 2.10 births per woman in 2050. This lowers the rate of population growth
  - **Average life expectancy** is expected to **increase** from 73.5 years in 2025 to 77.0 years in 2050, globally. This drives population growth, but cannot totally compensate for decreasing fertility rates
- By 2050, **most** of the global population will come from **less developed regions**, live in **urban areas**, be between **20 and 64 years old**, and have a **life expectancy of over 70 years**

1) The definition of urban areas follows the definitions that are used in each country

Source: UN Population Division; Roland Berger

Future population growth will stem from developing countries – Population of least developed countries is set to grow by 60% towards 2050

Population growth by development status 2025 and 2050[1] [bn]



- From 2025 to 2050, the population of **less developed regions** is expected to grow by 12.8% or 728 million people, reaching 6.4 billion people in 2050. Notably, the **highest growth is forecast for the least developed regions** which are expected to increase by 60.9% or 732 million people. In contrast to the growth dynamics in developing countries, the population in **more developed regions** is projected to **marginally decline** (-1.0%)
- **Least developed countries** (LDC) face **a greater risk of deeper poverty** and underdevelopment than other countries. Over 75% of LDC populations live in poverty and **face several challenges** such as a lack of key resources (water, food, energy), insufficient levels of social security, healthcare, and basic education

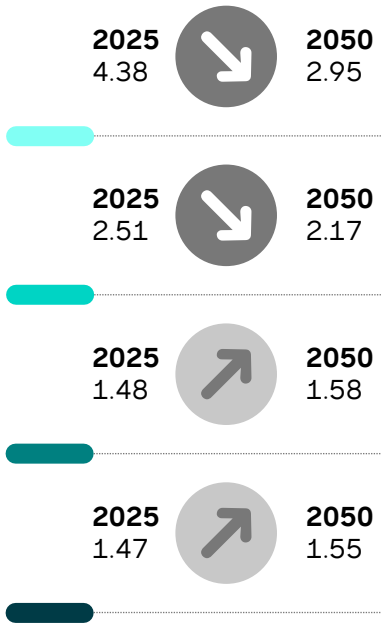
1) According to the UN, more developed regions comprise Europe, Northern America, Australia/New Zealand and Japan. Less developed regions comprise all regions of Asia (except Japan), Latin America and the Caribbean plus Melanesia, Micronesia, Polynesia, and African countries. The latter are largely excluded in our diagram as we separated the least developed regions from the less developed. The group of least developed countries (LDCs) includes 47 countries: 32 in Sub-Saharan Africa, 2 in Northern Africa and Western Asia, 4 in Central and Southern Asia, 4 in Eastern and South-Eastern Asia, 1 in Latin America and the Caribbean, 4 in Oceania. According to the UN, LDCs are countries that are deemed highly disadvantaged in their development process, for structural, historical, and also geographical reasons

Source: UN Population Division; Roland Berger

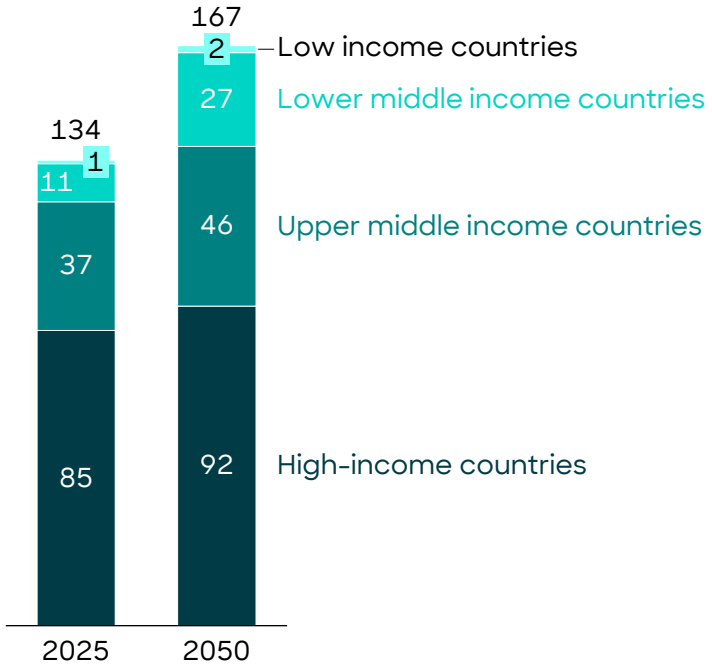
Due to economic and social developments, fertility rates in developing countries are expected to fall, slowing their population increase over time

Development of fertility rates by income level

Average fertility rate (life birth per women)



Number of countries under replacement fertility rate



By 2050, **169 countries** are projected to have a fertility rate **below** the replacement level[1]. Of these, **94 are high-income nations**

Major drivers of declining fertility rates

Better access to contraception

The wide availability of contraceptives and women's increased autonomy in family planning have led to a decline in global fertility rates. More sex education has also contributed to fewer pregnancies

Lower child mortality

A decline in infant and early childhood mortality acts as an inhibitor of birth, causing the fertility rate to decrease

Social empowerment of women

Increased education has enabled more women to participate in the labor force. The desire to pursue career opportunities affects the time available for childcare and can prevent women from making decisions about having children

Changing attitudes to marriage/family

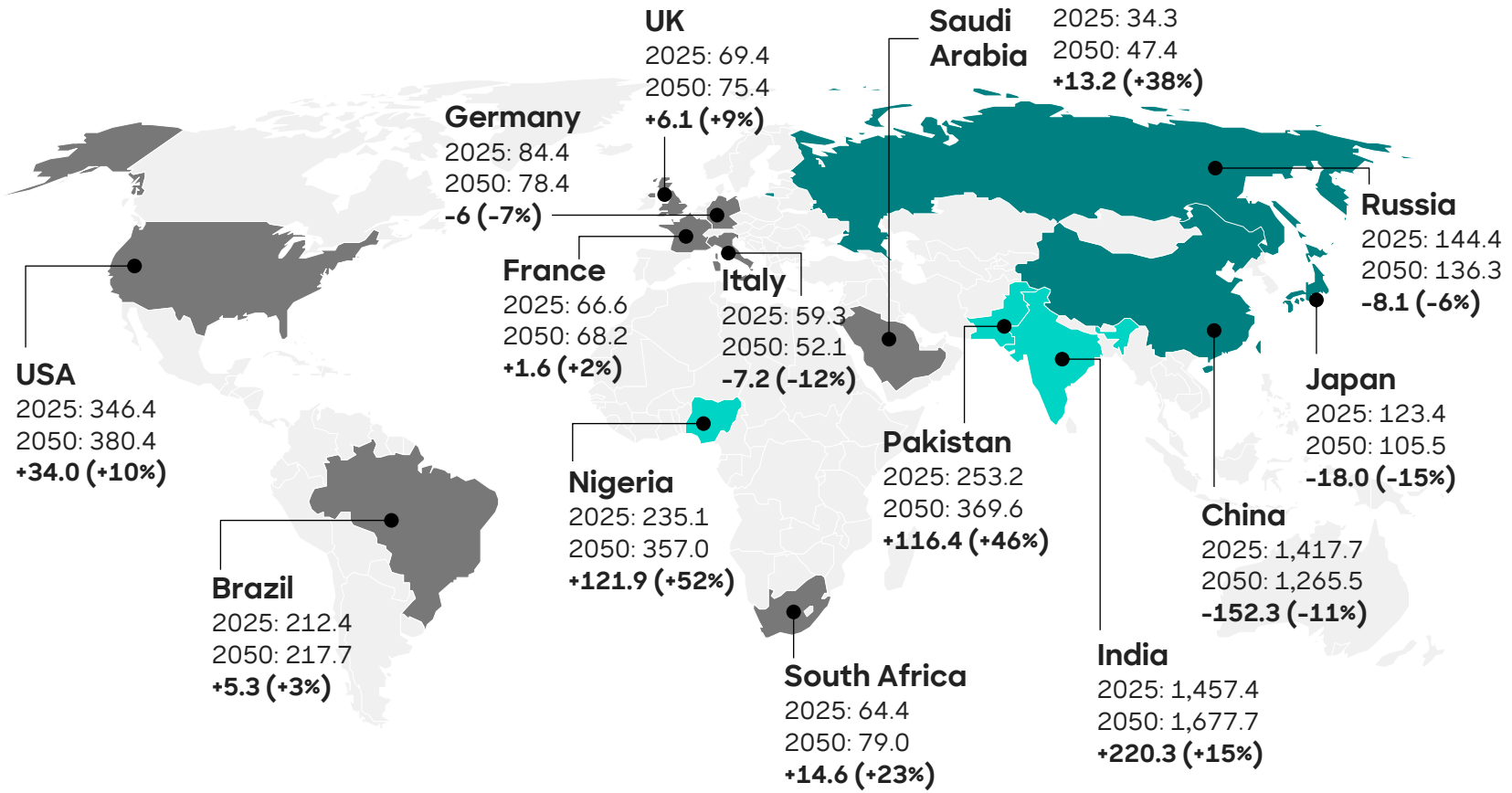
Cultural pressures for marriage and family have been diminishing, especially in wealthy countries. People are getting married later and having fewer children, if any

1) The replacement fertility rate is the rate of fertility at which a population exactly replaces itself from one generation to the next. On average, this level equals 2.1 children per women

Source: UN Population Division; GE Healthcare; Roland Berger

Between now and 2050, nearly a third of total global population growth is expected to occur in just three countries: India, Nigeria, and Pakistan

Key countries in terms of absolute population growth/decline between 2025 and 2050 [m]



- Although the global population is expected to continue growing to 2050, closer examination reveals **strongly diverging population growth rates** among countries
- **Nigeria** is projected to experience a 52% population increase by 2050 **(+122 million),** while **Pakistan's population** will increase by nearly half **(+116 million). India's** population is expected to grow by 15% **(+220 million).** All three countries still have high fertility rates
- Meanwhile, other countries, such as **China, Japan, Russia, and Germany,** are facing **shrinking populations.** The main reasons for this are low fertility rates and large populations of older people

Top 3 countries with a growing population by 2050[1)] | Top 3 countries with a shrinking population by 2050[1)] | Other selected/key countries[1)]

1) Top 3 by absolute numbers; estimates are based on the UN medium-variant projection

Source: UN Population Division; Roland Berger

Population growth entails chances as well as challenges – Making the most of human capital while preserving natural resources will be key to success

Chances and challenges of population growth

+ Chances

Extended pool of human capital

Not only does the wider availability of labor convert to higher national output, but a broader pool of talent, skills, and ideas can also accelerate technological advancements. Consequently, various sectors may benefit from significant increases in productivity and efficiency

Market expansion

Expanding the customer base creates new business opportunities and fosters foreign investment and entrepreneurship in the country. Positive spillovers resulting from this growth, such as innovation, job creation, and economic diversification, can lead to resilient growth and increased stability

Prevention of political paralysis

Growing populations tend to be younger than shrinking ones - and younger populations tend to be more open to new ideas and approaches than aging populations, which tend to be more risk-averse and hold on to the status quo

Easing of public budget pressures

An expanding tax base increases public revenue, enabling higher infrastructure investments in areas such as healthcare, education, transportation, and energy. This contributes positively to economic development

– Challenges

Deterioration of public health

Strong population growth can create an imbalance between healthcare infrastructure and the demands of a growing society. This can result in inadequate access to healthcare services, longer wait times, and greater pressure on providers

Aggravation of poverty

Increased dependency burdens on household heads may deplete savings and worsen poverty. Additionally, increasing food demand can exacerbate hunger and malnutrition in developing countries. In developed nations, surging real estate prices amid a supply shortage may notably worsen housing quality

Conflicts over distribution

Increasing scarcity of resources (e.g., water, food, energy, and land) due to overpopulation may lead to more frequent political unrest, forced migration, and cross-border conflicts. Domestically, tensions may also arise over the distribution of limited public resources, such as daycare spaces

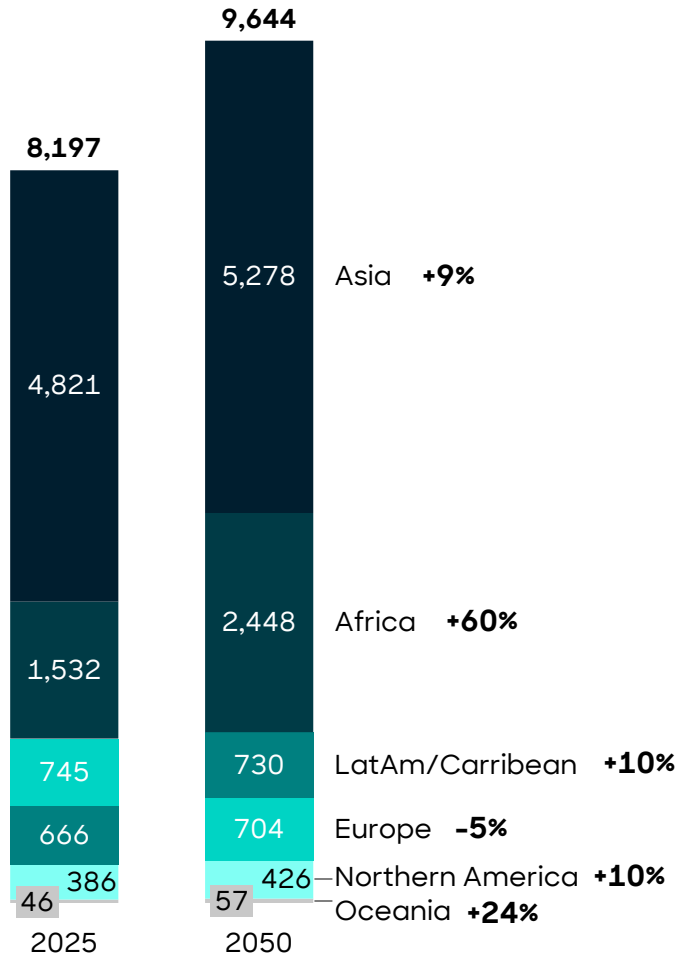
Environmental damages

Exploitation of natural resources through deforestation and overfishing inevitably leads to biodiversity loss. Additionally, increased waste and industrial production raise water pollution levels and greenhouse gas emissions, exacerbating climate change and clean water scarcity

Source: UN; Population Media Center; World Bank; Roland Berger

Within less than three decades, Africa's population will increase by roughly one billion people – Asia remains the world's population giant

Population by continent 2025 and 2050 and growth rates [m, %]



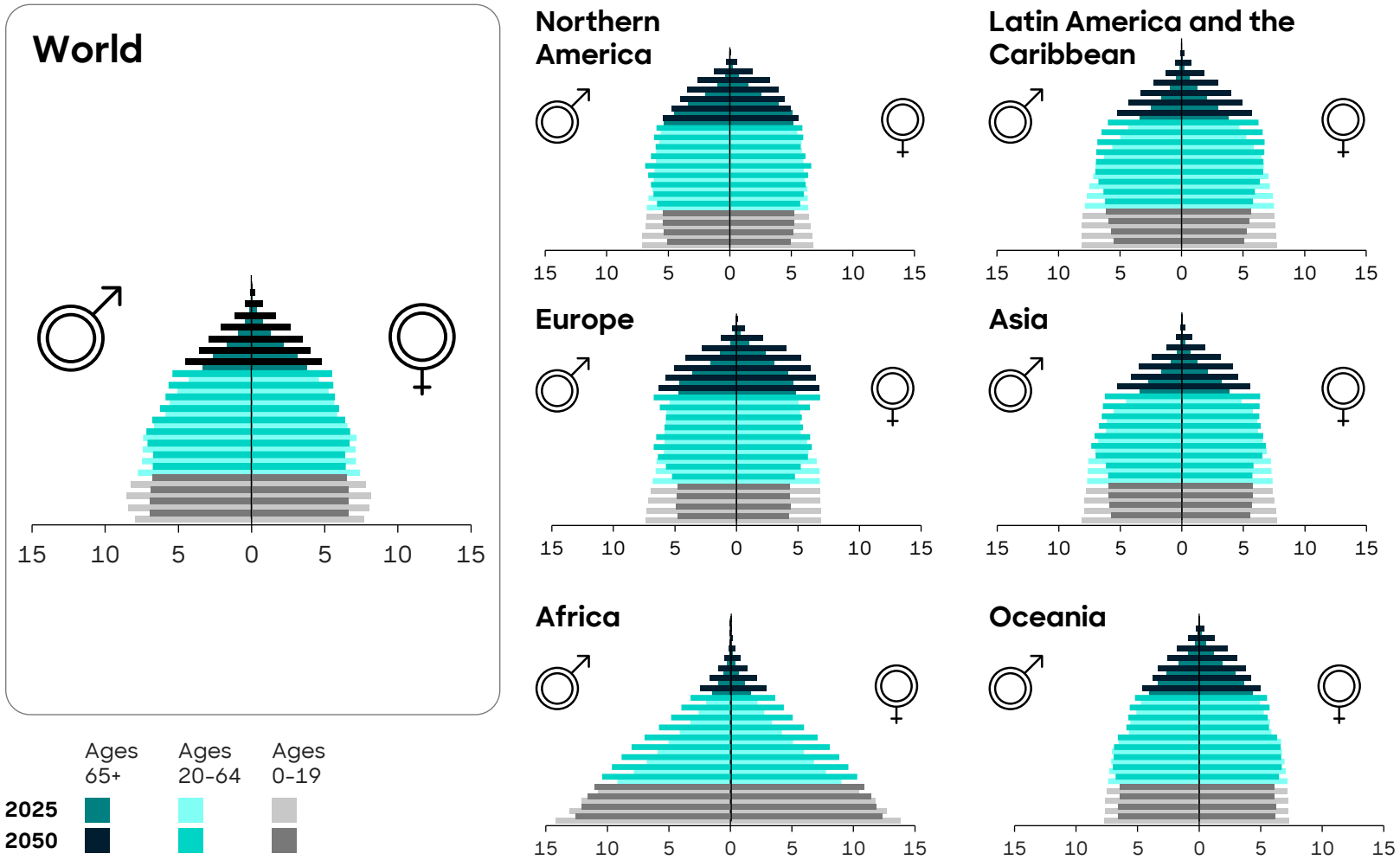
Top five countries per region by population 2050 [m]

Asia	India 1,668	China 1,266	Pakistan 370	Indonesia 320	Bangladesh 214
Africa	Nigeria 357	D.R. Congo 216	Ethiopia 223	Egypt 161	Tanzania 128
LatAm/ Caribbean	Brazil 218	Mexico 149	Colombia 59	Argentina 48	Peru 41
Europe	Russia 136	Germany 78	UK 75	France 68	Italy 52
Northern America	USA 380	Canada 46	Bermuda <1	Greenland <1	S. Pierre & Miquelon <1
Oceania	Australia 32	Papua N. Guinea 15	New Zealand 6	Solomon Islands 1	Fiji 1

Source: UN Population Division; Roland Berger

The global population pyramid is visibly growing sturdier in all regions except Africa, which has the highest percentage of young people

Distribution of the world's population by five-year age groups and sex, 2025 and 2050 [% of population]

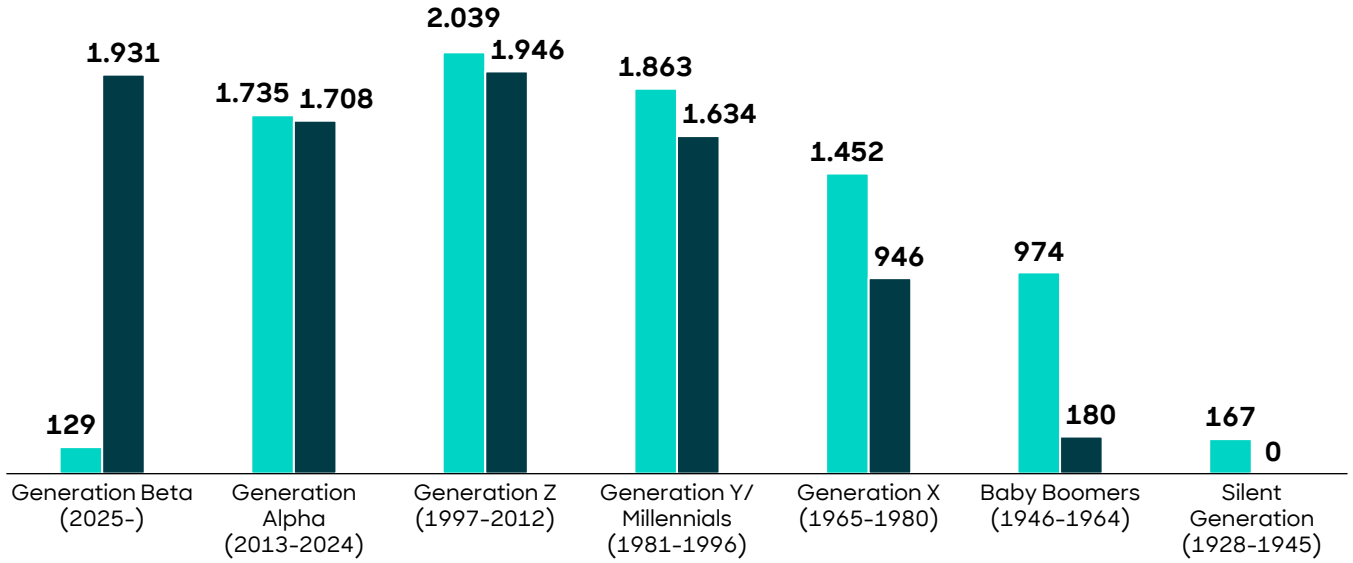


- **Shifts** in **fertility** and **mortality rates** are **reshaping population age distributions**
- Although **population aging is a global phenomenon** observed on every continent, **regional population distributions vary widely** and will continue to do so
- Where **fertility** rates decline and **life expectancy** rises, the proportion of the younger population decreases, while that of older people rises
- While **Africa remains the continent with the highest share of younger people,** Europe's population is (and will be) the oldest one
- The most **notable transition** can be observed in **Latin America and the Caribbean.** By 2050, the youth population in this region will shrink significantly, while the elderly population will grow

Source: UN World Population Division; Roland Berger

Different age cohorts also constitute different generational cohorts shaped by social and technological change and historical events

Generational cohorts, 2025 and 2050[1] [m]



Generational cohorts and share of workforce (aged 15-64 in 2025 and 2050)[%]

	Gen Beta	Gen Alpha	Gen Z	Gen Y/ Millenials	Gen X	Baby Boomers	Silent Gen
2025	0%	32.3%	38%	34.7%	27.1%	5.3%	0%
2050	23%	27.9%	31.8%	19.3%	0%	0%	0%

2025 2050

- When thinking about population in terms of **generational cohorts**, it is argued that **major historical events** and **social and technological changes** encountered by a group of people born and coming of age at around the same time **shape their attitudes, values, behaviors, and lifestyles –** thereby influencing, for example, consumption patterns throughout their lifetime
- **Generation Beta** is **the latest generational cohort** and primarily consists of the children of younger Millennials and Generation Z. It **will be the first generation entirely shaped by artificial intelligence, sustainability, and advanced digital connectivity**. Many members of **Gen Beta** will **live to see the 22nd century**
- **Generation Alpha:** Poignantly, "geek" was the word of the year, this is the first generation **born entirely in the 21st century** and **immersed in technology** since birth, they are spending more time online and in front of digital screens than any prior group.
- Due to increased longevity**, on and around 2035, up to seven generations will coexist**, creating a highly diverse, intergenerational society
- In the even more distant future – by the time **Generation Gamma** and **Generation Delta** are in their prime – the challenges of today, such as the climate crisis or the digital divide, may have been replaced by the complexities of **managing a multi-planetary society**

1) As of mid-year. Birth years in brackets

Source: UN; Roland Berger

Declining fertility rates and increasing longevity cause global aging – By 2050, the global median age will increase by 5.2 years to reach 36.1 years

Age groups, median age, fertility rate, life expectancy 2025 and 2050 [%, years]

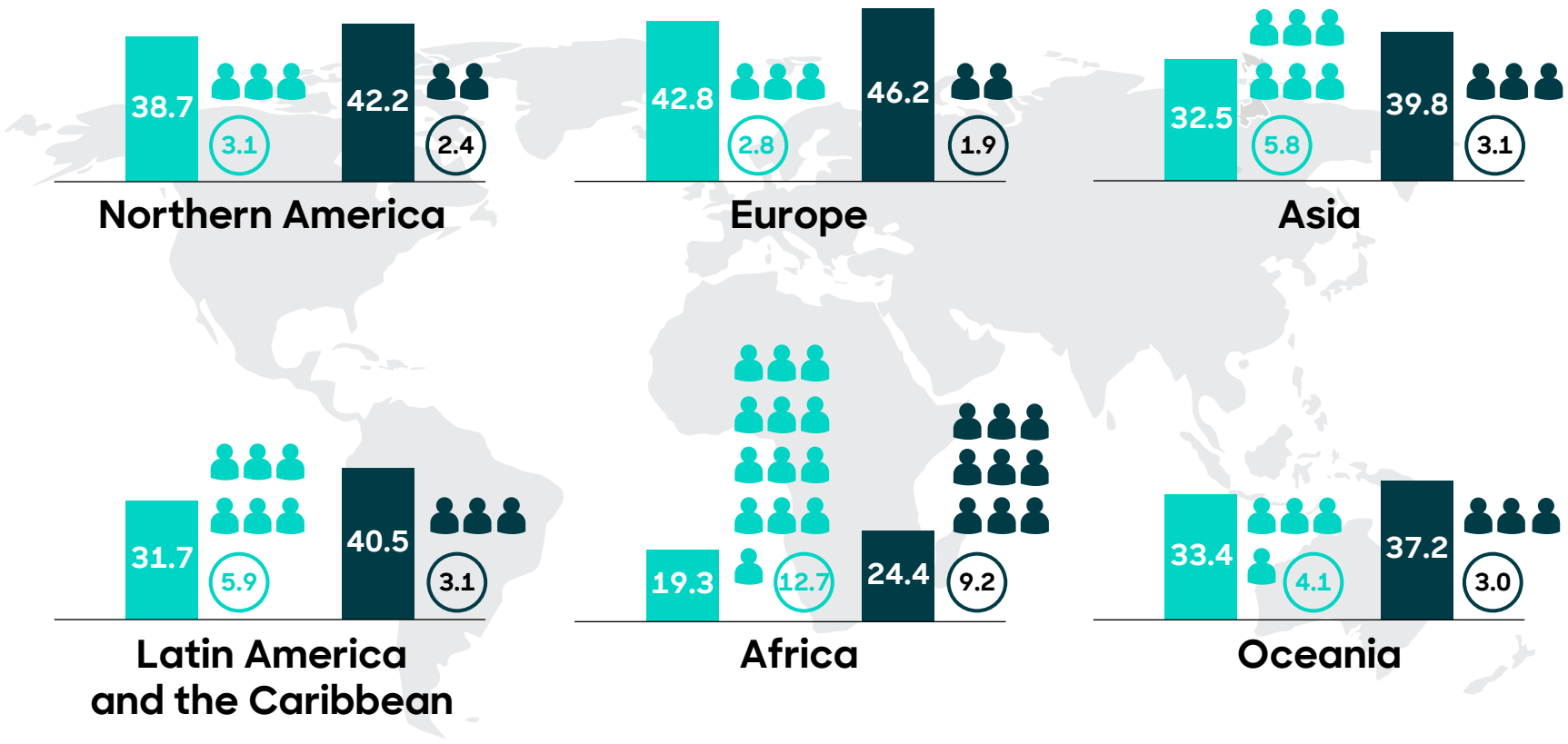
	World		More developed		Less developed	
Median age	**30.9**	**36.1**	**42.1**	**45.1**	**29.0**	**34.8**
Fertility rate[1)]	**2.2**	**2.1**	**1.5**	**1.5**	**2.4**	**2.2**
Life expectancy[2)]	**73.5**	**77.0**	**80.2**	**83.9**	**71.1**	**75.9**
	2025	**2050**	**2025**	**2050**	**2025**	**2050**

- **Population aging** is a global phenomenon: virtually every country in the world is experiencing growth of its share of older people within its population. In 2025, there were **857 million people globally aged 65 years or over – this figure is projected to double** to 1.6 billion in 2050
- **Drivers** of global aging are two-fold: **declining fertility rates** and **increasing longevity,** the latter due to improvements in healthcare and better living conditions
- **Life expectancy** at age 65 is projected to **increase in all countries.** Globally and on average, a person aged 65 years in 2025 could expect to live almost 18 more years. This increases to almost 20 more years by 2050
- Women currently outlive men by 2.9 years, but this **global gender longevity gap is expected to narrow** over the next three decades
- The **median age will rise** in both developed regions (+3 years = 45.1 years) and developing regions (+6.9 years = 38.2 years)

1) Number of births per woman
2) Life expectancy at birth [years]
Source: UN Population Division; Roland Berger

All regions are aging, with fewer people of working age having to support a growing elderly population – Intercontinental differences remain significant

Median age and old-age potential support ratio by region, 2025 and 2050[1] [years, ratio]

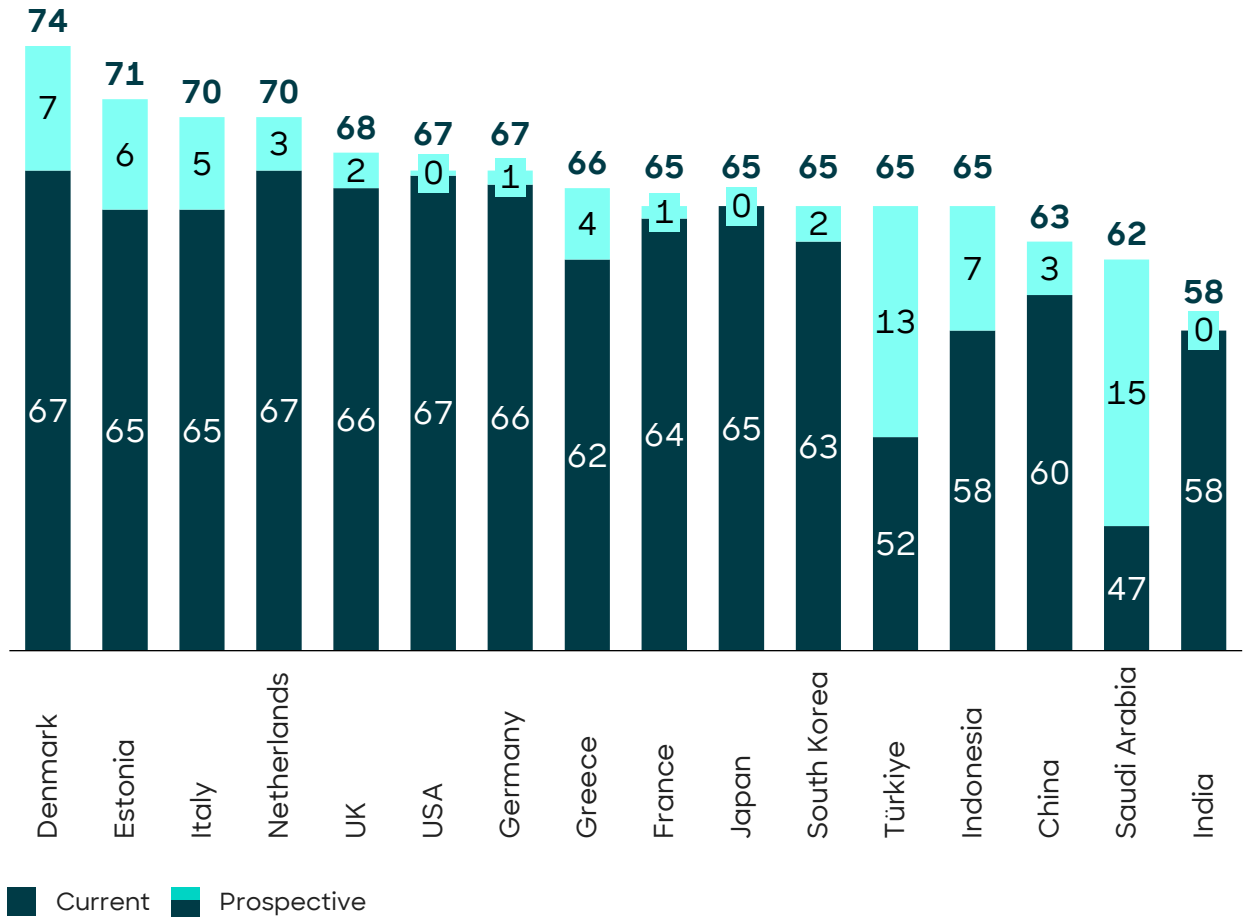


- A **low old-age potential support ratio** (fewer working-age people for every person over 65) can have **severe consequences** for countries with high public expenditure primarily driven by a rising demand for pensions and long term (health)care alongside a shrinking tax base
- However, there are several caveats: The old-age support ratio ignores the fact that **people above the age of 65 are not necessarily dependent on support** as a rising proportion is (still) in work or has access to other financial resources; also, by contrast, not all of those considered of working age are actually working

1) The old-age potential support ratio (PSR) is the number of people aged 20-64 per one older person aged 65 or older
Source: UN Population Division; Roland Berger

Future retirement ages will rise in most countries – Demographic challenges increase the need for further retirement reforms

Normal retirement age for men, current (2024) and prospective, selected countries[1] [years]



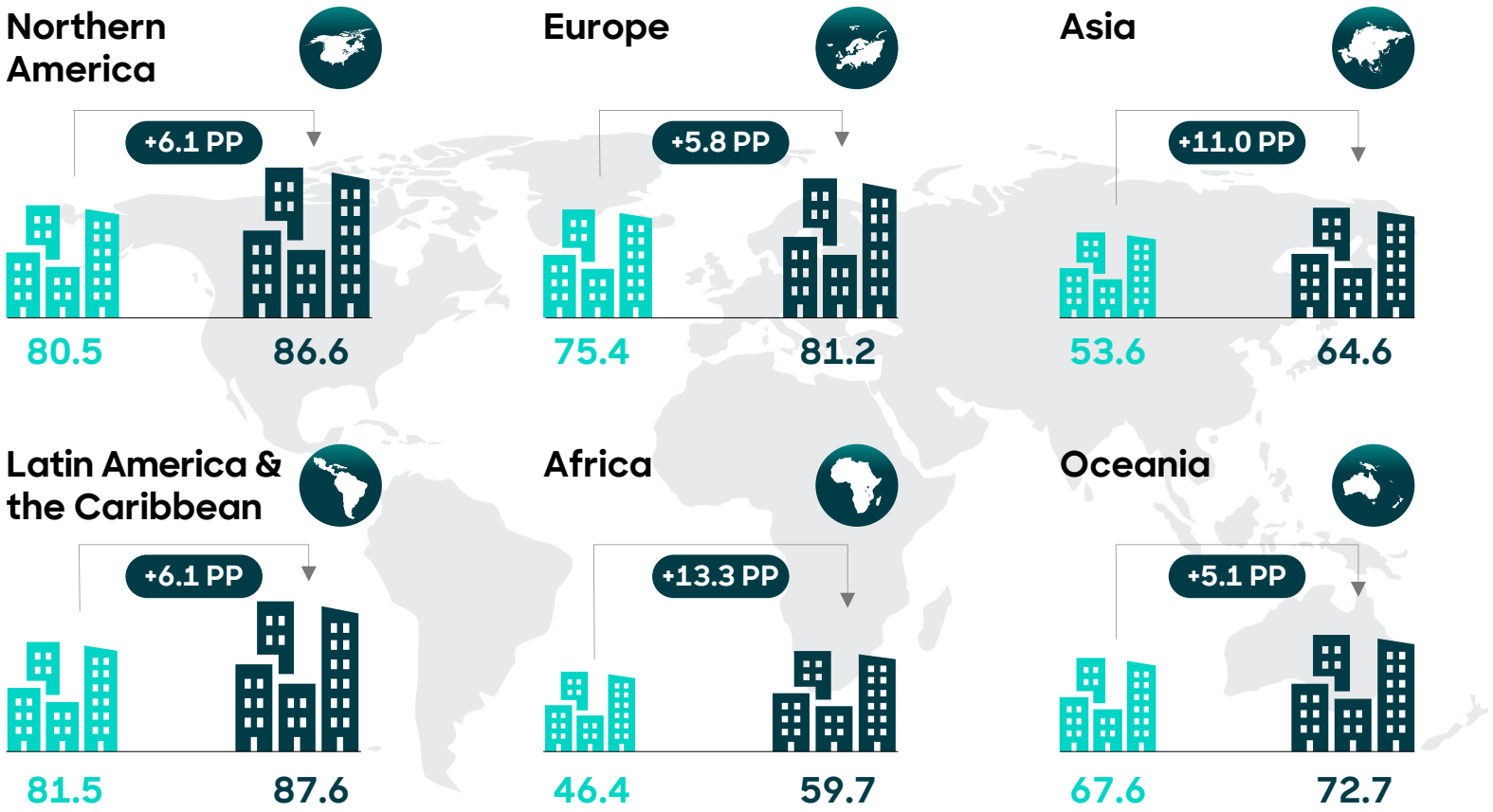
1) Current retirement age is calculated for a man with a full career aged 22 in the year 2024. Prospective refers to the year in which a person is eligible for full retirement benefits from all mandatory components in a country, without reduction, assuming labor market entry at age 22 in 2024

Source: OECD; Roland Berger

- Future normal **retirement ages range from 70 years or more in Denmark, Estonia, Italy, and the Netherlands** to as low as 62 years in Saudi Arabia, and even 58 in India
- The **average normal retirement age among OECD countries will increase** from 64.7 years (for men) and 63.9 years (for women) retiring in 2024 **to 66.4 and 65.9 years,** respectively, when starting their career (aged 22) in 2024. The **normal retirement age will increase in more than half of OECD countries based on current legislation**
- Currently, **gender differences in the normal retirement age** exist in a number of OECD countries but these **will be mostly phased out by 2050.** However, **six countries,** including Hungary, Poland, and Türkiye, **will still maintain different retirement ages for men and women** for the foreseeable future
- These projections reflects the global tendency of **linking the retirement age to key demographic indicators** (e.g. life expectancy) **more strongly.** In many countries, the **shrinking workforce** amid population aging is expected to aggravate **fiscal pressures on future pension systems**
- However, as the **future retirement age projected by the OECD** is a **forecast** based on demographic trends, these numbers **differ from** the **legislated increase in retirement ages** of national pension reforms
- **Pension reforms** can face **severe opposition** or even cause **social unrest.** The **difficulty to reach a consensus** may act as a challenge for countries considering retirement reforms

Globally, the share of people living in urban areas is set to rise from 58% to 67% by 2050 – Highest growth in urbanization is expected in Africa and Asia

Inhabitants of urban areas, 2025 and 2050[1] [% of total population]



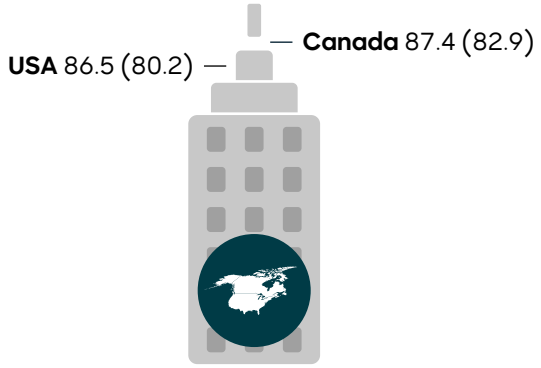
- **Today, 57.8%** of the world's population lives in **urban areas,** and this figure is expected to increase to **67.3% by 2050**
- **Countries in Northern America, Europe and Latin America** already have **high levels of urbanization.** As this trend continues, **more than four-fifths of the population** in these regions will live in **urban** areas by 2050
- Historically, urbanization levels in **African and Asian countries** have been lower. Yet, these countries will experience **significant increases by 2050,** when more than half of their populations will live in urban areas
- **Economic development is the main reason for rising urbanization.** In particular, people in developing and emerging markets are moving from rural areas to seek employment in growing industry and service sectors, which are predominantly concentrated in and around urban areas

1) The definition of urban areas follows the definitions that are used in each country. These definitions can vary widely

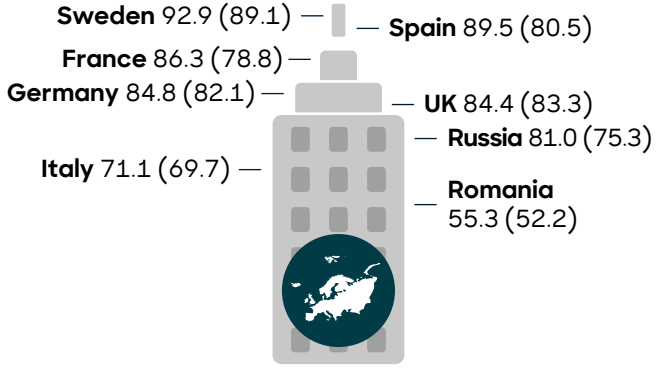
Source: UN; Roland Berger

A closer look at a selection of countries shows that their levels of urbanization vary significantly

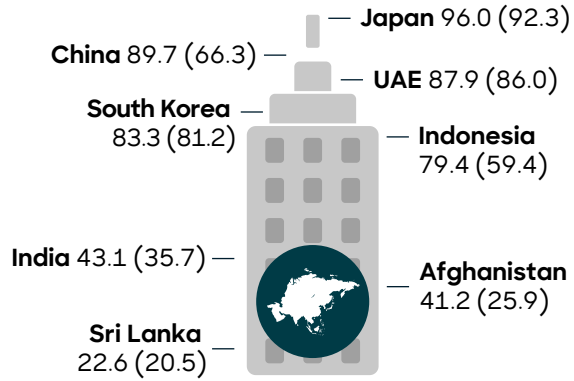
Degree of urbanization in selected countries per region in 2050 (2025) [% of total population]



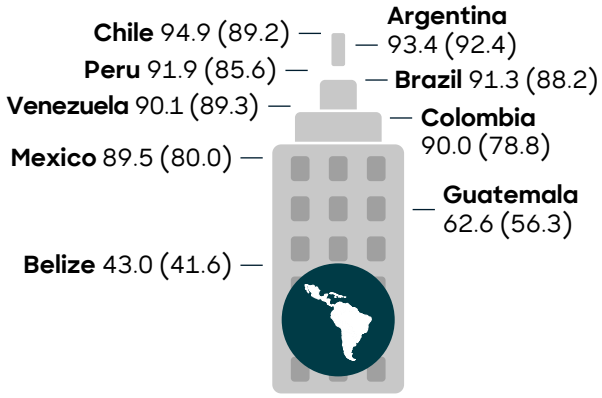
Northern America



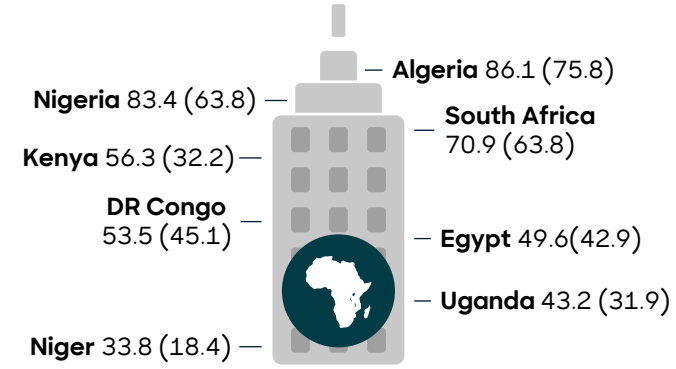
Europe



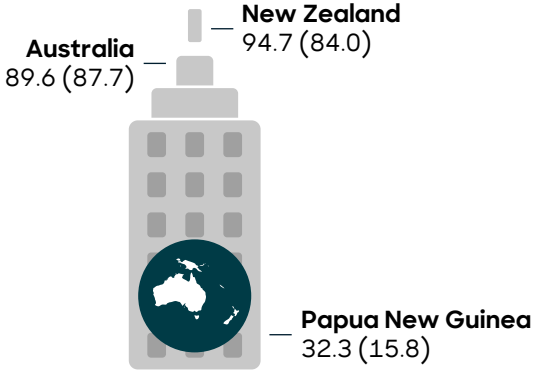
Asia



Latin America & the Caribbean



Africa

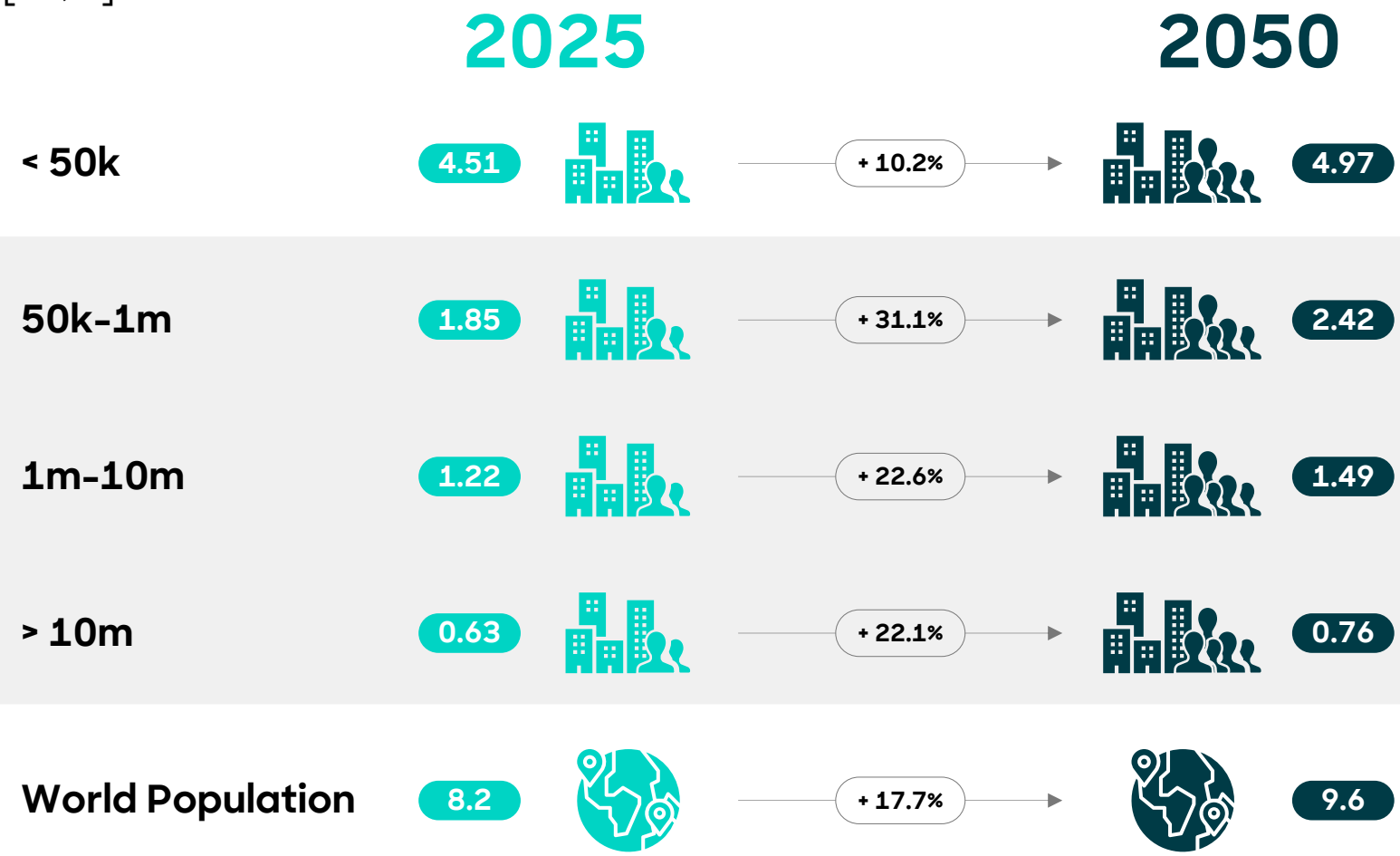


Oceania

Source: UN Population Division; Roland Berger

Urban population growth is outpacing overall population growth, reinforcing the global shift towards cities

Global mid-year population of cities by size class of settlements in 2025 and 2050[1] [bn, %]



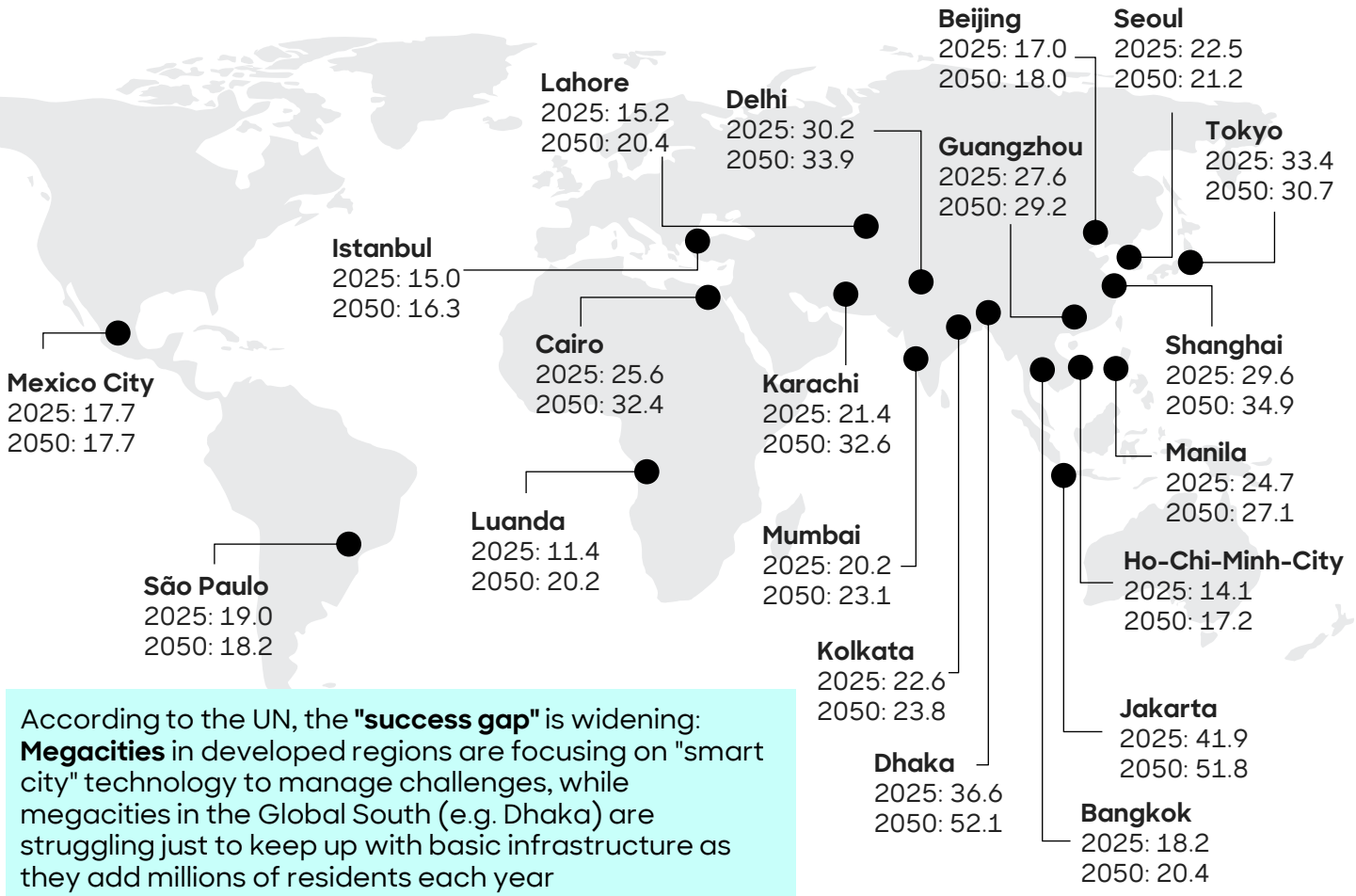
- **Urban population growth** is significantly **outpacing** overall population growth: while the global population increases by 17.7% from **8.2 billion** in 2025 to **9.6 billion** in 2050, the population living in cities (larger than 50,000 inhabitants) grows by **26.8%** to around **4.7 billion** people, 9.1 percentage points faster
- Growth differs across city size categories: cities with **50,000 to 1 million** inhabitants expand from **1.85 to 2.42 billion** people, cities with **1 to 10 million** inhabitants grow from **1.22 to 1.49 billion**, and megacities with more than **10 million** inhabitants increase from **0.63 to 0.76 billion**

1) Data availability only for urban settlements with more than 50,000 inhabitants. This limitation reflects differing national definitions of "cities" and urban areas, reducing comparability for smaller settlements

Source: UN Population Division; Roland Berger

The growth of the largest cities will be most pronounced in Asia – By 2050, sixteen of the twenty biggest urban agglomerations will stem from Asia

Population development of the 20 biggest urban agglomerations to 2050 [m]



According to the UN, the **"success gap"** is widening: **Megacities** in developed regions are focusing on "smart city" technology to manage challenges, while megacities in the Global South (e.g. Dhaka) are struggling just to keep up with basic infrastructure as they add millions of residents each year

- With more than two thirds of the world population projected to live in urban areas by 2050, the **dynamics** of the largest of urban agglomerations, i.e. **megacities** (defined as over 10 million inhabitants), are important
- Megacities, historically to be found in more developed regions, are **now mostly concentrated in developing regions in the Global South –** in only 20 countries, particularly in Asia
- The number of **megacities** has **increased** from **8 in 1975 to 33 in 2025 – with more than half being in Asia**
- Currently, **Jakarta** is considered the largest with **around 42 million people**, while **Dhaka** is expected to become the world's largest megacity by mid-century. **By 2050**, about **seven new megacities** are projected, including Kuala Lumpur and Addis Ababa. **9 of the 10 largest cities in the world will be located in Asia**
- Megacities are notable for their sprawl and **concentration of economic activity** but universal development **challenges** are also most acutely felt including **resource adequacy** in terms of water and energy supply, pollution and waste management, infrastructure and mobility, as well as security and crime prevention

Source: UN Population Division; Roland Berger

Urbanization provides plenty of opportunities for growth but also faces numerous challenges in terms of its strain on resources

Chances and challenges of urbanization & megacities

	Economic	Infrastructure	Environmental	Social & cultural	Governance
+ Chances	**Concentration of wealth** Cities are economic powerhouses, generating over 80% of global GDP; they are hubs of innovation, start-ups, (venture) capital and specialized labor markets	**Economics of scale** More profitable to provide higher level of public transport and utilities incl. internet to dense populations than to rural communities	**Efficiency** High-density living can reduce land consumption and urban sprawl	**Access to services & cultural diversity** Better proximity to (top) higher education, specialized healthcare, and diverse cultural and social entertainment	**Political influence** Megacities often hold political weight and drive national policy and local reform implementation
— Challenges	**High cost of living** Extreme real estate prices, gentrification, and inflation can push low-income workers into long commutes and/or (housing) poverty	**Overstretched services** Overburdened transit systems and gridlock traffic; rapid growth often outpaces the construction of utilities (e.g. sewers or power grids), leading to slum conditions	**Pollution** Air pollution and waste management become critical health risks; concentrated concrete and lack of green space raise local temperatures creating "urban heat islands"	**Inequality & segregation** Extreme poverty often exists next to luxury, which can lead social tension, higher crime rates, rapid spread of infectious diseases, etc.	**Administrative complexity** Managing a city-state sized population requires multiple layers of bureaucracy and is prone to corruption

Source: UN; Roland Berger

Migration reflects the complex dynamics of people and society within a multi-layered set of factors that extend far beyond economic drivers

Driver dimensions and factors concerning migration

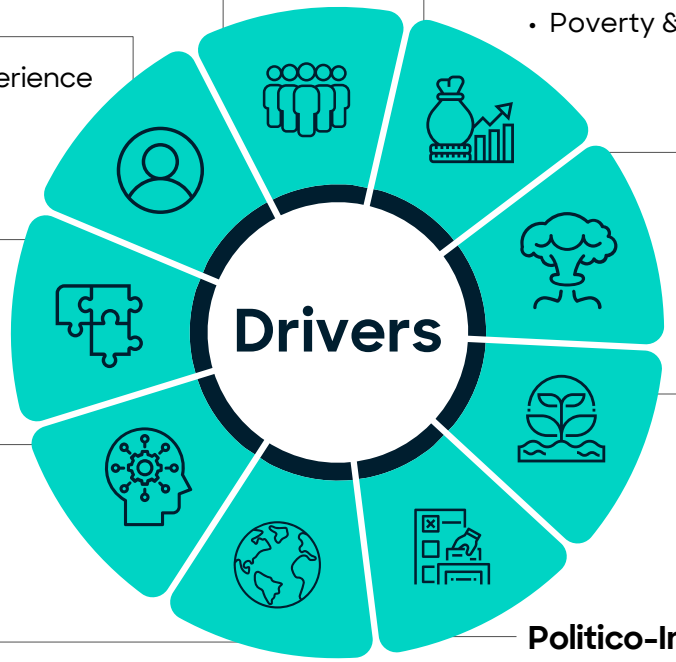
Demographic drivers
- Population dynamics
- Family size & structure

Individual drivers
- Personal resource & migration experience
- Migrant aspirations & attitudes
- Sex, gender, age, disability etc.

Socio-Cultural drivers
- Migrant communities & networks
- Cultural norms & ties
- Gender relations

Human Development drivers
- Education services & training opportunities
- Health services & situation

Supranational drivers
- Globalization & (post)colonialism
- Transnational ties
- International relations & geopolitical transformations



Economic drivers
- Economic & business conditions
- Labor markets & employment
- Urban/rural development & living standards
- Poverty & inequality

Security drivers
- Conflict, war & violence
- Political situation, repressions & regime transitions

Environmental drivers
- Climate change & environmental conditions
- Natural disasters & environmental shocks

Politico-Institutional drivers
- Public infrastructure, services & provisions
- Migration governance & infrastructure
- Migration policy & other public policies
- Civil & political rights

- Migration decisions are influenced by a number of **interacting drivers, which can facilitate, enable, constrain, or trigger migration processes** in complex ways. It is rare that migration is the outcome of one single cause
- Migration is often multi-directional, and can include **onward migration** to new destinations. Countries that were historically countries of emigration are now increasingly also **transit countries**
- The **average exit rate**[1] **of migrants varies widely,** with the Netherlands and Germany having the highest average exit rates (75% and 67%) and France (26%) and the UK and Sweden (both, 31%) having the lowest in Europe (over the most recent period analyzed), while the US' is much lower still (12.5-16%)
- Estimates show that **roughly one-quarter** of migration events consist of **returns** to an individual's country of birth

1) Exit rate: percentage of a specific group of immigrants who leave their host country within a defined period (here: five years) after arrival

Source: Migration Data Portal/Czaika & Reinprecht; OECD; PNAS/Azose & Raftery; Roland Berger

Migration is a complex topic – Not every migrant has crossed a border, not every immigrant is a refugee

Types of migrants and migrant status

International migrants

Refugees[1)]

A person fleeing their home country due to **conflict** or **persecution** and **fear for their safety** upon return; such persons are protected by international law

Other international migrants

Short- or long-term international migrants[2)] for the **purpose of work, study, or training, family reunion/formation**, and under the **right to free establishment** (e.g., freedom of movement treaties)

Asylum seekers

A person who has **applied for asylum**, a protected status granted by a host government and **enshrined** in the United Nations Universal Declaration of Human Rights (1948)

Others in need of international protection[3)]

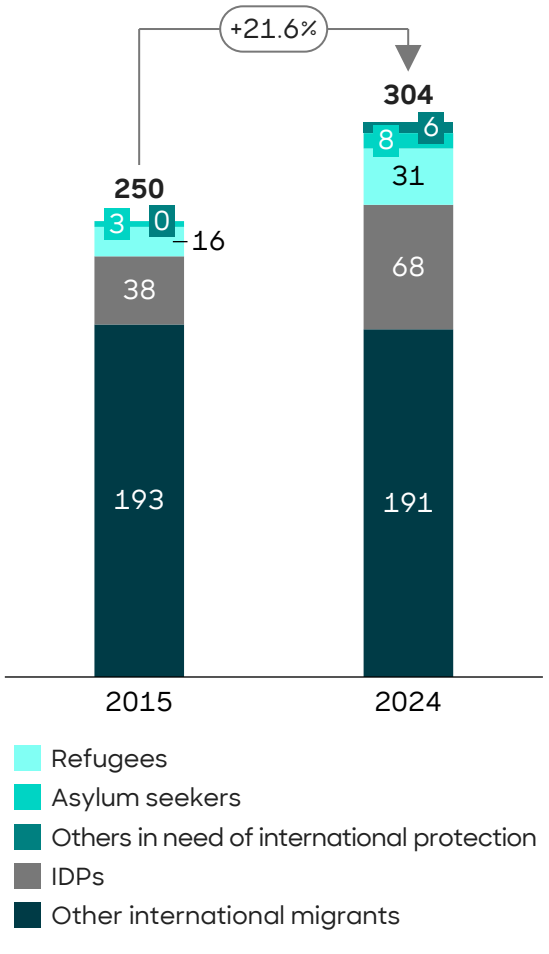
Individuals outside their country or territory of origin and not reported under other categories in need of protection

"National migrants"

Internally Displaced People (IDPs)[4)]

Persons migrating **within the borders** of their home country due to **conflict** or **disaster**

Migrant stock by status [m]



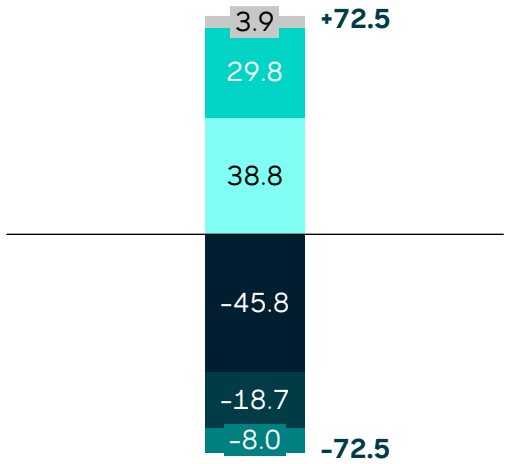
- **Migrant** is an umbrella term, not defined under international law, reflecting the common understanding of a person who moves away from their place of usual residence, whether **within a country or across an international border, temporarily or permanently,** and for a **variety of reasons**
- People who move from one country to another are **international migrants:** they "are defined as either **living** in a country **other than** their **country of birth** or in a country other than their **country of citizenship";** although this broadly covers both **economic migrants** (with and without work authorization) and includes other international migrants such as **educational migrants,** it also applies to **refugees,** but then refers to different legal rights and viewpoints
- Food for thought: **In some situations, people who have never undertaken migration may be referred to as migrants –** such as children born to settled, migrant parents and to whom local citizenship is not automatically conferred at birth
- People who are **moving within their own country due to** reasons of **conflict** or **disaster,** are also migrants – they are **Internally Displaced People** (IDPs)
- These **distinctions are important** because different migrants are entitled to **different rights** and **levels of protections** from host governments and international organizations/treaties; equally, some **distinctions can be blurry,** for example, many people fleeing conflict are often also looking to escape poverty

1) Defined by UN Convention and Protocol; includes UNRWA Refugees (persons whose normal place of residence was Palestine during the period 1 June 1946 to 15 May 1948, and who lost both home and means of livelihood as a result of the 1948 conflict); 2) From 3 months; excl. purposes of tourism/recreation/pilgrimage etc.; 3) A new category introduced by the UNHCR in mid-2022; 4) IDPs data according to IDMC/NRC

Source: UN; UNHCR; UNRWA; Internal Displacement Monitoring Centre/Norwegian Refugee Council; Roland Berger

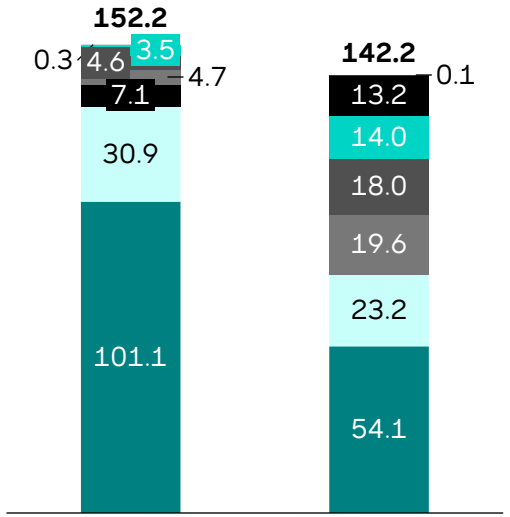
International net migration flows between regions are expected to be on a high level toward 2050 – This reflects only one of many migration aspects

Cumulative net inter-regional migration flows, 2025-2050[1] [m]



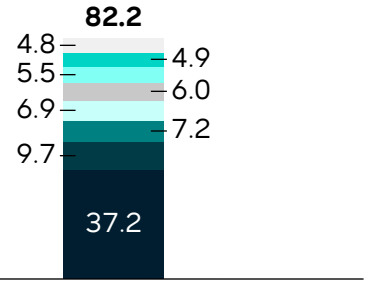
Africa
Asia
Europe
Oceania
Northern America
LatAm/ Caribbean

Interregional and intra-regional migrants stock, 2024[2] [m]



Oceania
Central & Southern Asia
Sub-Saharan Africa
Eastern & South-Eastern Asia
Northern Africa& Western Asia
Latin America & the Caribbean
Europe & Northern America

Migrants within countries (IDPs stock), 2025[3] [m]



DR Congo
Bangladesh
Afghanistan
Afghanistan
Colombia
Sudan
Yemen
Others

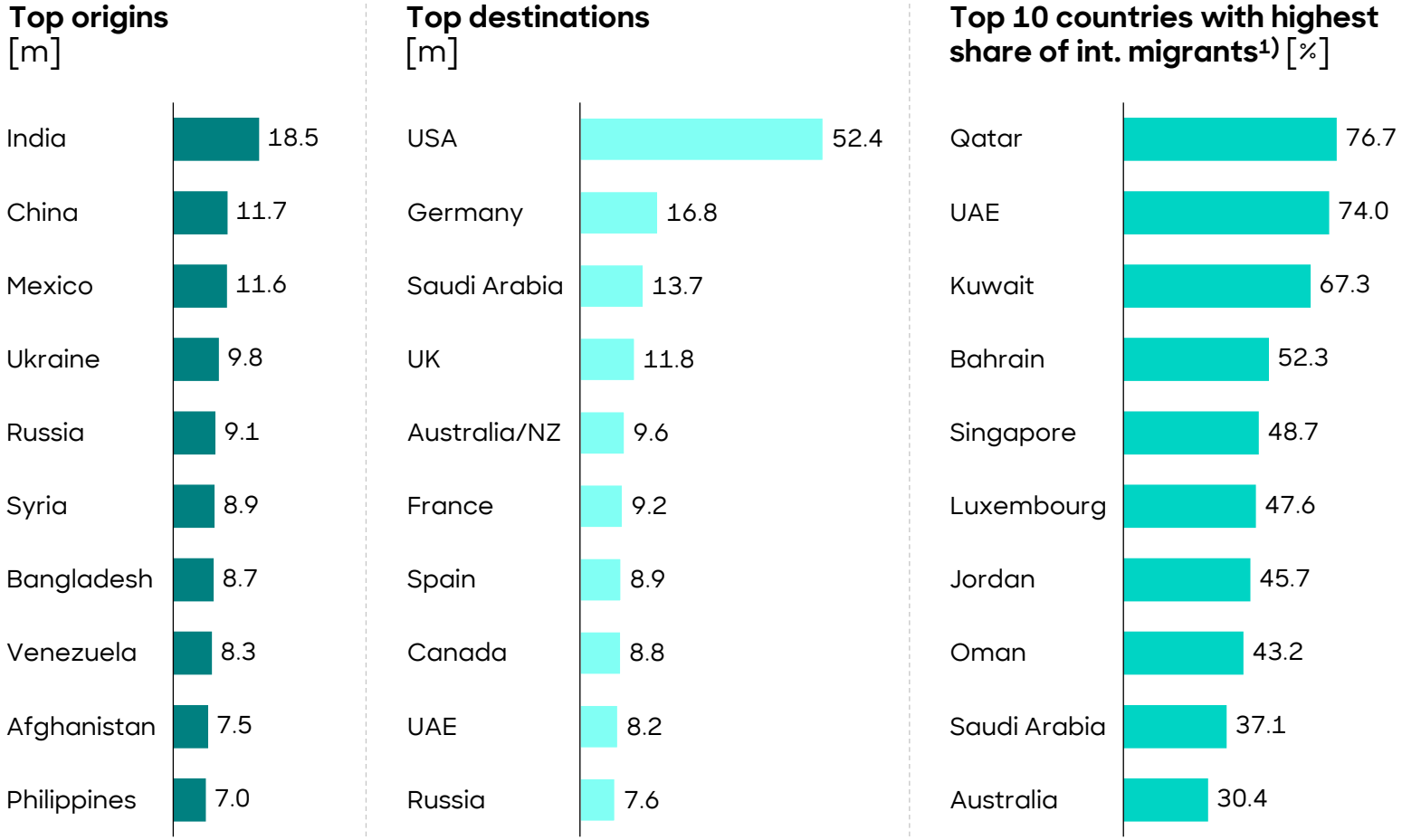
- According to the UN, **"international migrants** are defined as either **living** in a country **other than** their **country of birth** or in a country other than their **country of citizenship"**
- The **majority of international migrants** (interregional and intraregional migrants) are **not refugees or asylum seekers** having left their home country due to conflicts, persecution, or similar, but are defined as migrating for **economic, educational, or other reasons**
- In **2025**, there have been **38.9 million international refugees and asylum seekers** globally; 53% came from just five countries: Syria, Afghanistan, Ukraine, Sudan, and South Sudan
- **IDPs** are **refugees** who stay **within their own country.** In 2023, the **majority** of IDPs (68.3 million) **fled conflicts and violence,** the remaining 7.7 million fled disasters

1) Interregional migration includes only migration between regions; data are based on UN medium variant forecast; 2) Numbers of interregional migrants are for destination regions; intraregional migration includes only migration between countries within a region; 3) IDPs: internally displaced people

Source: UN Population Division; IOM; Internal Displacement Monitoring Centre/Norwegian Refugee Council; Roland Berger

By origin, migrants from India dominate in absolute numbers, while the US is the top destination – Middle Eastern countries host most in relative terms

Top origins and destinations of international migrants, and countries with the highest share of international migrants in 2024, stock [m, %]

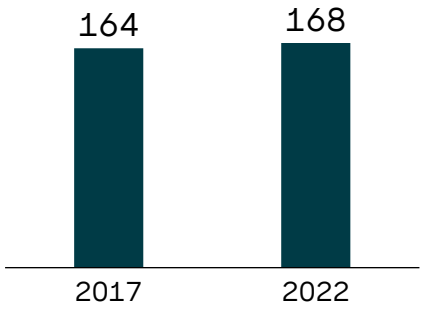


- In 2024, around **one third** of the 304 million international migrants stem from **10 countries of origin; 10 destination** countries host **half of all** international migrants
- With a total share of **60%,** international migrants mostly originate from **middle-income nations.** By contrast, **low-income countries** still generate the **smallest portion of migrants (14%)**
- **Among origin countries, the spatial distribution of migrants varies greatly.** While migrants stemming from China, Russia, and India are more widely dispersed across the globe, migrants from African and Central American nations (i.e., Algeria, Mexico, Guatemala) are more strongly concentrated in one or a few countries of the same region
- Particularly in **Middle Eastern countries,** international migrants make up a significant part of the labor force, helping to explain why these nations have the **highest share of migrant population** globally

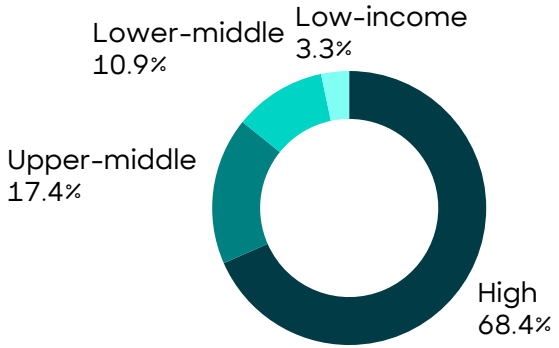
1) Share of international migrants relative to population size (minimum 100,000 migrants)
Source: UN Population Division; International Organization for Migration; Roland Berger

International labor migrants constitute the bulk of international migrants, and mostly higher-income host countries benefit

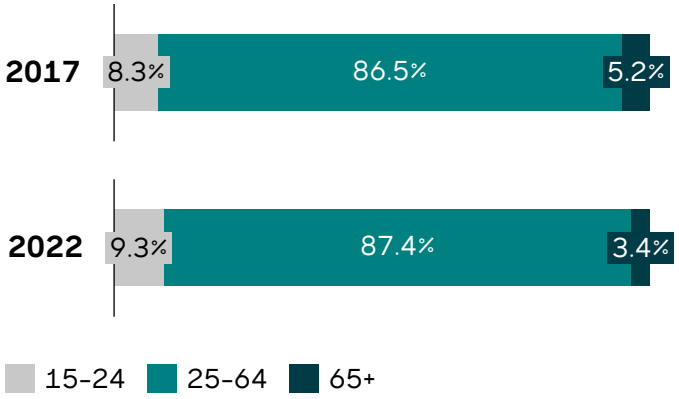
Number of international labor migrants, 2017 and 2022 [m]



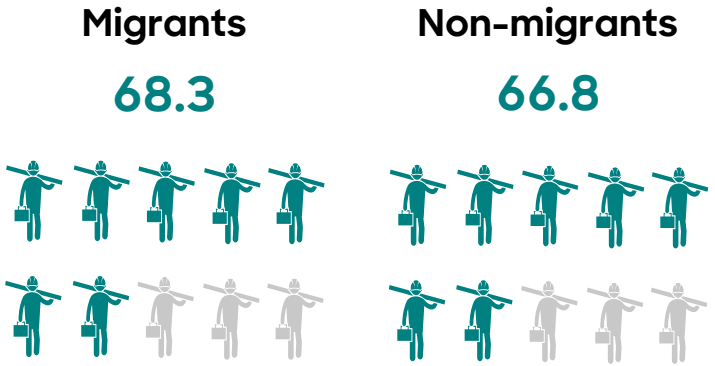
International migrant workers by income level of countries in 2022 [%]



Global age distribution of international labor migrants in 2017 and 2022 [%]



Global employment rates of migrants vs. non-migrants, 2023 [%]



- According to the ILO, the **number of international labor migrants** amounted to **168 million in 2022** – an **increase of 4 million (+2.4%)** relative to **2017**
- **Roughly 86% of global labor migrants are residing in high or upper-middle income countries,** reflecting greater employment opportunities in wealthier nations. **North America (22.6%), Europe (30.0%),** and **the Arab States (13.5%)** represent primary regions of migrant destination
- Due to their broad social network, adequate work experience as well as sufficient financial resources, **prime-age adults (25-64) comprise the majority of global migrant workers.** Compared to 2017, **the share of young migrant workers (15-24) has increased** amid high youth unemployment rates in many countries of origin
- **Favorable demographic profiles** and **higher labor participation** of international migrants offer potential benefits to destination countries. On taking up productive work, migrants contribute toward economic growth in host nations. Especially for developed countries, **migrants can help alleviate labor shortages** as well as **pension pressures arising from population aging**

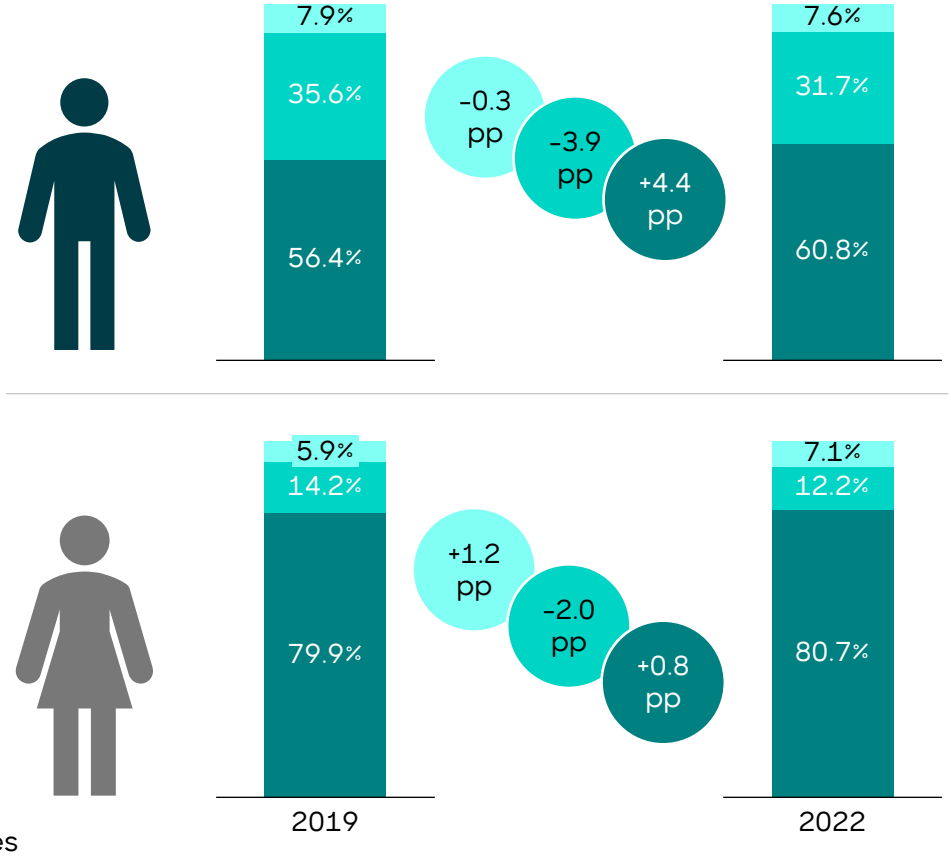
Source: OECD, ILO based on UN/DESA; Roland Berger

Most international labor migrants are male and are employed in the service sector – In case of women, their service sector share is even higher

International labor migrants by gender and economic sector activity

Gender of international labor migrants, 2022 [%]

Distribution of labor migrants by economic sectors [%]



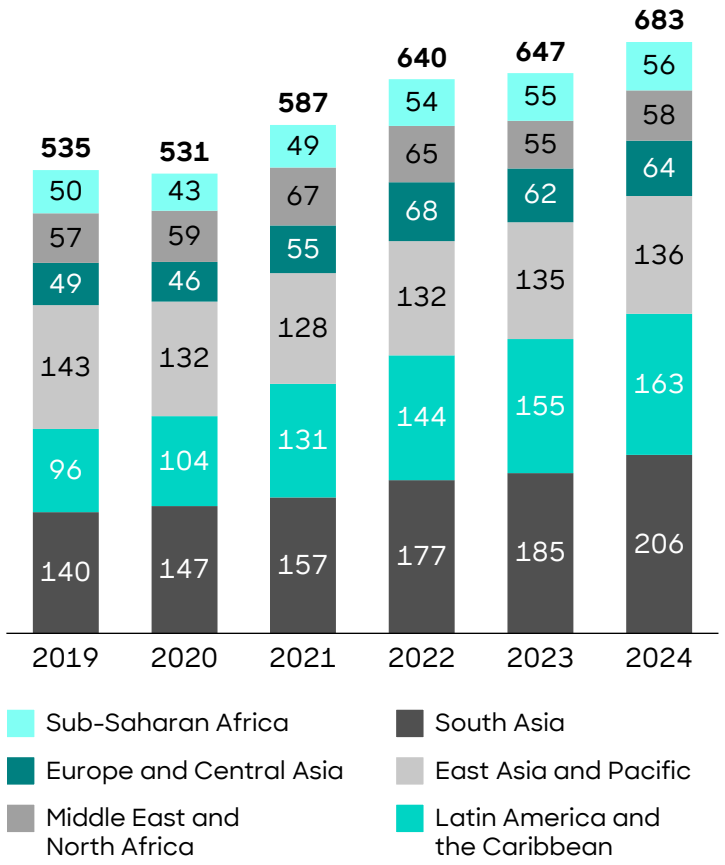
- Of all international labor migrants, only **38.7% are female.** Gender discrimination as well as the higher likelihood of migrating as an accompanying family member explain the lower share of female labor migrants
- **For both sexes, service sector activity comprises the biggest share of labor migrants.** By contrast, agriculture represents the least important area of employment
- **Nonetheless, substantial gender differences exist:** Female migrants are strongly concentrated in the service sector (80.7%), while the employment distribution between industry (31.7%) and services (60.8%) is comparatively more balanced for male labor migrants

Source: ILO based on UN/DESA; Roland Berger

Labor migration is not only beneficial to host countries – Remittances often represent an important source of external financing for nations of origin

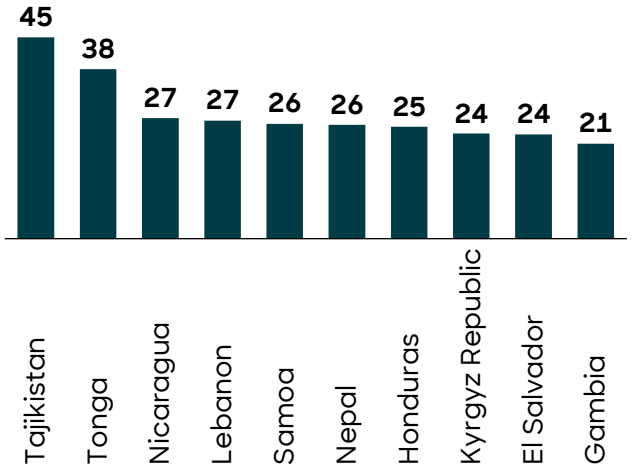
Development of global remittance flows to LMIC from 2018 to 2024[1)]

[USD bn, nominal]

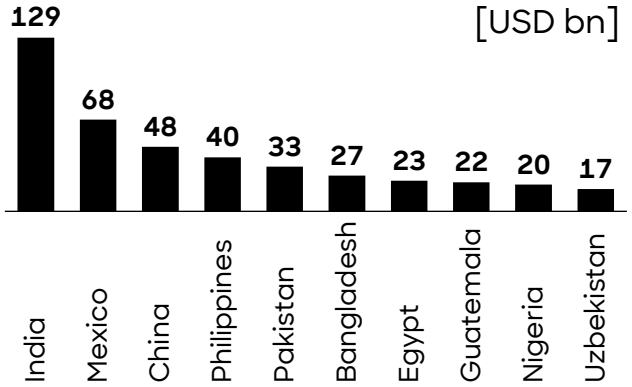


Top recipients of remittances among LMIC countries, 2024

[% of GDP]



[USD bn]



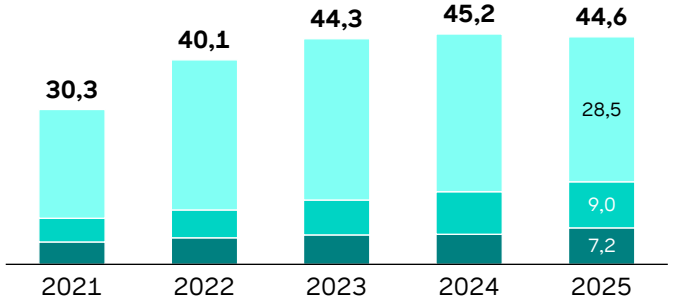
- **Two-way flow:** International labor migrants often **remit a share** of their **earnings** to low- and middle-income countries (LMIC) **for familial support,** thus lifting income per capita "at home" while **partly offsetting** the **migration effects** of a shrinking labor force and brain drain. According to the UN, migrant workers **send back about 15% of their earnings on average**
- In line with growing migration flows, **global remittances to LMICs have risen notably over the past years.** This trend continued in 2024, reaching a **new high of around USD 683 bn.**
- Historically, remittances have been a more important source of external financing to LMICs than FDI or official development assistance (ODA). For countries such as **Tajikistan (45%)** or **Tonga (38%), remittances** account for a very **substantial share of their national GDP**
- **Transaction costs** remain a sticking point: the average fee for sending money dropped from around 7.5% in 2015 to roughly **6.5% in 2025,** but progress has stalled. Although lower cost mobile transfer channels have proliferated, the median cost remains far above the **3% target set by the G20 and the UN's Sustainable Development Goal for 2030**

1) Estimated flows to LMICs (low- and middle-income countries) only, based on IMF data; excludes informal money transfers

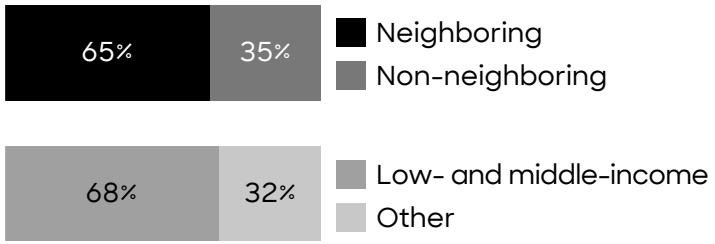
Source: World Bank; IFAD; Roland Berger

The vast majority of forcibly displaced people flee to nearby countries – Venezuela is the top origin country of forced displacement, USA is top host

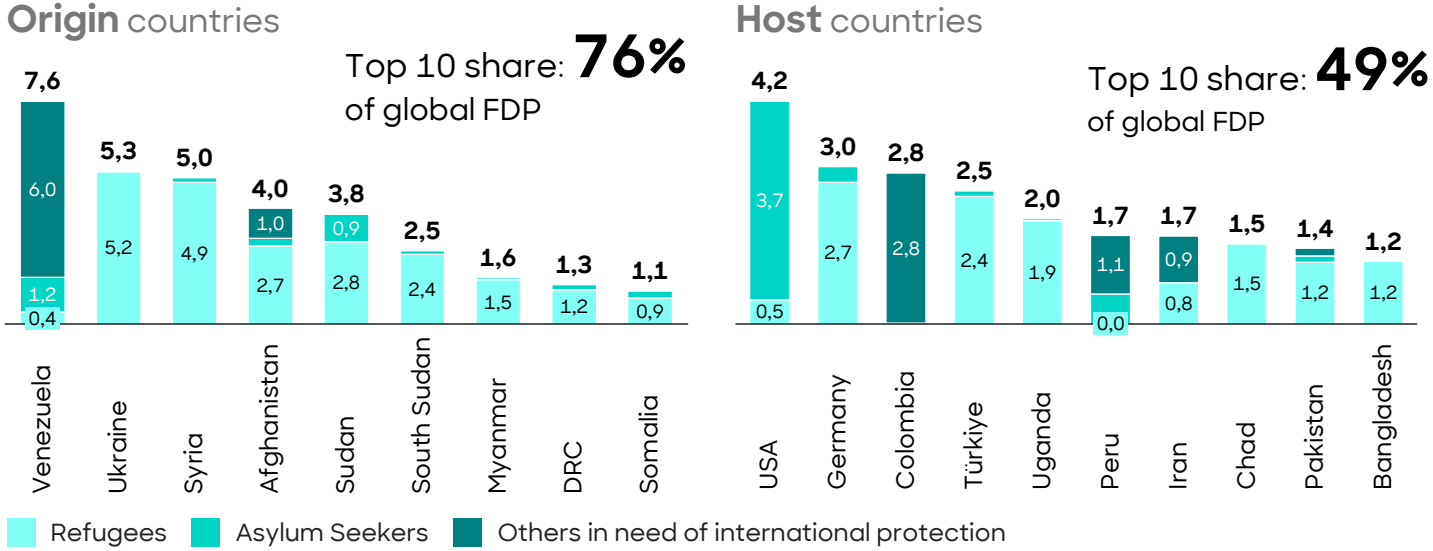
Selected FDP groups, 2021-2025[1] [m]



FDP across borders by host country characteristics, end of 2025 [%]



Top 10 origin and host countries of selected FDP groups, 2025 [m]



- **Forcibly displaced people (FDP)** are individuals who **have been forced to flee their homes** due to armed conflict, violence, human rights violations, or persecution
- At the end of **2025,** the number of **global FDP** was about **118 million** people. With nearly 67 million, the biggest group are Internally Displaced People having fled from conflict and violence
- The next bigger groups are **refugees, asylum seekers,** and **others in need of international protection –** totaling about **45 million** people in 2025
- **Adjacent countries** are the **primary destination** of forced migration. This tendency explains the strong concentration of global FDPs by destination: the majority (68%) of hosting countries are low- and middle-income nations – which is in stark contrast to economic migration largely occurring to wealthy countries
- In **2025, 76% of global FDPs** stem from just **10 countries:** forced migration mostly originated from Venezuela (7.6 million), Ukraine (5.3 million), and Syria (5.0 million)
- **Top host countries** are the **US, Germany, and Colombia –** but with a very different pattern type. In the US, asylum seekers dominate, in Germany refugees, and in Colombia others in need of international protection

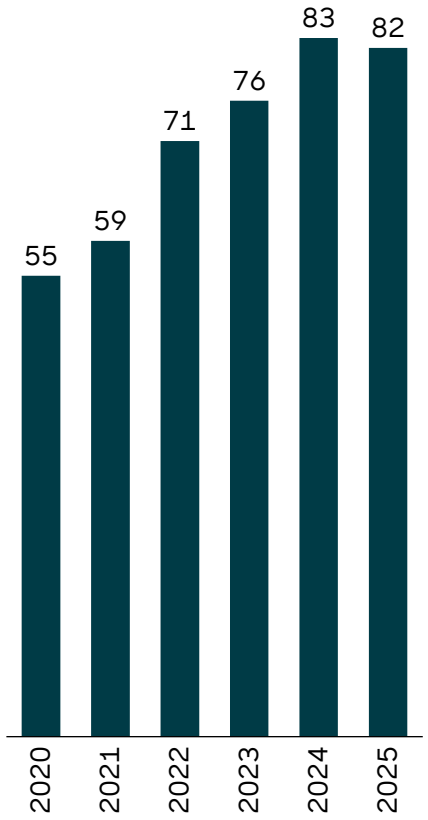
1) FDP: Forcibly Displaced People excluding Internally Displaced People (IDP), stateless people, host community, and others of concern

Source: UNHCR; Roland Berger

Displaced in their own country due to conflict, violence, or disaster: In previous years, the number of IDPs reached more than 80 million

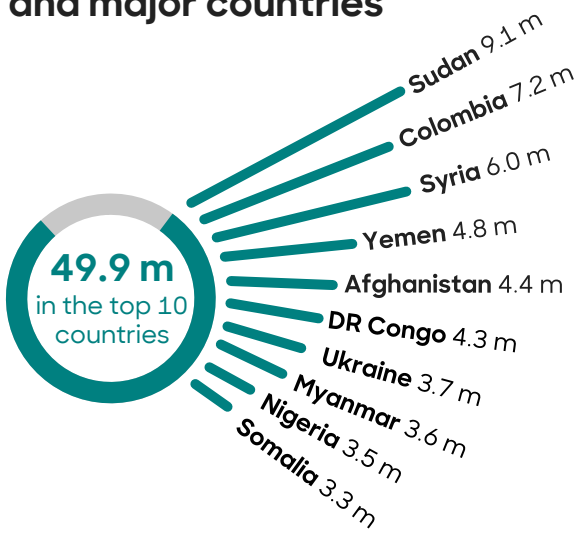
Major facts regarding internally displaced people (IDPs)

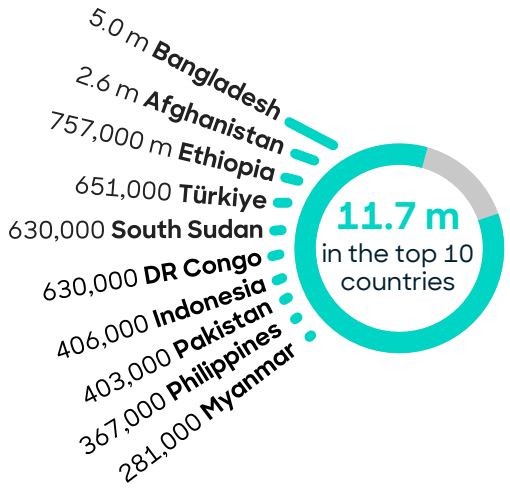
Global number of IDPs (stock) from 2020 to 2025 [m]



Global number of IDPs (stock) by cause of displacement and major countries 2025 [m]

68.6 m as a result of **conflict and violence**





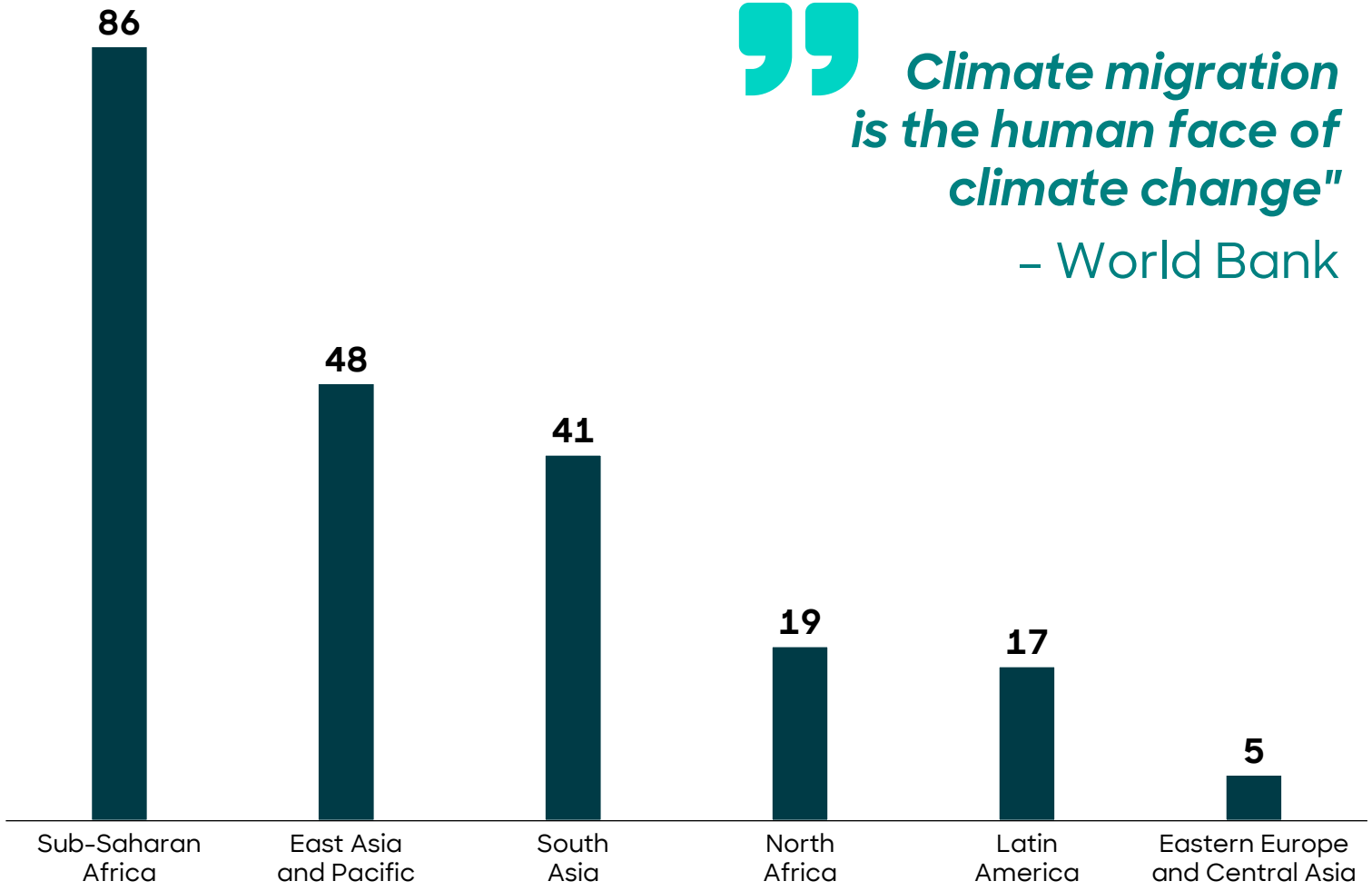
13.6 m as a result of **disasters**

- **Internally displaced people** (IDPs) constitute the overwhelming majority of people to have fled conflict, violence, or disasters worldwide – **without crossing international borders**. In **2025**, their number reached **82.2 million IDPs** in 136 countries and territories. **Sub-Saharan Africa** is by far the most affected **region, with a 38% share** of the global IDP total
- Due to **conflict and violence**, an estimated **68.6 million people were internally displaced** in 54 countries by the end of 2025, while **disasters caused 11.7 million** IDPs in 82 countries and territories
- Regarding **flow**, internal displacement triggered by conflict and violence reached a record high of **32.2 million** in **2025** (+60% vs. 2024), driven primarily by the crises in **Iran** (10 million), the **DRC** (9.7 million), **Palestine** (2.8 million) and **Sudan** (1.7 million). Nearly half of all movements were linked to international armed conflicts, while one third of global conflict displacements occurred in **Iran** concerning temporary evacuations from Tehran
- **Disaster displacement** took place against the backdrop of **weather-related hazards**, such as **storms and floods**, accounting for **91%** of movements; **36%** of global disaster displacements occurred in the Philippines

Source: Internal Displacement Monitoring Centre/Norwegian Refugee Council; Refugee Law Initiative; Roland Berger

Without global action on climate change, over 216 million people may be forced to migrate within their own countries by 2050

Internal climate migrants in selected regions 2050 according to World Bank's pessimistic scenario [m]



Climate migration is the human face of climate change"

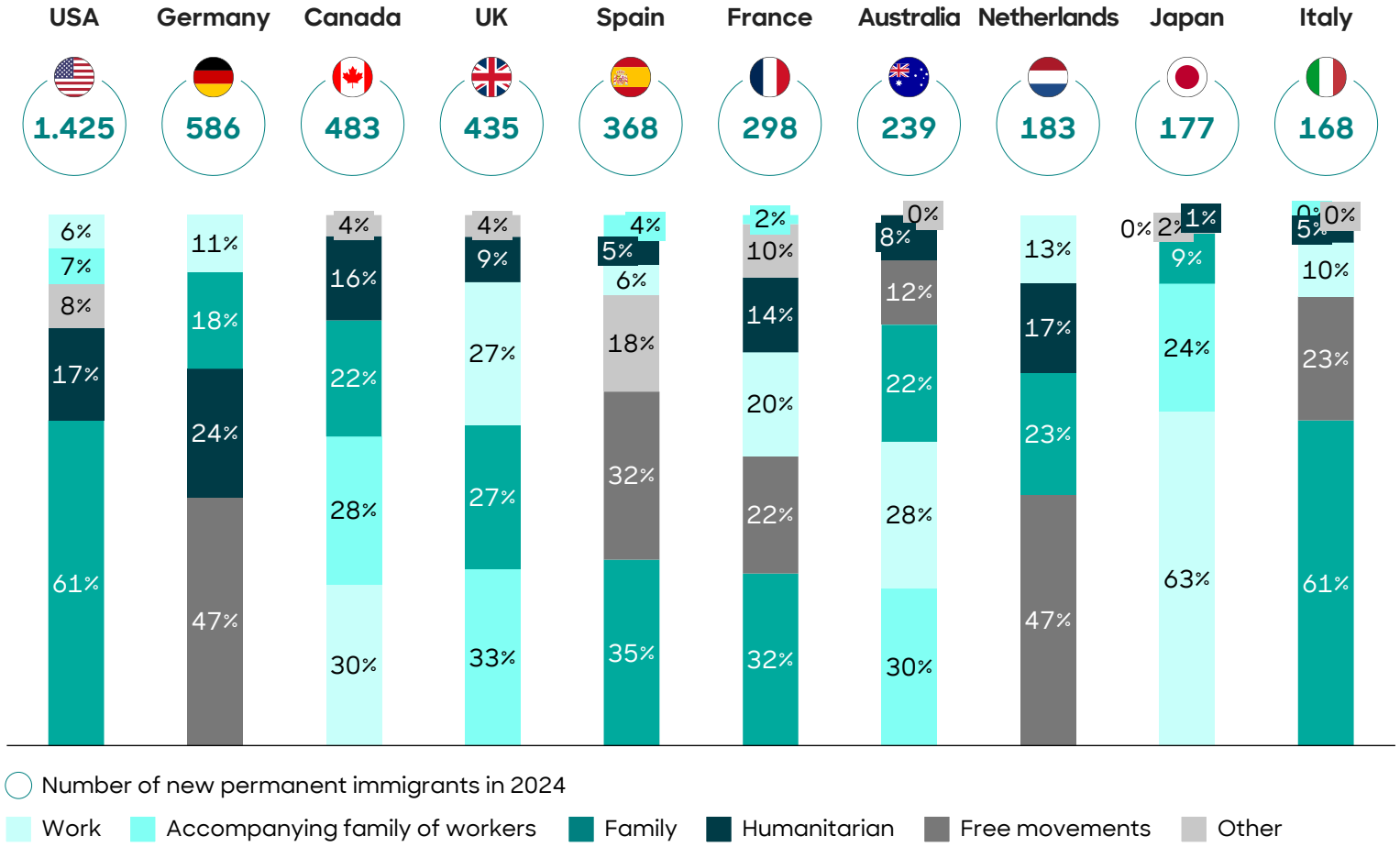
– World Bank

- **Global climate and environmental migration** forecasts to **2050** range widely, from 25 million to 1 billion people
- A **large share of climate migrants** will become **internally displaced,** i.e. they will be forced to move **within their own country** due to increasing climate change impacts such as rising sea levels, crop failure, water stress, etc.
- In a **pessimistic scenario** (high green-house gas emissions combined with unequal development pathways), the World Bank expects **216 million internal climate migrants** across the six defined regions
- Based on these estimates, the **global community** could manage **to lower the number of people forced to move due to climate change by 60-80% –** if we manage to cut greenhouse gases, embed climate migration in development planning, and invest to improve our understanding of internal climate migration in the first place

Source: World Bank; Roland Berger

Migration inflows differ due to national immigration policies and appeal of host nations – Permanent migration is usually due to work or family

Permanent immigration to OECD countries, top 10 by inflow and reasons for permanent immigration, 2024[1] ['000, % of total]



- **Immigration** due to **work or family constitute the largest two motives** to move to a host country, with the former being evident in Canada and Japan, while the latter is strongest in the US, Italy, and Spain
- **Humanitarian** immigration comprises a **minor** share in observed OECD countries
- **Bi-/multi-lateral agreements of free mobility can also foster migration**, for example the Trans-Tasman Arrangement between Australia and New Zealand, and the EU's freedom of movement right among member countries
- Typically, **half of all permanent migration to the OECD is concentrated in the top five destination countries.** In 2024, the US accounted for around a quarter of the total, with 1.4 million new permanent immigrants. However, the **Trump administration has undertaken sweeping policy changes** to drastically curb immigration in his second term of office, i.e. from 2025 onward

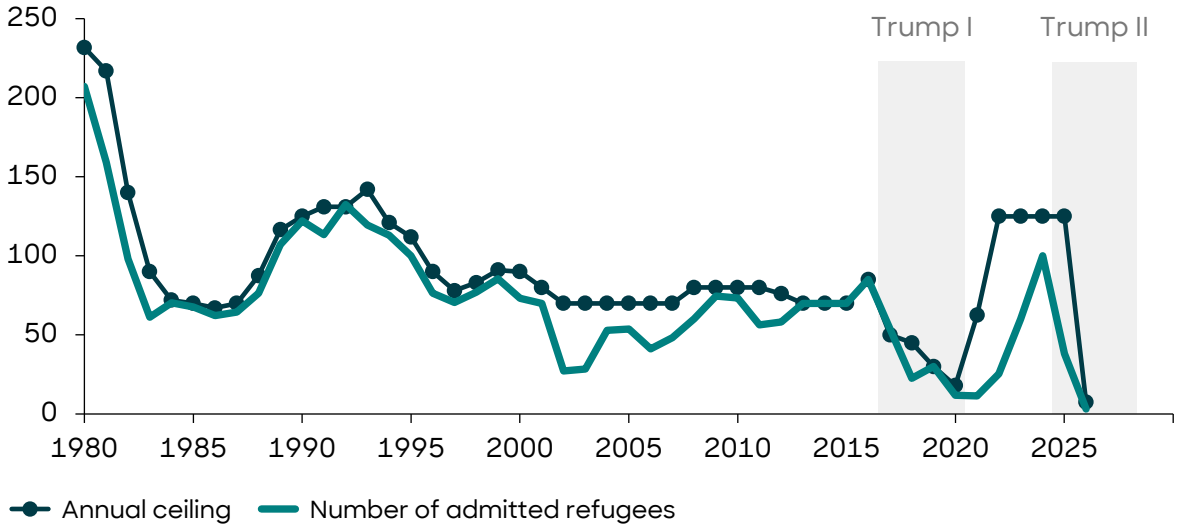
1) Inflow of individuals who change their country of usual residence for a period of at least one year

2) Family members: migrants accompanying labor migrants or joining already residing family members; Work: labor migrants; Humanitarian: forced migrants amid conflicts or disasters; Free movements: migrants benefiting from existing free movement agreements between countries; Other: migrants whose purpose of residence cannot be identified

Source: OECD; Roland Berger

Historically a favorite destination country, Trump's wide-ranging changes to immigration policies are expected to drastically reduce migrant numbers

US refugee resettlement ceilings and refugee admissions, 1980-2026[1] ['000]



"Zero Migration America"

- **US net migration** in **2025** is projected to shift dramatically from its **2024 peak of 2.7 million**, with some **estimates suggesting a drop to between -295,000 and -10,000 (negative net migration)** due to reduced arrivals and increased removals
- For **2026**, **net immigration** will likely **remain in negative territory** (within a projected range of -925,000 to +185,000), according to Brookings. However, alternative projections by the U.S. Census office predict around +321,000 in 2026 – if current trends continue

Key US policy changes affecting immigration, 2025 onward (selective)

Drastic admission cuts: **refugee admission ceiling set at 7,500** for fiscal year 2026 – the lowest in the 45-year history of the US Refugee Admissions Program

Expanded travel bans: as of January 1, 2026, **travel bans** were expanded to completely **bar entry to citizens from 19 countries**, including several in the Middle East and Africa

Targeted resettlement shifts: admissions are heavily **focused on specific groups**, such as Afrikaners from South Africa - a move away from traditional refugee sources

Green card and status reviews: in November 2025, the administration ordered **a halt to green card processing for refugees** admitted previously and a reevaluation of their status

Reduced support services: **food assistance** for newly arrived refugees **was ended** via the "One Big Beautiful Bill Act" in October 2025

Excluded UNHCR vetting: in early 2025, the Trump administration departed from the existing United Nations High Commissioner for Refugees (UNHCR) framework, **stopping the reliance on UNHCR for initial refugee screening**

Program suspension and review: an executive order issued on January 20, 2025, **halted all refugee admissions and services for a 90-day review**

1) Refugee admissions and annual resettlement ceilings since inception of the U.S. refugee resettlement program in 1980. Refugees are individuals who are unable or unwilling to return to their country of origin or nationality because of persecution or a well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion

Source: MPI; Brookings; The Economist; Forum Together; IRC; OECD; Roland Berger

Migration policy development in many countries show starker restrictions, third country processing trends, and a shift to more skills-based approaches

Current and future migration policies developments (selective)

Canada

- Implementation of significant changes to **student work permits**, **settlement services**, and **"super visa" requirements**

USA

- In line with President Trump's goals regarding migration, the **US** has shifted toward aggressive border controls, targeted **visa holds**, **highly restrictive (re-) vetting,** and an **"enforcement-first"** model, including mass enforcement of **deportations**

Brazil

- A **primary destination** for South American migrants and a **regional hub for relocation, Brazil** has a focus on **long-term integration** through its flagship project, Operation Welcome, which has facilitated the legal regularization of more than 600,000 Venezuelans and supported over 160,000 in relocating voluntarily to municipalities across Brazil
- Since 2026**, Brazil is transitioning** from this flexible, ad-hoc humanitarian model to a more structured, single **Unified Humanitarian Visa Framework**, entailing new enforcement measures and administrative hurdles

UK

- Instead of offshoring (after the failed UK-Rwanda scheme terminated in early 2026), the **UK** is focusing on its **new "Border Security Command"** and a **"one in, one out" plan** with France
- Other restrictive shifts include: **reducing refugee protection duration** (to 30 months, down from five years), stricter **English requirements** for skilled workers, and tighter **sponsor compliance.** There is also a **new visa brake affecting several nationalities.** For students, **graduate visa duration will be reduced** to 18 months from 2027, down from 2 years

EU

- Effective **June 2026**, the **new EU Migration and Asylum Pact** allows all 27 member states to use a **common "safe third country" list** (including Bangladesh, Colombia, Egypt, India, Kosovo, Morocco, and Tunisia) to fast-track or reject asylum claims
- Based on the Italy-Albania **extraterritorial asylum processing model,** efforts are underway to build **"return hubs" outside Europe** for migrants whose asylum applications have been rejected, with operations planned to start **late 2026**
- The **EU Blue Card** directive, aimed at **highly skilled worker migration,** now allows for lower salary thresholds, shorter contract requirements, faster family reunification, and easier movement between member states

India

- The **Immigration and Foreigners Act 2025** aims at more unified reporting and **mandatory registrations;** it includes higher penalties and **digital monitoring**
- A **mandatory e-Arrival Card** requirement for all foreign travelers was launched in April 2026

Japan

- Introduced in 2025, the so-called **Zero Plan** is a broad crackdown to **reduce the number of illegal overstayers to zero** and to cut asylum processing times to six months by 2030
- Latest updates include a **new permanent residence eligibility rule**, **tightened naturalization requirements,** and planned **fee rises**
- Planned for **2028** is a new online **pre-travel screening system** for visa-exempt travelers (JESTA)

Australia & Oceania

- **"Anti-visa hopping" rule:** new regulations effective **early 2026** restrict onshore switching between visitor and student visas, aiming to reduce Australian temporary visa numbers by 85,000 p.a. – while **student visa refusal rates** hit a new **high** (32.5%), particularly impacting applicants from Nepal, Bangladesh, and India
- **Climate visa:** With the Pacific region a **"lived reality" for climate migration**, small island states are increasingly **advocating for migration as a strategy,** not as a last resort. To this end, **Tuvalu and Australia** have agreed on the world's first **"climate visa"** pathway, which allows 280 Tuvaluans p.a. to relocate to Australia with a level of support usually reserved for citizens

1) Source: ICMDP; desk research; Roland Berger

The use of AI in all areas migration management promises to increase efficiency, reduce uncertainty, and improve decision making

Application of AI technologies in the migration cycle

1 Pre-departure

- Government visa information chatbots
- Visa application lodgment e-platforms
- Automated profile and security checks
- Private sector visa service chatbots
- Decision-making in visa application

2 Entry

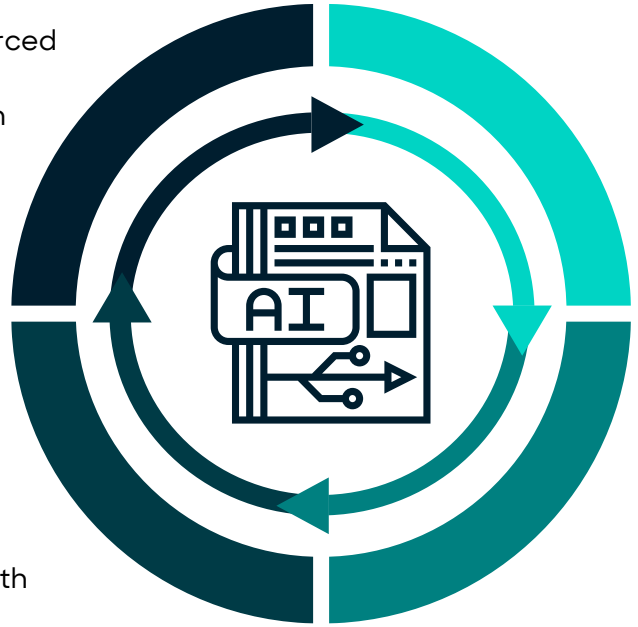
- Arrival information via chatbots
- Automated identity verification checks with biometric data
- Automated security checks with biodata
- AI drone monitoring of borders
- Behavioral analysis identifying hostile intent
- Risk profiling

3 Stay

- Chatbot for immigration information
- Facial recognition to spot undocumented migrants
- Legal advice for refugees with chatbots
- Job-matching
- Provision of humanitarian aid via digital identity systems

4 Return

- Returning migrant worker's "smart card" in origin countries
- Community detection for forced return
- Return decision-making with machine learning

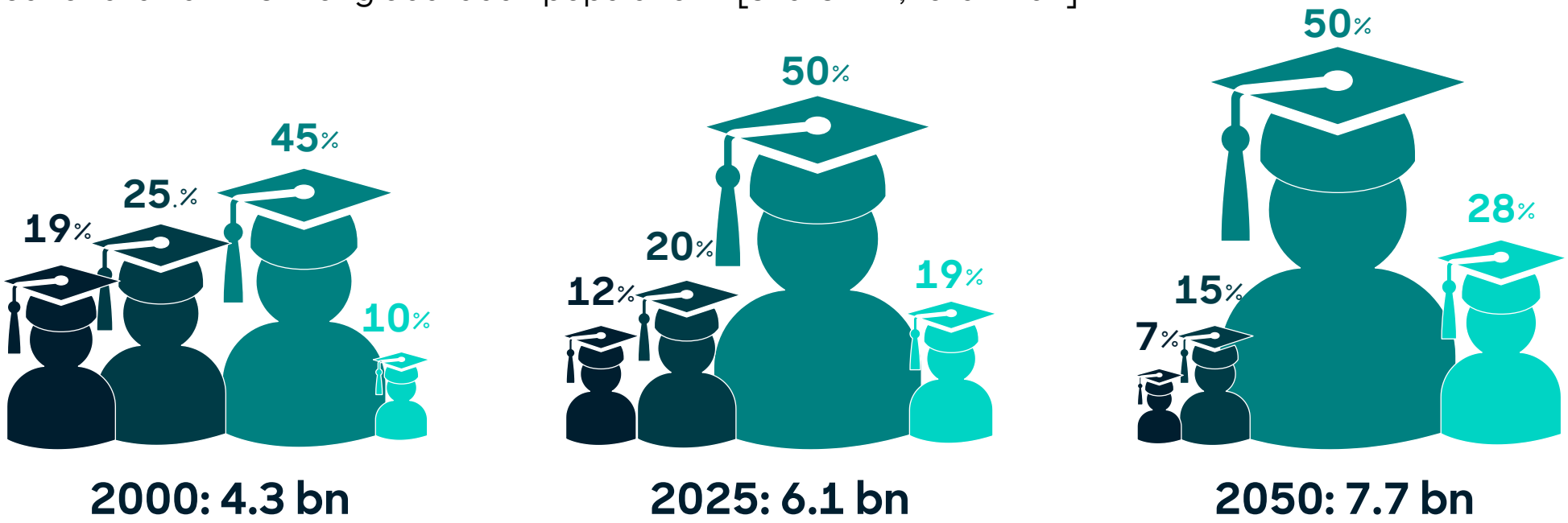


- **Artificial intelligence** (AI) technologies are increasingly used around the world in the **many complex areas of migration and asylum**, helping to administrate the movement of people more efficiently
- **In a best case, AI can be integrated along the entire (im)migration cycle** in activities such as information delivery via chatbots, identity and security checks, visa applications, and legal compliance of people on the move. Hence, **access to real-time information becomes possible alongside improved system efficiency**
- AI usage in migration poses several challenges: **rising migrant surveillance** and **possible algorithm bias** may harm migrants' basic rights to privacy and equality. Moreover, a lack of IT infra-structure in developing nations may lead to **growing isolation from AI-driven international migration management elsewhere**

Source: McAuliffe et al.; European Parliament; IOM; Roland Berger

Educational attainment has come a long way – Staying in education longer is now the new global norm and still growing to 2050

Educational attainment of global adult population[1] [share in %, total in bn]



- Our world will be inhabited by a **growing number of educated people,** while the number of individuals lacking formal education keeps falling
- The **rising level of educational attainment** is a result of **changing attitudes towards education**, more **public investment**, **new methods**, and wide-ranging **international support,** such as the **United Nations Sustainable Development Goals (SDGs) 2030** placing education at the heart of global development through **Goal 4: Quality Education** which aims to "ensure inclusive and **equitable quality education** and **promote lifelong learning** opportunities for all" and covers primary and secondary education, early childhood development, vocational training, and skills for employment
- By **2050,** only **16 countries** are predicted to have a share of **non-educated people** that is **>20%**

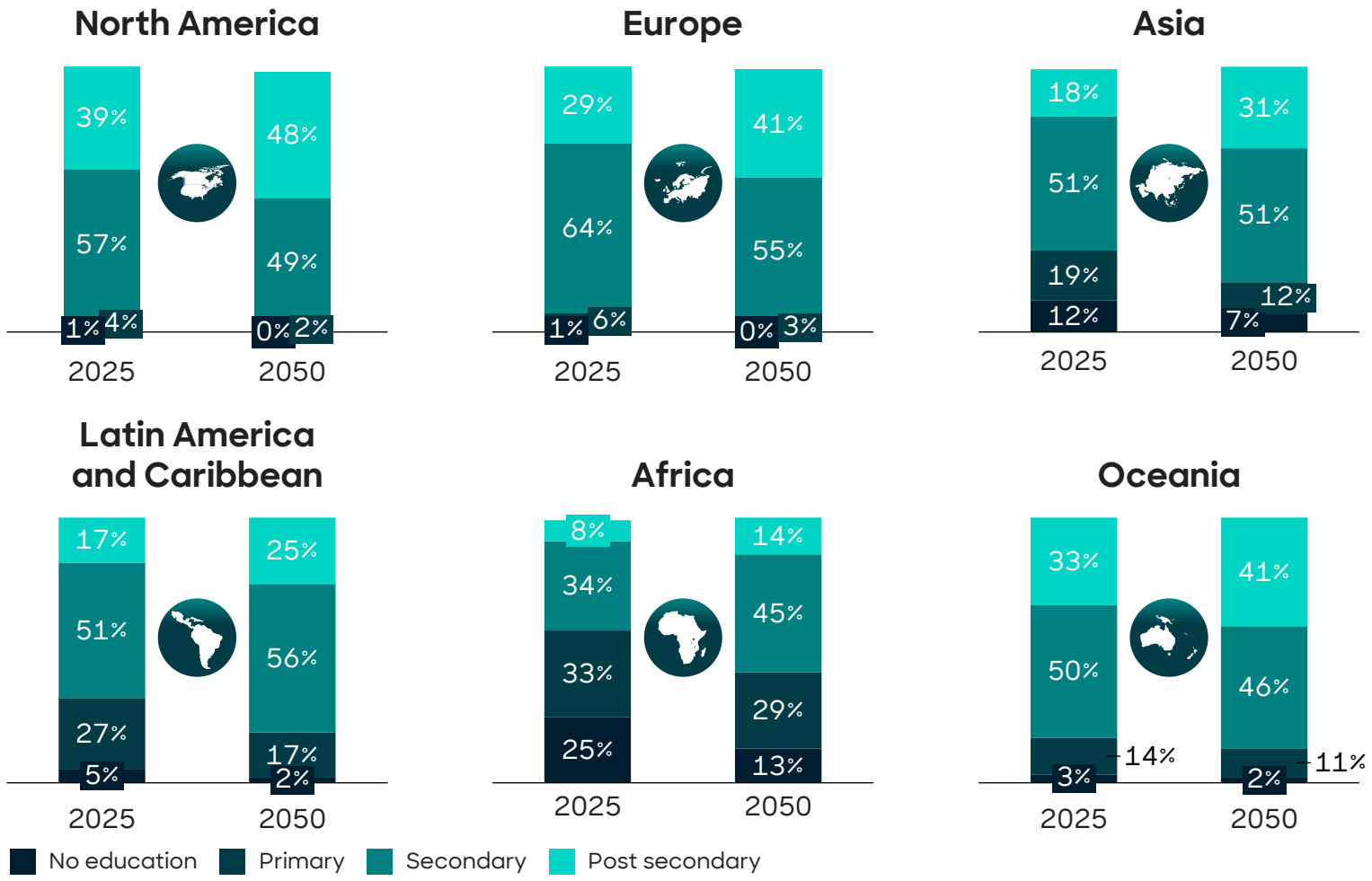
No education | Primary[2] | Secondary[3] | Post secondary

1) People >15 years; 2) Includes incomplete primary as well as completed primary education; 3) Includes lower secondary as well as upper secondary education

Source: Wittgenstein Centre; Roland Berger

The share of post secondary attainment is increasing in all regions to 2050 – Regionally, educational attainment levels continue to vary substantially

Educational attainment of adult population per region[1] [share in %]



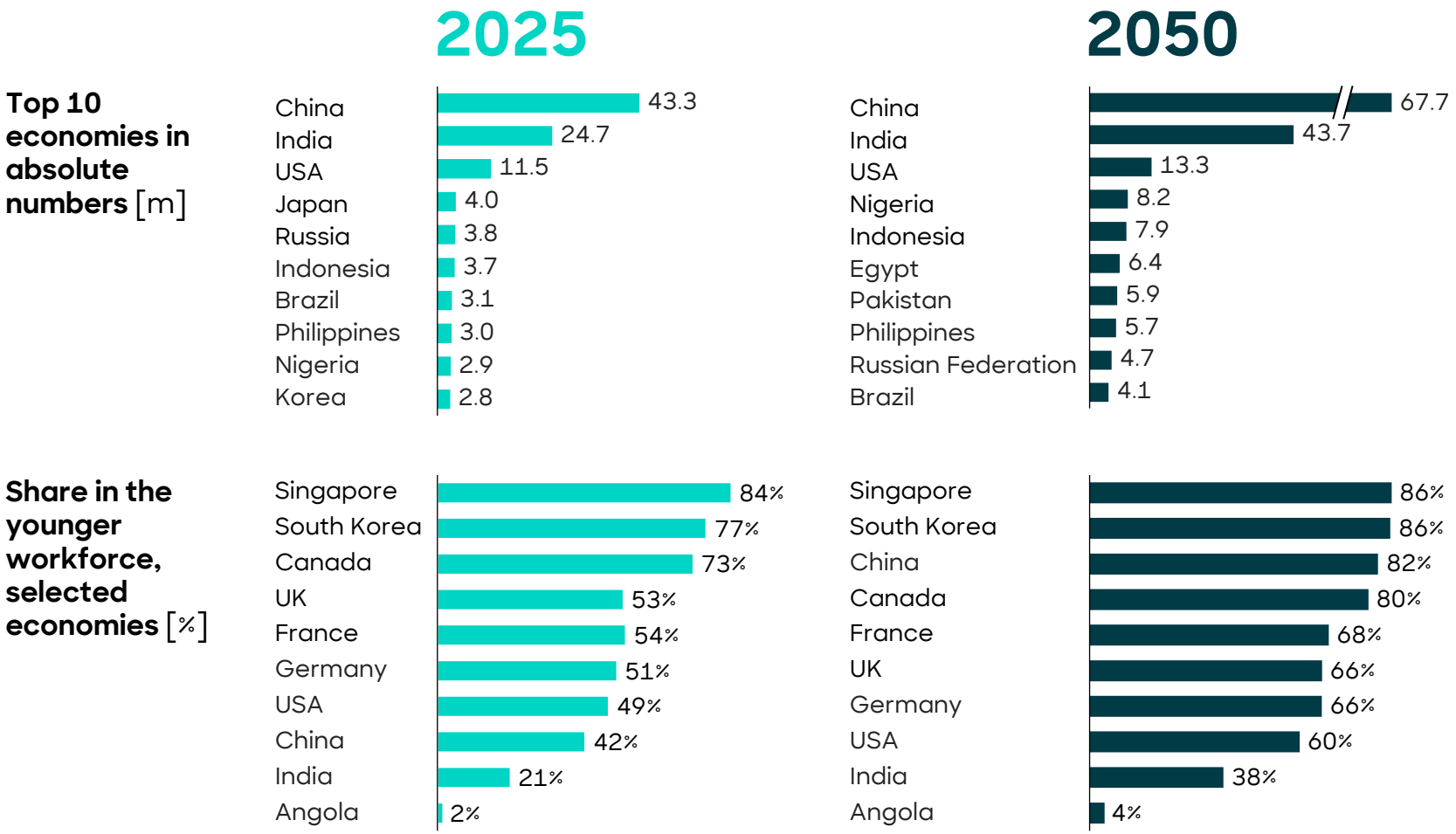
- By 2050, **all regions** will have achieved **increases** in **post secondary educational attainment levels.** However, these increases will vary widely, from 48% in North America to 14% in Africa
- At **post secondary level, Europe will experience the largest percentage point rise** of all regions, from 29% to 41%. Only North America will have a larger share in 2050
- **Asia and Latin America** will have 31% resp. 25% of their adult population educated to **post secondary level –** significantly more than in 2025
- By contrast, **one in four people in Africa** and **nearly one in eight people in Asia** have **no education** in 2025. However, over the next three decades, **both regions will successfully lower this proportion.** Nevertheless, both regions continued to have the largest share of people without any basic education

1) People >15 years

Source: Wittgenstein Centre; Roland Berger

China and India are projected to continue having the largest highly skilled young workforces – Singapore and South Korea lead in relative terms

Post-secondary education in the younger workforce (aged 30-34), 2025 and 2050

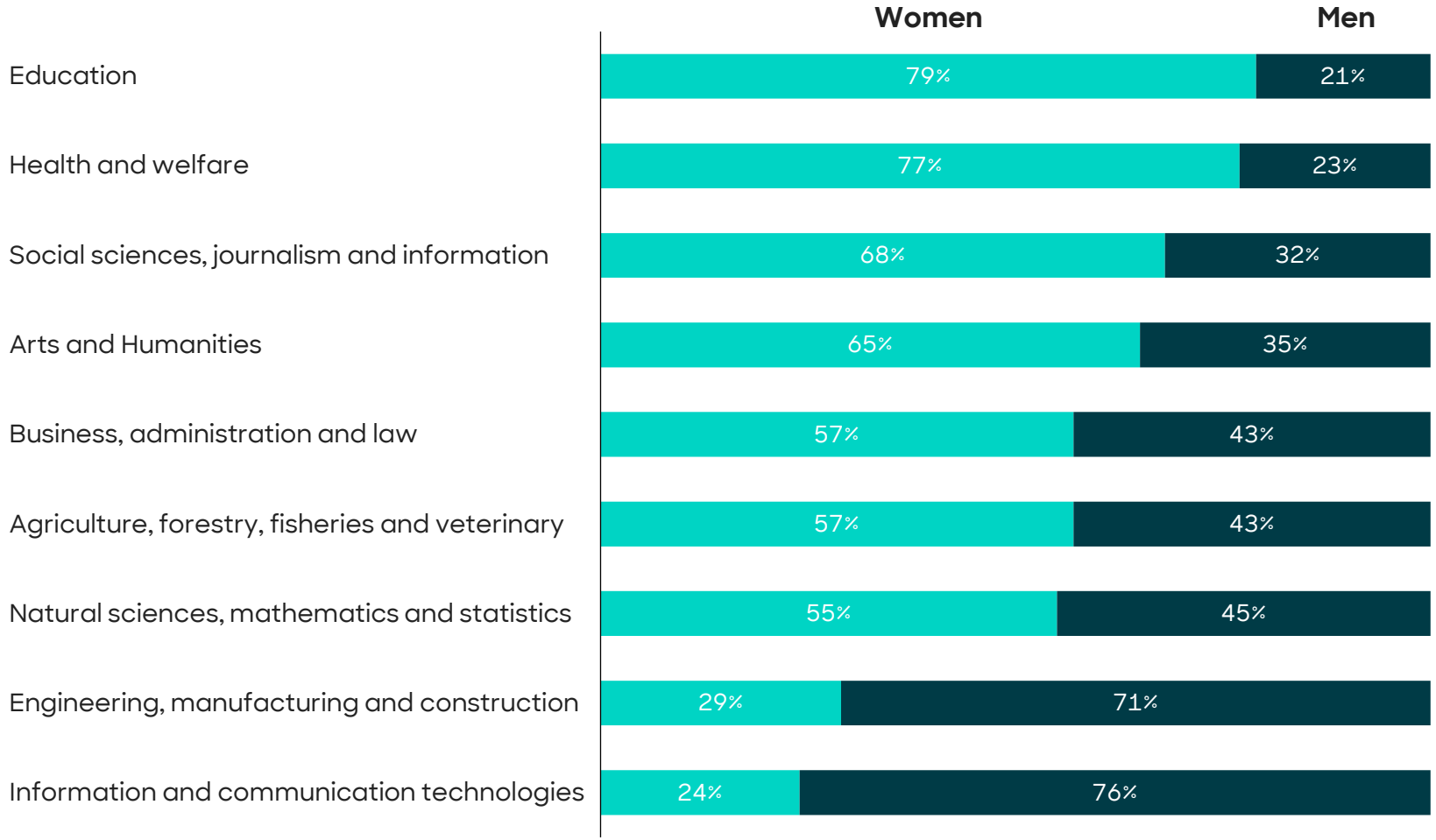


- When it comes to **higher education** among the **young population, Asian** nations are **leading – both** in **absolute and relative** terms. This will likely **remain** the case for decades to come
- In terms of providing the world with a highly educated younger workforce, **China and India will lead for the next three decades,** with a total number that exceeds that of the next eight countries combined
- By **share of population**, **even more Asian countries** rank among the **top positions** in the highly educated younger workforce leaderboard in 2050
- By contrast, many countries in **Sub-Saharan** Africa like Angola or Mozambique experience due to widespread **poverty**, **early dropouts** an resource constraints

Source: Wittgenstein Centre; Roland Berger

Across fields of study, the share of women and men varies significantly – In engineering and IT, less than a third of graduates are women

Proportion of female and male tertiary graduates by field of study, global average, 2023 [%]

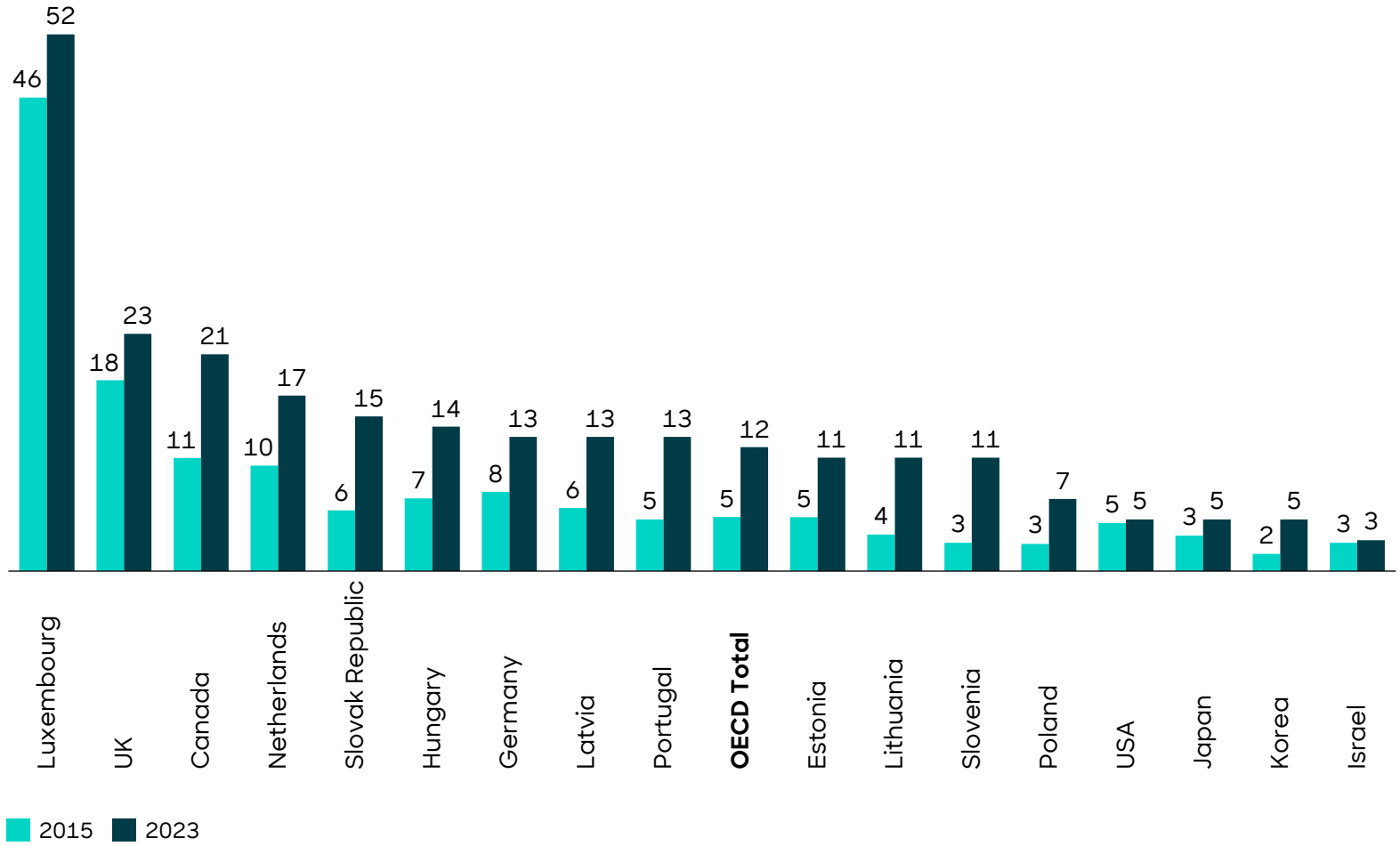


- Advances in women's enrolment in education not withstanding, in terms of **fields of study, gender gaps are highly evident**
- Globally, **women** make up the majority of graduates in fields related to **education, health and welfare, social sciences, journalism and information** as well as **arts and humanities**
- Most graduates in **engineering and ICT** are **men**
- Fields of study such as **business, law and natural sciences** are more equally **balanced**

Source: OECD; UN SDG; Roland Berger

Education is becoming more international as the rise in global student mobility shows

International tertiary-level students as a share of all tertiary-level students, 2015 and 2023 [%]



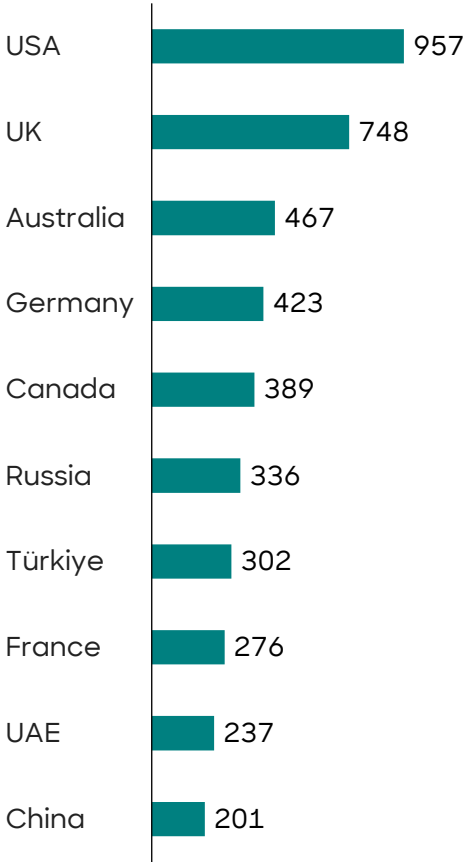
- In **2023,** over **6 million international students** worldwide travelled abroad for education, of which 5.1 million enrolled in OECD countries. **By 2030**, the total international student population is projected to reach **8.5 million**
- Across OECD countries, the share of international students more than doubled from **5% in 2015 to 12% in 2023,** although developments differ substantially across countries
- **Smaller and highly internationalized economies** such as **Luxembourg (52%), the UK (23%), and Canada (21%)** report particularly high shares of international students in tertiary education, while most other OECD countries still remain below 15%
- From a migration policy perspective, **international students** constitute a distinct group, often viewed as **"pre-integrated" migrants** whose locally obtained qualifications and language skills are easily acknowledged by employers

Source: OECD; UIS/UNESCO; QS; Roland Berger

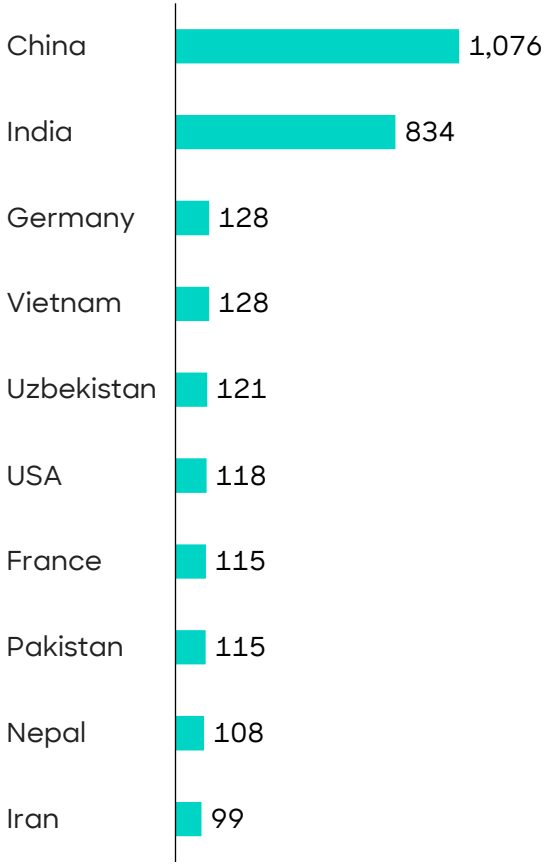
Anglosphere countries are the most popular destinations for international students – Most international students originate from Asia

Top 10 countries for inbound and outbound students, 2023

Number of inbound students, top 10 countries ['000]



Number of outbound students, top 10 countries ['000]

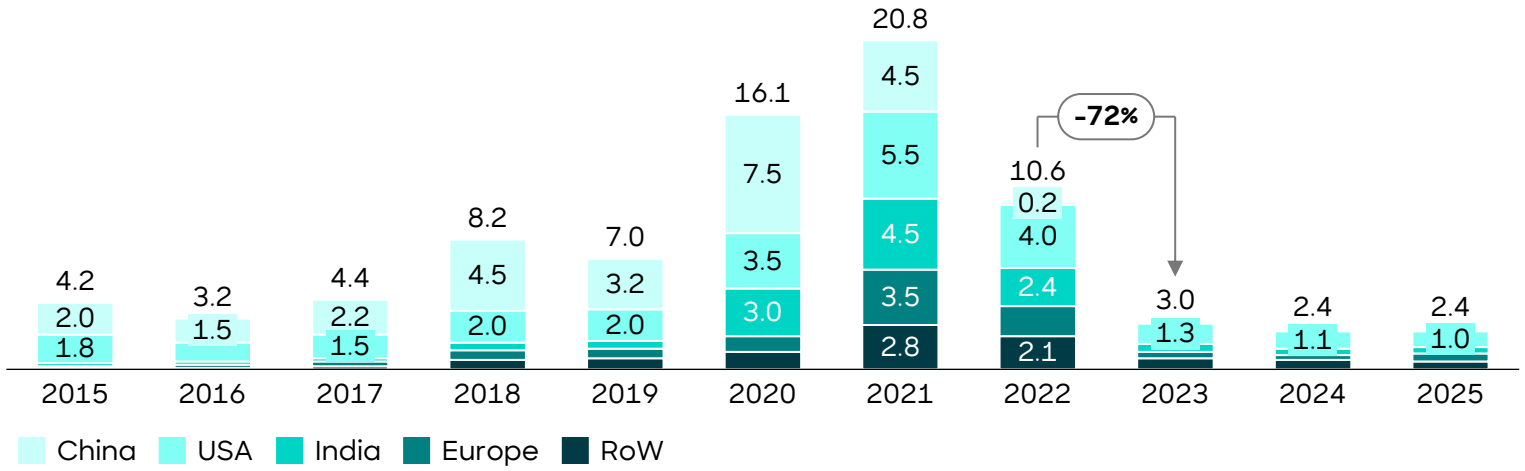


- Rankings of the most **popular destination countries** clearly highlight the dominance of the **anglophone countries,** with the US, the UK, Australia, and Canada in the top 5 by inbound student numbers
- The **main countries of origin have mostly remained stable over the past decade,** with **China** and **India** vying – and in some years alternating – for first and second place
- The **proportion of international students rises** in line with the **level of education:** across OECD countries, international students account for 12% of those enrolled in tertiary education programs, 19% in master's programs and 27% in doctoral study programs
- Major **factors of mobility** are **teaching quality** (including prestige), **capacity** (including visas), **teaching language,** as well as personal means of **funding** foreign studies
- Although **quality of education** remains highly important – with strong academic, internationally prestigious institutions in North America and Europe having long-standing appeal – **language is another key factor,** keeping English-speaking destination countries highly relevant. At the same time, English-language taught **courses are becoming commonplace in non-English-speaking countries**, such as Germany, the Netherlands, and parts of Asia, adding new destinations to the global competitive mix
- To counteract the clear pull of the Anglophone tertiary education market – **most other major countries** around the world have set themselves considerable **strategic targets for international student recruitment** as part of their overall national educational policies

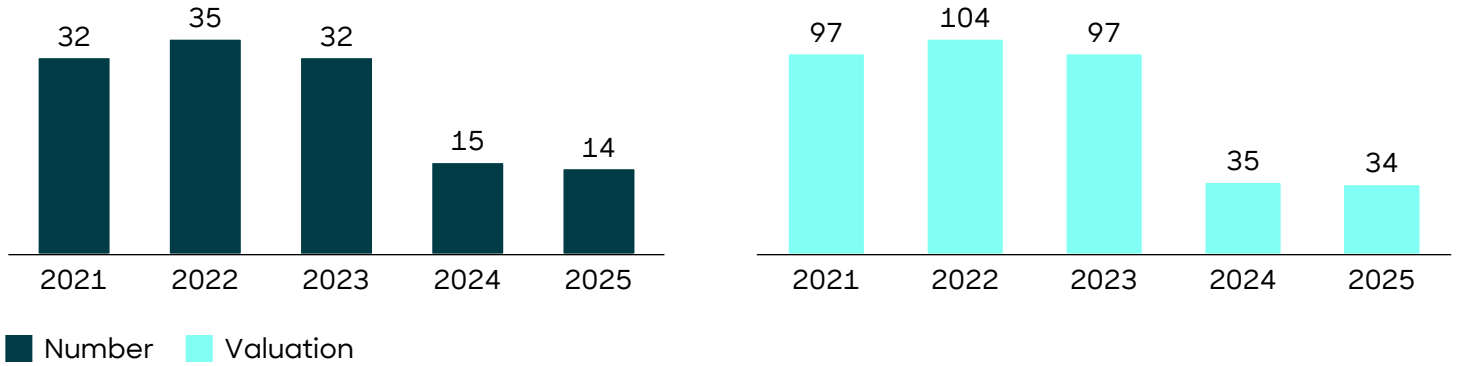
Source: OECD; Roland Berger

Post-pandemic, global education VC funding has experienced a clear correction – Also reflected in the number and valuation of EdTech unicorns

Global education VC funding, by country, 2015-2025 [USD bn]



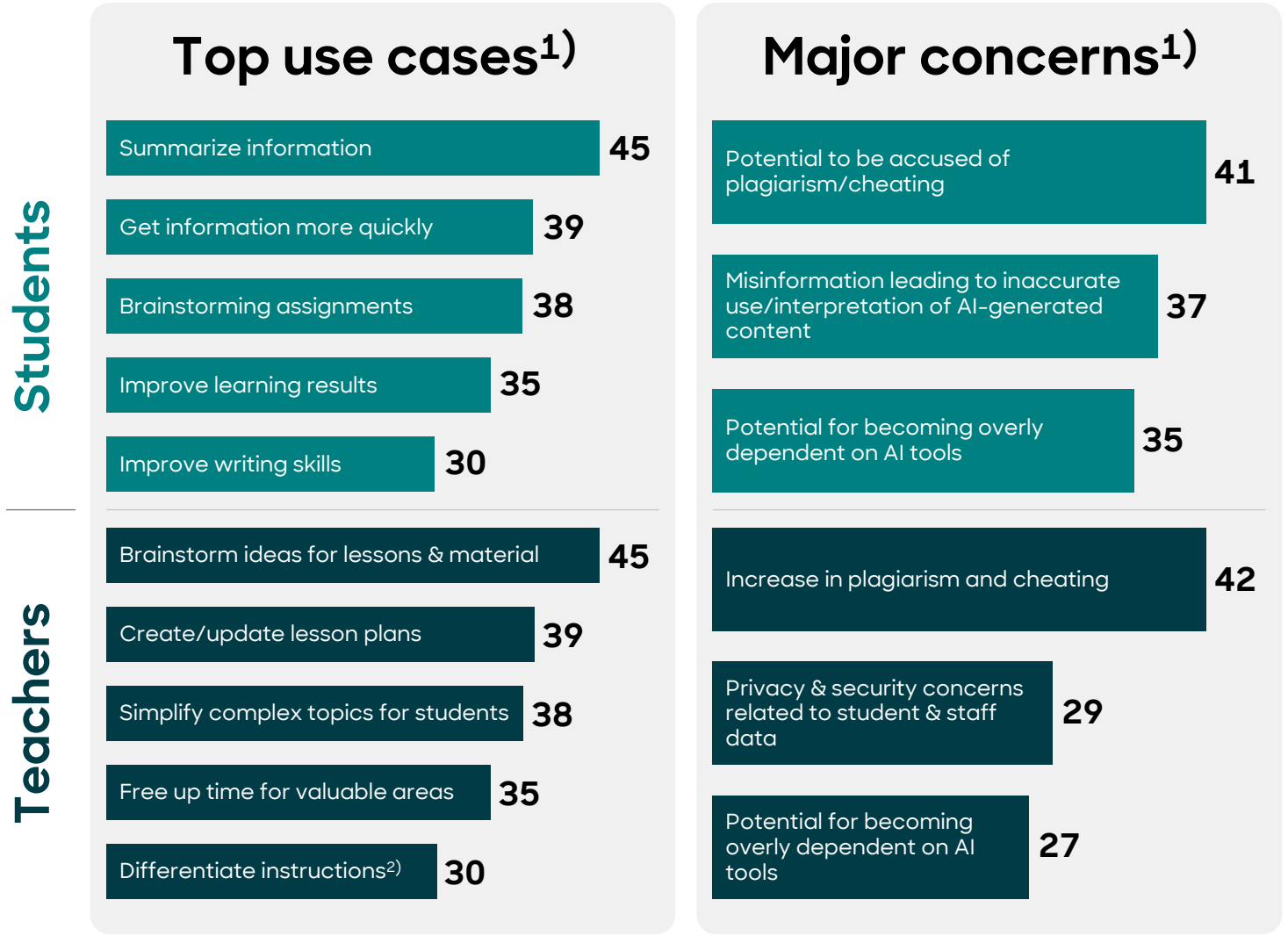
Number and valuation of EdTech unicorns, 2021-2025 [#, USD bn]



- Accelerated by the global pandemic and driven by a growing demand for **flexible, scalable, and technology-enabled learning solutions** across academic and professional settings, **digital learning has become ubiquitous**
- After a notable boom, global **VC funding in educational technology (EdTech)** companies experienced a strong correction following the COVID-19 pandemic, **declining** from a peak of **USD 20.8 billion in 2021 to USD 2.4 billion in 2025** (-69.5%)
- While the **US** and **China** dominated **funding volumes** during the peak years, investment activity has since **normalized significantly across all regions**
- The number and valuation of **EdTech unicorns** follows a similar trajectory: after peaking at **35 unicorns with a combined valuation of USD 104 billion in 2022,** the market corrected to **14 unicorns valued at USD 34 billion in 2025,** reflecting lower market multiples, funding normalization, and increasing investor selectivity

Source: Holon IQ; Roland Berger

AI has already entered the classroom, shaping how the next generation learns, works, and navigates an AI-driven world



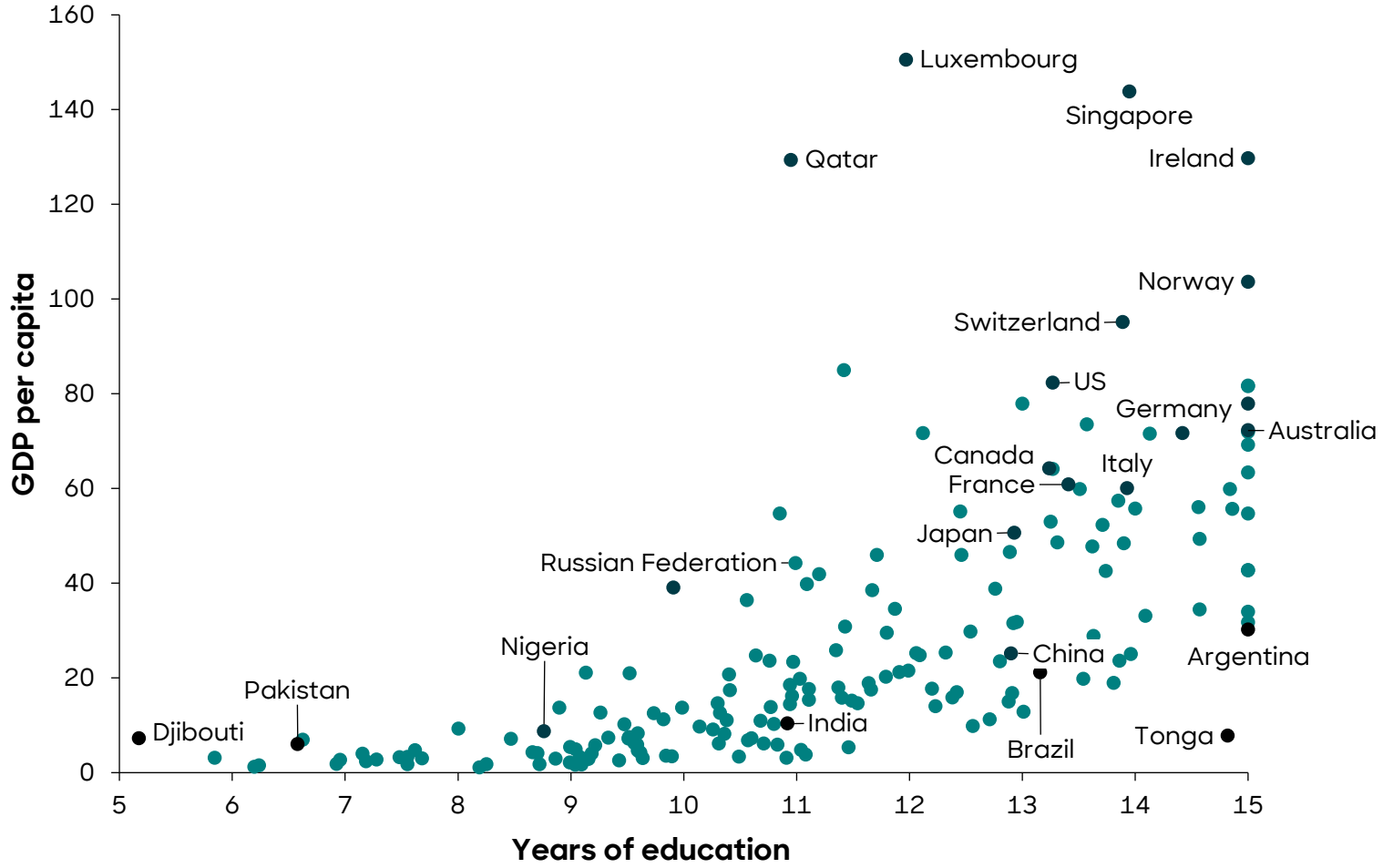
- Artificial intelligence is **rapidly transforming education**, with **adoption accelerating across classrooms**, **administration**, and **curriculum development.** AI has the potential to enhance learning outcomes, reduce administrative workloads for educators, and enable more personalized and adaptive education
- The widespread adoption of AI also raises **important challenges**, particularly around **academic integrity, misinformation, data reliability,** and **the risk of students and teachers becoming overly dependent** on AI-powered tools at the expense of critical thinking and problem-solving skills
- Educational **institutions** are increasingly shi**fting their focus from whether to adopt A**I to **how to integrate it responsibly,** emphasizing governance, digital literacy, and the development of AI-related competencies among both students and teachers
- Venture capital investment in education technology **has moderated,** in part because large, **established technology platforms** have **integrated education-related AI capabilities directly into their existing ecosystems,** reducing the addressable market and competitive space for standalone EdTech startups

1) Sample represents K-12 and higher education leaders and educators globally. 2) Differentiate instructions to address students needs

Source: Microsoft AI in Education Report

Education is key to prosperity – While time spent in education translates into prosperity after a certain number of years' schooling …

Average number of years of education completed in 2023 related to GDP per capita PPP in 2023[1)] [years, USD '000]



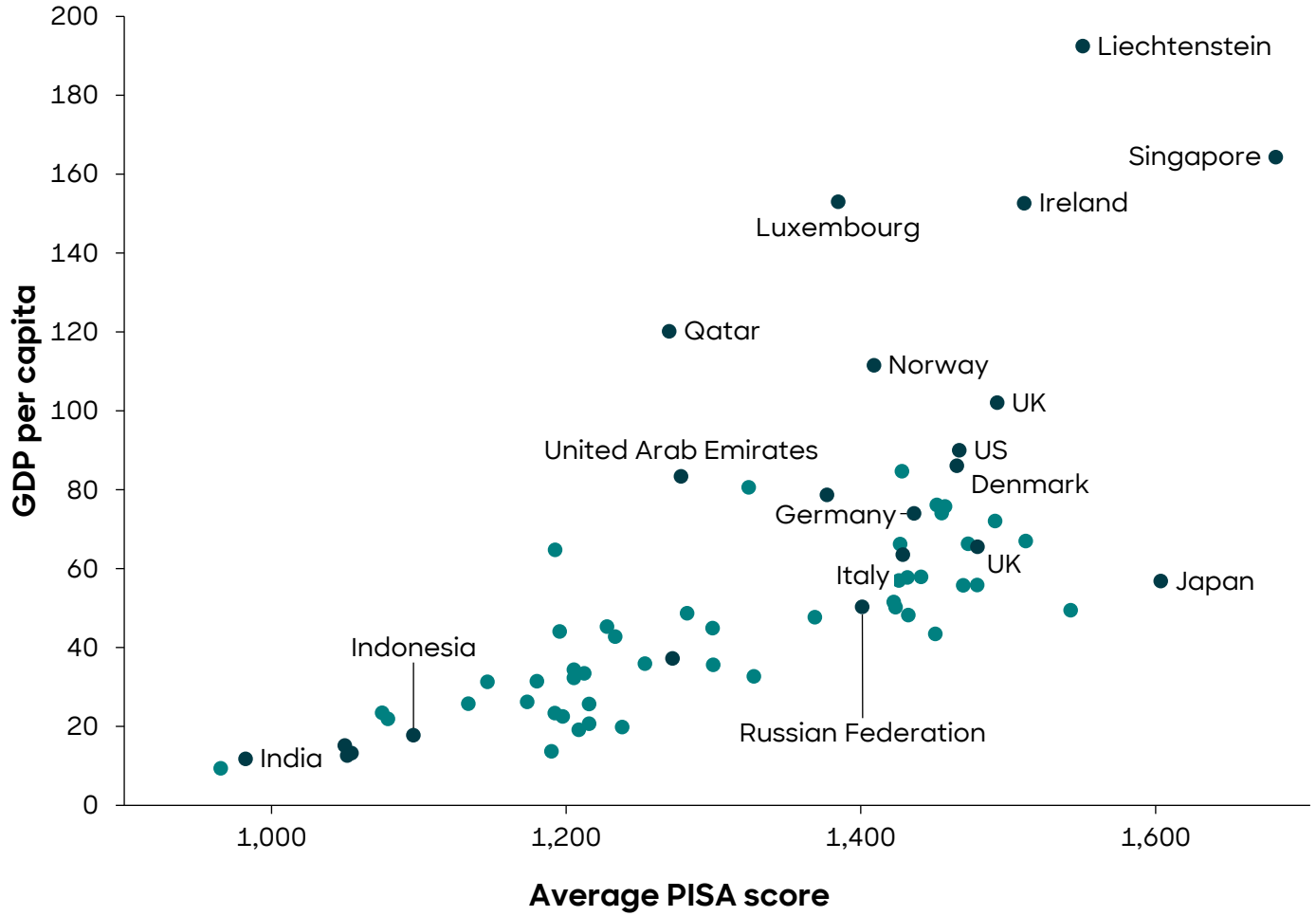
- Over the past two centuries, countries around the world have made **remarkable progress in educational outcomes.** For instance, while only 12% of the global population could read and write in 1820, by 2023, this figure had reversed, with fewer than 12% remaining illiterate
- Broadly put, people from wealthier countries have completed more years of schooling, on average, highlighting the **importance of education in fostering national prosperity**
- **Education may drive economic growth via three channels:** (1) **boosting productivity** by enhancing human capital; (2) **facilitating** development of **new technologies,** products, and processes; (3) **improving knowledge diffusion** for utilizing current technologies and skills
- An important **caveat,** however, is that **years of schooling** do **not account for cross-country differences in the quality of education.** Other factors, such as family and peers, can influence individual learning outcomes as well

1) Number of years of education completed by people aged 25+. PPP stands for purchasing power parity. GDP per capita PPP in current (2020) international dollar

Source: UNDP/Global Data Lab; World Bank; Hanushek & Woessmann; Roland Berger

… the same applies – even more strongly – to the relationship between educational quality and prosperity

Average PISA score related to GDP per capita PPP in 2025[1)]
[score, USD '000]



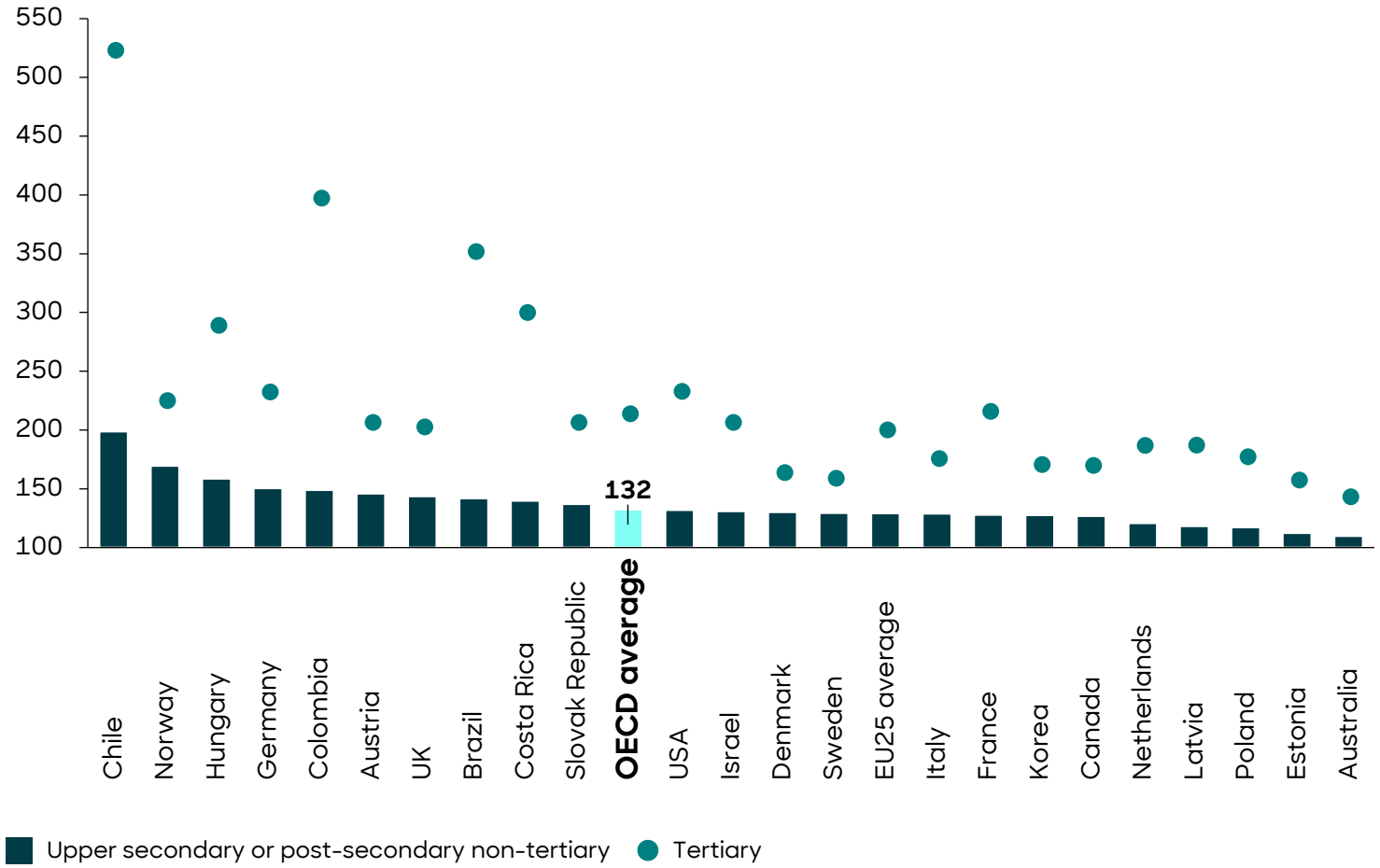
- Data shows that average incomes, as measured by **GDP per capita, increase** not only with the number of years spent in education, but are **also with the quality of education**
- **PISA scores** are an expression of **educational quality** providing standardized, internationally comparable measures of student **learning outcomes,** thus helping to evaluate the **economic importance of human capital**
- **Low educational performance,** can have **many causes.** In poorer countries, **a lack of qualified teachers combined with inadequate resources,** such as unhealthy environments and poor nutrition, can play a role
- In addition, some of the **most capable students** from poorer countries often **migrate.** This selective aspect of migration can **lead to lower outcomes in the students' home countries** while boosting outcomes in the countries where they eventually pursue their education
- The **link** between both education quantity and quality, and income is **bidirectional: richer countries** can **invest more in education** systems, improving and enlarging them. And, in richer countries **more young people** have the **financial means to stay in education for longer** before starting their professional careers

1) The PISA score represents the respective countries sum of the average scores for the three dimensions Reading, Math and Science; PPP stands for purchasing power parity. GDP per capita PPP in current (2025) international dollar

Source: OECD; World Bank; Euromonitor; Roland Berger

Education is beneficial for both the economy and the individual, as higher levels of education translate into higher incomes

Relative earnings of adults (aged 25-64) by educational attainment, 2022[1] [%]



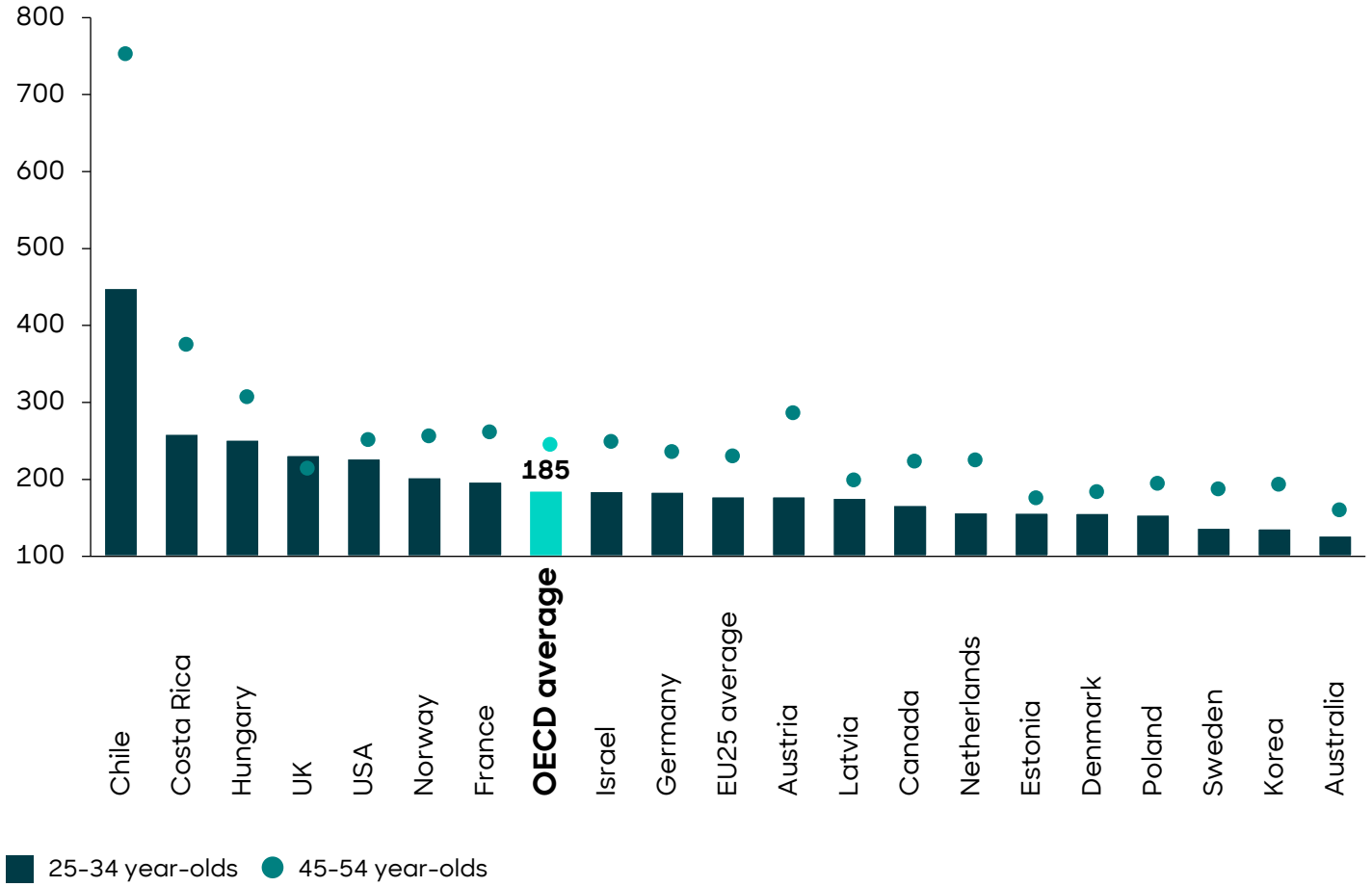
- In general and across most countries, achieving **higher levels of education,** especially at the tertiary level, leads to **higher earnings**
- On average, in 2022, individuals with upper-secondary or post-secondary non-tertiary education **earned 32% more than those without** upper-secondary education in OECD countries
- Chile stands out as a clear outlier: Tertiary-educated adults earned roughly **420% more than individuals without upper-secondary education**
- However, this **earnings advantage associated with tertiary education differs significantly** across countries. For instance, in Australia or Estonia, the premium only amounts to between **40 and 60%**
- This earnings advantage stems from the fact that **tertiary education** often provides individuals with **specialized knowledge and skills** in **high demand in the job market.** However, variations exist in different sectors and circumstances

1) Relative earnings refer to the income of full- and part time workers; below upper secondary = 100

Source: OECD; Roland Berger

Although higher education leads to higher earnings in all regions, salary differentials widen over the course of a professional career

Relative earnings of adults with at least a bachelor degree or equivalent, by age group, 2022[1] [%]



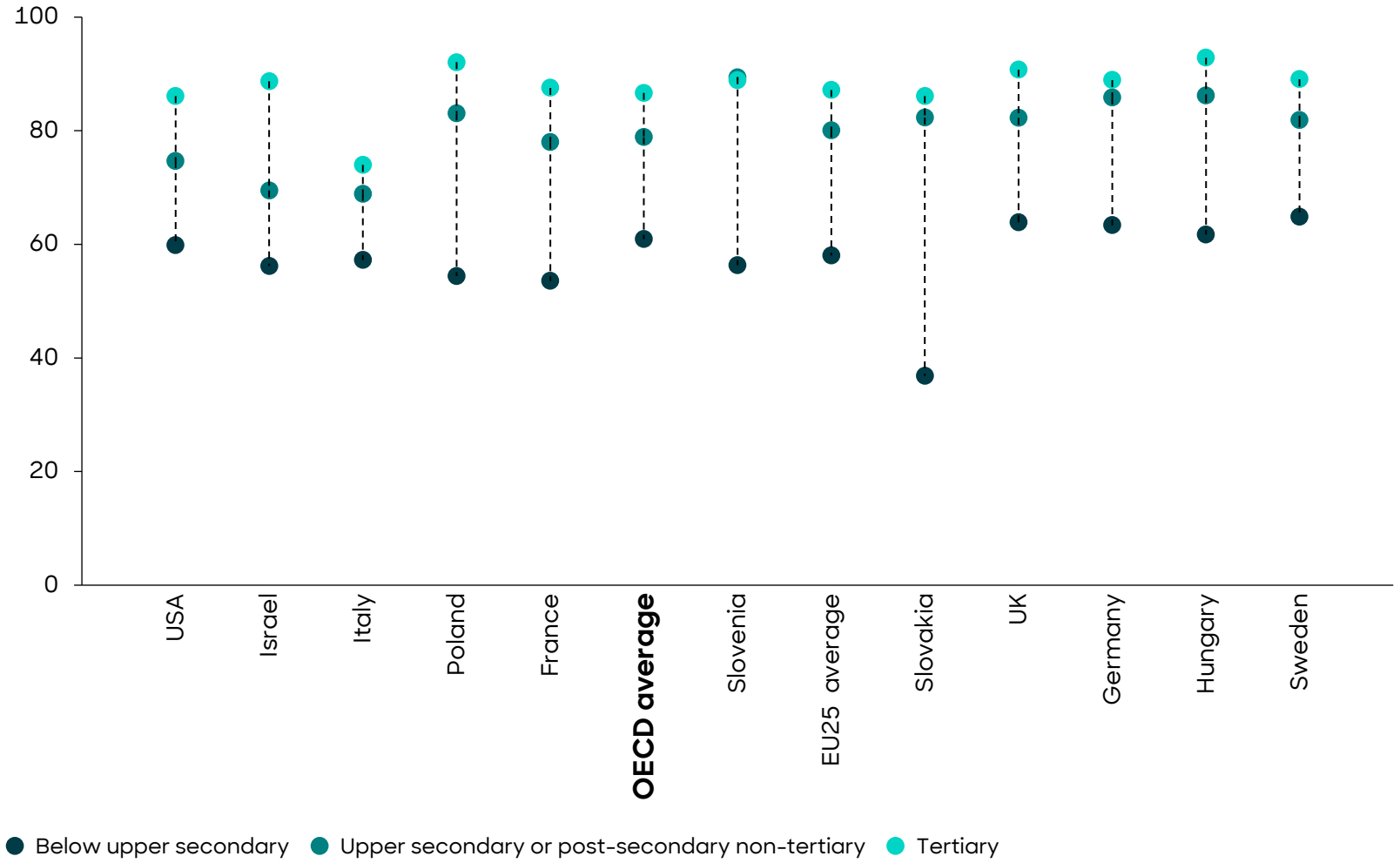
- **Earnings trajectories** tend to **increase with age across various educational levels** in most countries, yet this boost is **particularly notable** among those with a **tertiary education**
- The amplified wage growth observed among tertiary-educated individuals is largely **attributable to seniority.** Leadership roles – almost always commanding higher remuneration – frequently **necessitate attainment of tertiary qualifications**
- In some countries, such as Chile and Costa Rica, the **difference in earnings between younger and older workers is particularly pronounced.** In Chile, for example, the earnings premium for those aged 45-54 amounts to 653% compared to younger workers
- By contrast, **several European countries,** such as Germany, Netherlands, Denmark, and Sweden, exhibit **more moderate earning differentials**
- The OECD average indicates that individuals aged **45-54 earn roughly 85% more than those aged 25-34**
- Only **a few countries** show relatively small gaps between younger and older workers, pointing to **more compressed wage structures**

1) Relative earnings refer to the income of full- and part time workers; below upper secondary = 100

Source: OECD; Roland Berger

Higher levels of education also translate into better employment chances – Individuals with tertiary education are less likely to be jobless

Employment rates of 25-35 year-olds by educational attainment, 2023[1] [%]



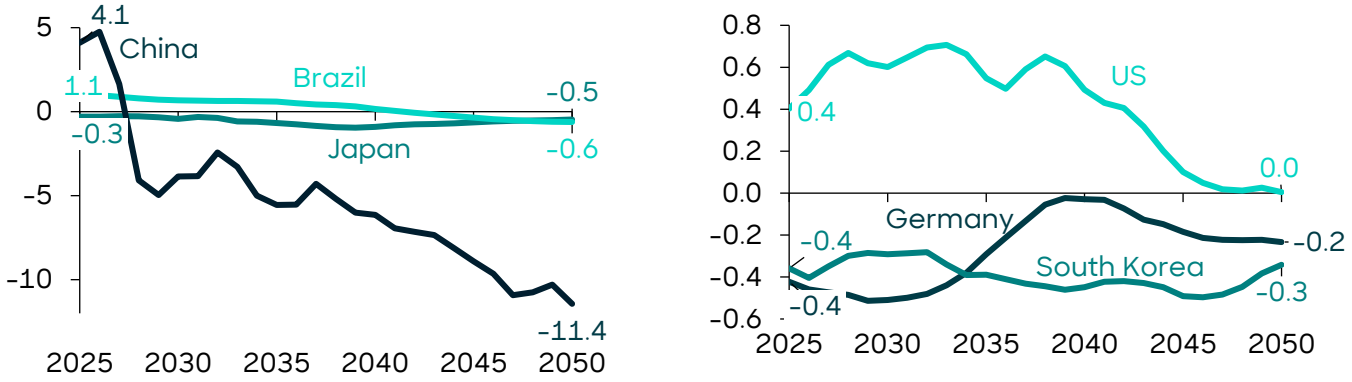
- In OECD nations, completing **upper secondary education** – regardless of study focus – leads to **higher employment rates** compared to those not completing this educational stage
- **Tertiary education** graduates also achieve **superior employment outcomes** in comparison to general upper secondary students
- On average across OECD countries, **vocational upper secondary graduates have better employment outcomes** than their peers who have completed general upper secondary education. This suggests that the **jobs market favors specialist training and skills**
- In summary and across all OECD countries, **higher levels of education** not only increases personal income, but also significantly **reduces the risk of unemployment**

1) EU25 = EU27 without Malta and Cyprus
Source: OECD; Roland Berger

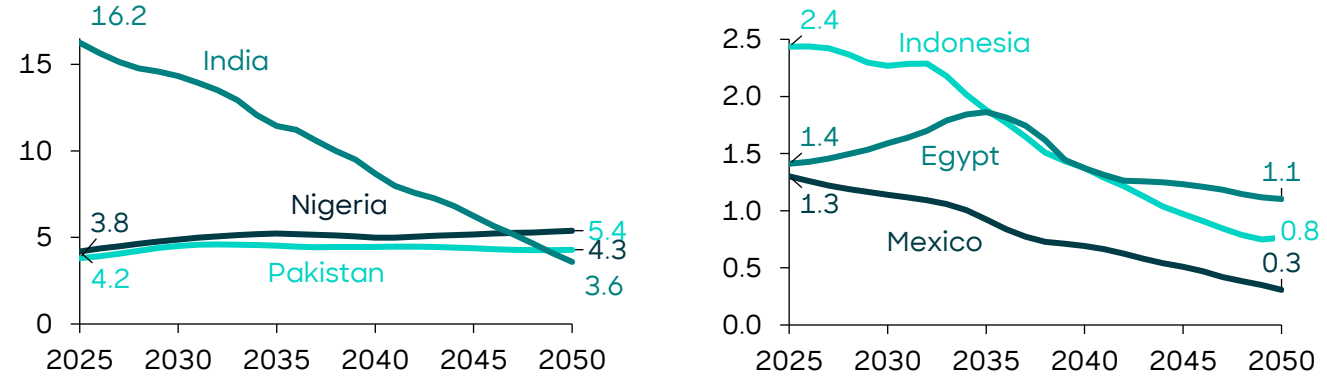
The shortage of skilled workers poses a problem for many labor markets – One possible option is to attract skilled workers from developing economies

Potential net-inflows p.a. into the workforce in the respective year 2025-2050[1] [m]

Countries with a negative/mixed net-inflow, 2025-2050



Countries with a positive net-inflow, 2025-2050



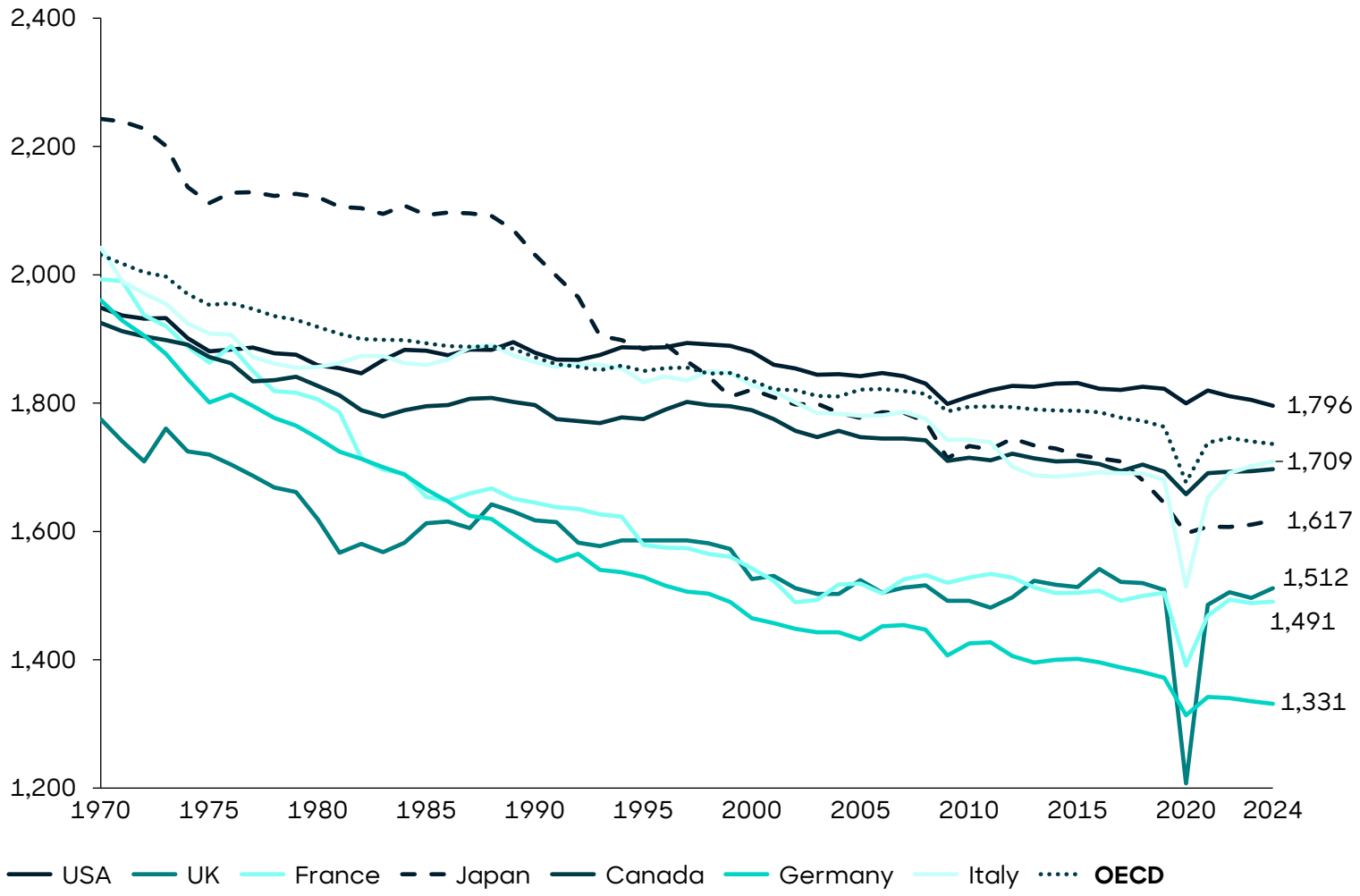
- In many advanced economies the youngest age groups of **the baby boomers** (born 1946-1964, a large cohort) will exit/are exiting **the workforce** in coming years/now in ever increasing numbers. Meanwhile, the next new **cohort in/entering the workforce** is much **smaller,** thus resulting in a **negative net-inflow** in these countries
- Because of the (now abolished) **one-child-policy, China,** the world's largest labor market, will also face a **shrinking workforce** from 2027
- **Countries with high fertility rates will experience positive net inflows.** One option to counter future shortages of workers in advanced economies is to **attract skilled workers from these countries,** but there are **pros and cons**
- The **pros** include easing workforce shortages in advanced economies, offering attractive prospects for skilled workers from developing economies, and supporting the welfare and prosperity of developing economies through remittances. **Cons:** brain drain in developing economies; family separation; the cost of attracting and integrating workers; language and cultural barriers
- **Other measures to increase the workforce in advanced economies** include increasing women's participation, upskilling non-skilled people, raising the retirement age, and increasing working hours

1) The potential net-inflow is the difference between potential inflow (people aged 20 entering work force within the current year) and potential outflow (people aged 65, leaving the workforce in the current year)

Source: UN Population Division; Roland Berger

In many developed economies, annual working hours have been declining for decades – Generation Z aspires to reduce working hours even further

Average annual working hours in selected economies

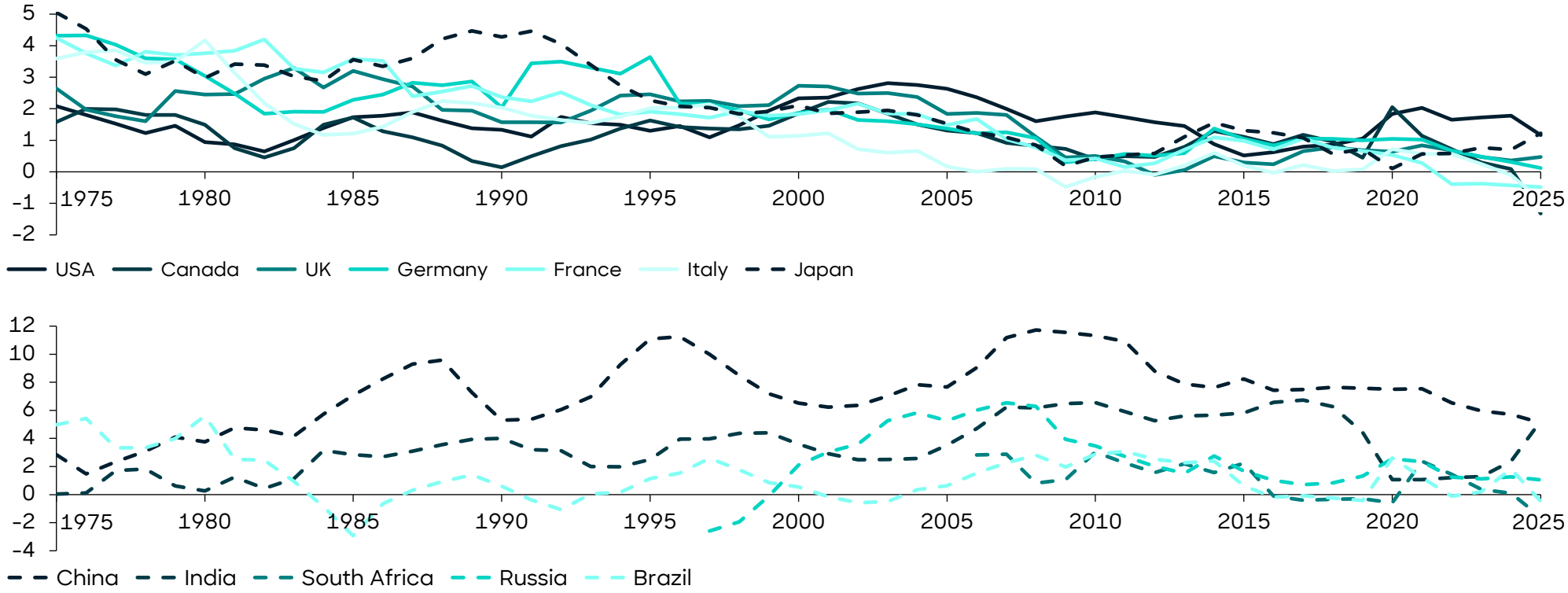


- Since 1970, **average annual working hours** in OECD nations have **decreased notably,** reflecting evolving **labor dynamics** and **changing societal preferences** as well as **stronger demands for improved work-life balance**
- **Generation Z,** the newest cohort in the workforce (born between 1972 and 2012), places **vital importance on work-life equilibrium.** They prioritize personal time alongside career aspirations and **seek flexible working arrangements.** Consequently, the concept of a **four-day working week** has gained prominence, aligning with Generation Z's desire for shorter working hours
- This shift is in line with **wider societal changes,** driven by **digital connectivity, automation,** and evolving attitudes towards the **role of work in life**
- **Organizations that recognize these shifts** can **attract and retain** Generation Z talent by embracing innovative work models that prioritize work-life balance and productivity, and by fostering a harmonious and dynamic work environment

Source: OECD; Roland Berger

Labor productivity growth in advanced economies has been declining notably for some time – BRICS countries volatility range is comparatively high

Long term yearly growth in labor productivity in selected economies[1] [%]



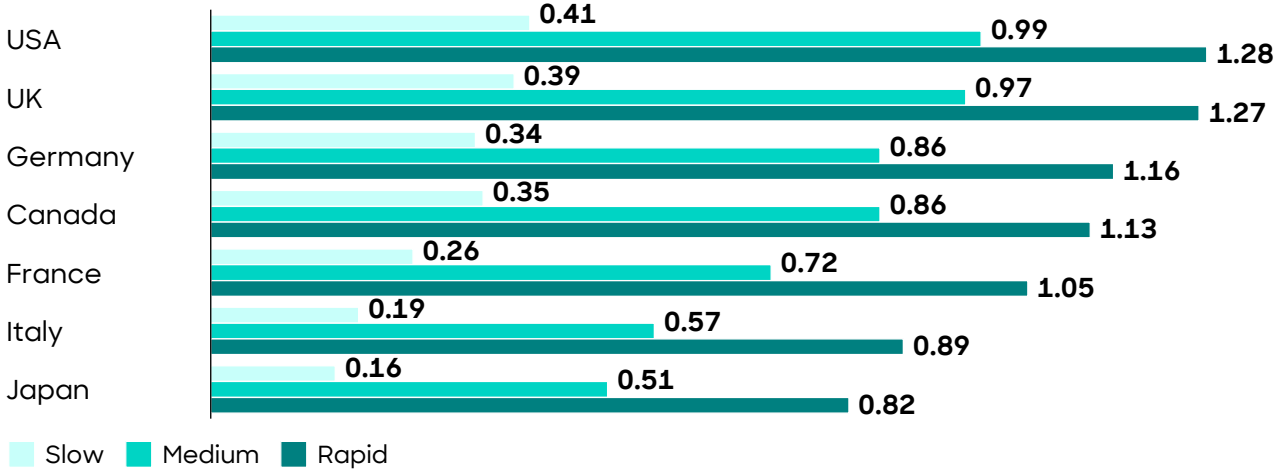
- While **G7 economies** have seen labor **productivity growth gradually decline** toward near-zero levels since the 1970s, **emerging economies,** such as China, have **oftentimes outpaced** advanced economies' growth – albeit with **significantly higher volatility** ranges; for others the picture is mixed
- For over two decades in particular, a **broad-based slowdown in productivity growth** can be observed across **most G7**, with many countries showing **persistently subdued growth rates** and limited recovery potential

1) To correct for statistical outliers, the 5-year moving average is shown

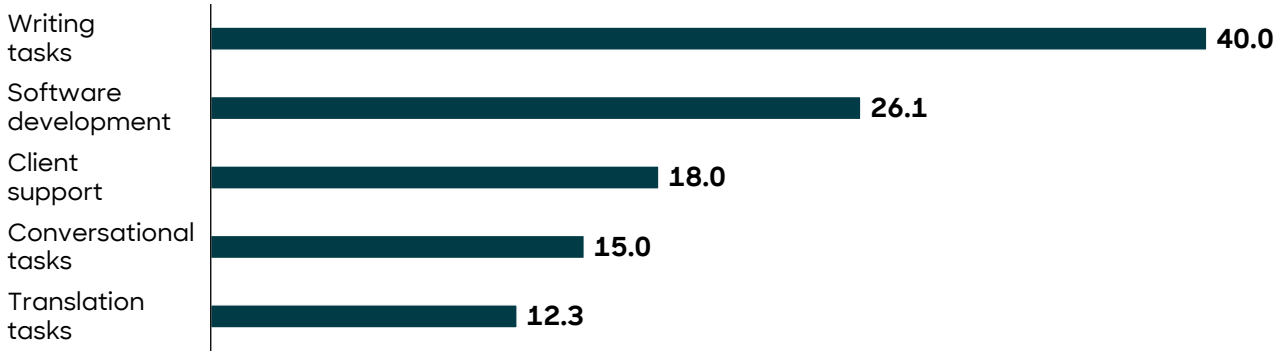
Source: The Conference Board; OECD; ILO; Roland Berger

Labor productivity in the age of AI: Academic studies confirm that generative AI can drive an economically significant increase in productivity

Projected contribution of AI to yearly productivity growth in the next 10 years by adoption speed, 2025[1] [pp]



Effects of AI on productivity increase in specific fields[2] [%]



- With the launch of ChatGPT in 2022, the **ascent of Artificial Intelligence** (AI) has reached new heights, including its transformative influence on **multiple facets of our lives,** the **economy and the way we work**
- Regarding the latter, the **impact of AI on labor productivity** is an ongoing area of discussion and intensive academic research
- AI's capacity to **process and analyze vast volumes of data at incredible speeds** facilitates the **automation of many routine tasks.** In the workplace, this will lead to more streamlined processes, increased error reduction, and accelerated decision-making, all of which contribute to **enhance labor productivity**
- AI is increasingly seen as a **collaborative partner** rather **than a replacement for human workers.** By handling repetitive tasks, AI **frees up human talent** to focus on complex problem-solving, creativity, and innovation, which inherently elevates productivity levels
- Academic studies conclude that AI adoption has a positive impact on **work productivity growth,** although they exhibit substantial heterogeneity depending on study design and field. A 2025 study lead by MIT economist Daron Acemoglu projects the **total factor productivity growth** to be **0.7%**
- Further findings include that adoption rates of Generative AI models (LLMs) are high, but **only 5% of enterprises get above zero returns –** and the majority of AI pilots **exhibit no meaningful impact to the bottom line (P&L)**

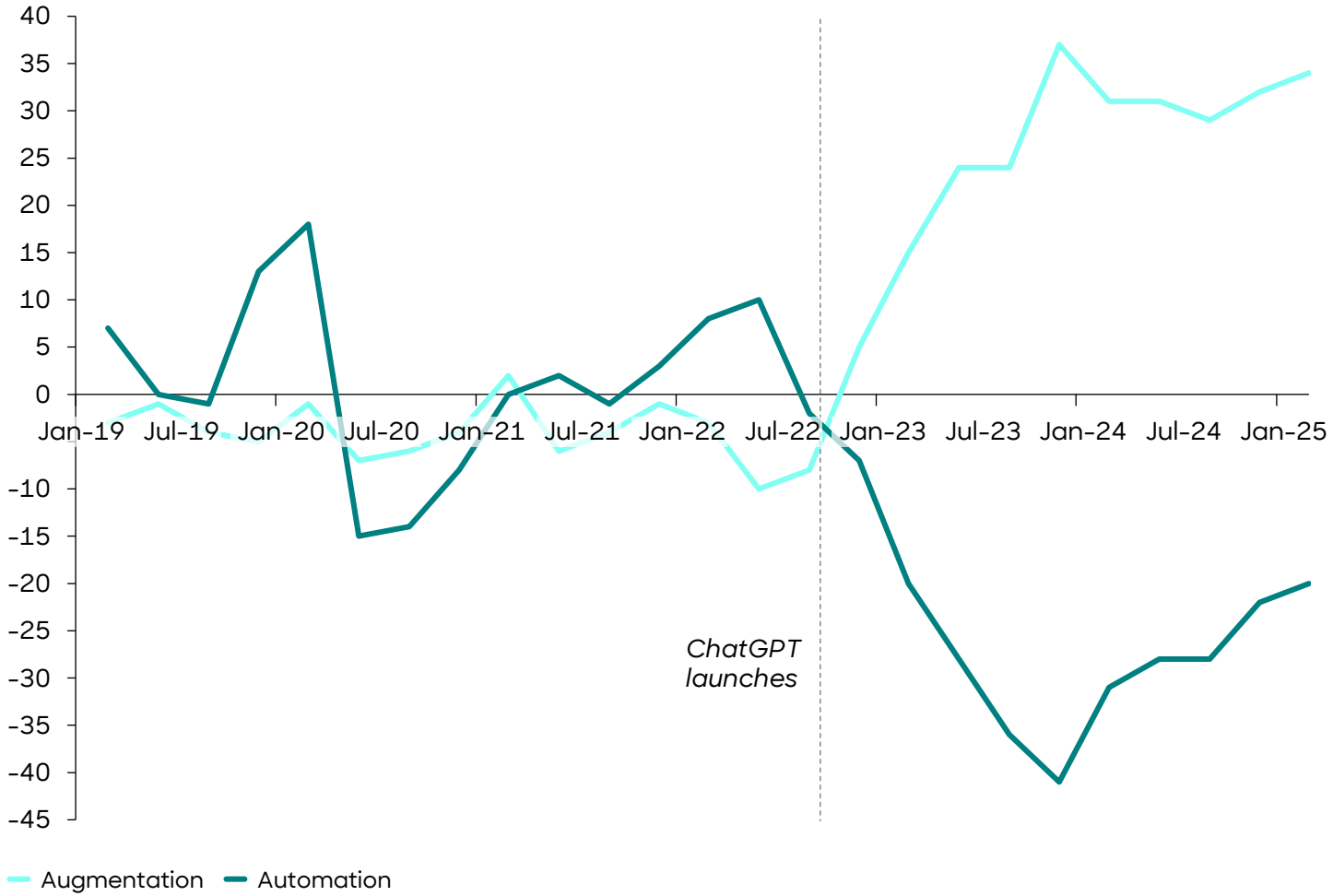
1) Adoption rates are benchmarked to that of previous technologies; Slow adoption: as electricity, medium adoption: as computers & internet, rapid adoption: as mobile phones;

2) Sources include Noy et al. (2023), Merali (2024), Cui et al. (2025), Choi et al. (2025) and Brynjolfsson et al. (2025), respectively

Source: OECD; International Center for Law & Economics; Roland Berger

The effect of generative AI strongly depends on occupation, as well as adoption speed and quality

Average effect of generative AI on job postings in the US, 2019-2025[1] [%]



1) Percentage change in job postings result from Difference-in-Differences estimations relative to the control group (with the treatment being the launch of ChatGPT), split by occupations prone to AI automation vs. augmentation. Main sources included the Occupational Information Network (O*Net) and LightCast for the Job postings

Source: Harvard Business School

- Exposure to **generative AI (GenAI) –** a type of AI that can create new content and ideas, including conversations, stories, images, videos, and music – **is concentrated in digital, administrative, and analytical occupations** that rely heavily on repetitive cognitive and information-processing tasks
- After the launch of ChatGPT in **November 2022**, a striking **difference** can be observed in the **job offerings** between jobs that involve repetitive tasks and are deemed likely to be automated by AI, and jobs that demand more analytical, technical, or creative work by employees
- Occupations that are prone to **AI augmentation** are those that involve tasks that can be automated using generative AI (LLMs), while also **entailing large parts that require human judgement, interpersonal interactions, and hands-on technical skills**
- Job postings in the **Automation category decreased** by **13%** in the observed period, while job offers in the **Augmentation category rose 20%**
- The **medium- to long-term effects** of generative AI on the labor market depends strongly on **adoption rates** and the **further technical development** of these technologies

Values and culture are fundamental to people and society – Understanding their complex interconnection shapes our world view

Selected aspects of the interplay of values and culture

Values are the **fundamental beliefs that act as a guiding principle** for our behavior and decisions, representing what we consider right or wrong, important or unimportant, etc.

- Values are the **principles that motivate** us and **provide a framework for making choices,** influencing everything from our personal relationships to our professional life
- Focus: **People-focused,** providing **a sense of purpose,** direction, and meaning. Values tend to be more **enduring and stable**, forming a significant part of **identity**
- Values can be **abstract** or **specific**, such as broad ideals (e.g. freedom), or more concrete (e.g. financial security). Other examples include respect, honesty, loyalty, family, and professional development
- Values are often **learned –** from family, community, and **cultural influences**

Culture is the **shared beliefs, customs, values,** and **ways of life** of a group of people. It encompasses the **collective behaviors, interactions, processes,** and **experiences** within an environment

- Culture is **learned** from our **social environment** rather than being innate, and it is **dynamic,** changing over time in response to internal and external influences
- Culture is **complex** and holistic, including a wide range of **intangible and tangible elements,** such as morals and customs, beliefs, knowledge – but also food, clothing, art and architecture
- Culture **shapes our identity** and **behavior,** its shared beliefs and values guides our conduct, how a group's members think, interpret their world, and interact with others

Source: Google AI; Roland Berger

According to the signatories of the Universal Declaration of Human Rights, everyone is entitled to the 30 rights and freedoms stated therein …

Universal Declaration of Human Rights (UDHR) 1948: Article 2

*"Everyone is entitled to all the **rights and freedoms** set forth in this Declaration, **without distinction of any kind,** such as **race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.** (…)"*

UDHR – a universal yardstick:

- The **UDHR** provides a **comprehensive and universal set of principles,** to serve as a **common standard of achievement for all peoples of all nations –** it explicitly transcends cultures, religions, legal systems, and political ideologies
- While there is a **wide consensus that the Declaration itself is non-binding,** nevertheless, the UDHR has **influenced legal, political, and social developments** on both the global and national levels. Some countries have **incorporated it into their domestic laws,** while other countries consider it **merely a statement of ideals**
- Today, **all 193 UN Member States have signed onto the principles of the UDHR.** Its further significance also lies in the **subsequent nine binding treaties** that have been influenced by the Declaration so far

1. Equality
2. Freedom from discrimination
3. Life, liberty and security
4. Freedom from slavery
5. Freedom from torture
6. Recognition as person before law
7. Equality before the law
8. Remedy by tribunal
9. Freedom from arbitrary arrest
10. Fair public hearing
11. Innocent until proven guilty
12. Privacy
13. Freedom of movement
14. Asylum
15. Nationality
16. Marriage and family
17. Property
18. Freedom of belief
19. Freedom of opinion
20. Freedom of assembly
21. Take part in government
22. Social security
23. Work
24. Rest and leisure
25. Adequate living standard
26. Education
27. Participate in cultural life
28. Social order
29. Mutual responsibility
30. Freedom from state or personal interference

Source: UN; eachother.org; Georgetown Law Library; Roland Berger

… and to the provisions made in subsequent important and binding treaties influenced by the UDHR – In reality, asserting these rights is often arduous

Timeline of core international human rights treaties

Work in progress: all **193 member states of the UN** have ratified **at least one** of the **nine binding treaties influenced by the Declaration (UDHR)**, with the vast majority ratifying four or more

UDHR + ICCPR + ICESCR International Bill of Human Rights

1) Enforced disappearance is considered to be the arrest, detention, abduction or any other form of deprivation of liberty by agents of the State or by persons or groups of persons acting with the authorization, support or acquiescence of the State

Source: UN; Georgetown Law Library; Roland Berger

In addition, UN Sustainable Development Goals 2030 are broadening the global consensus on values – A challenging blueprint for a better future for all

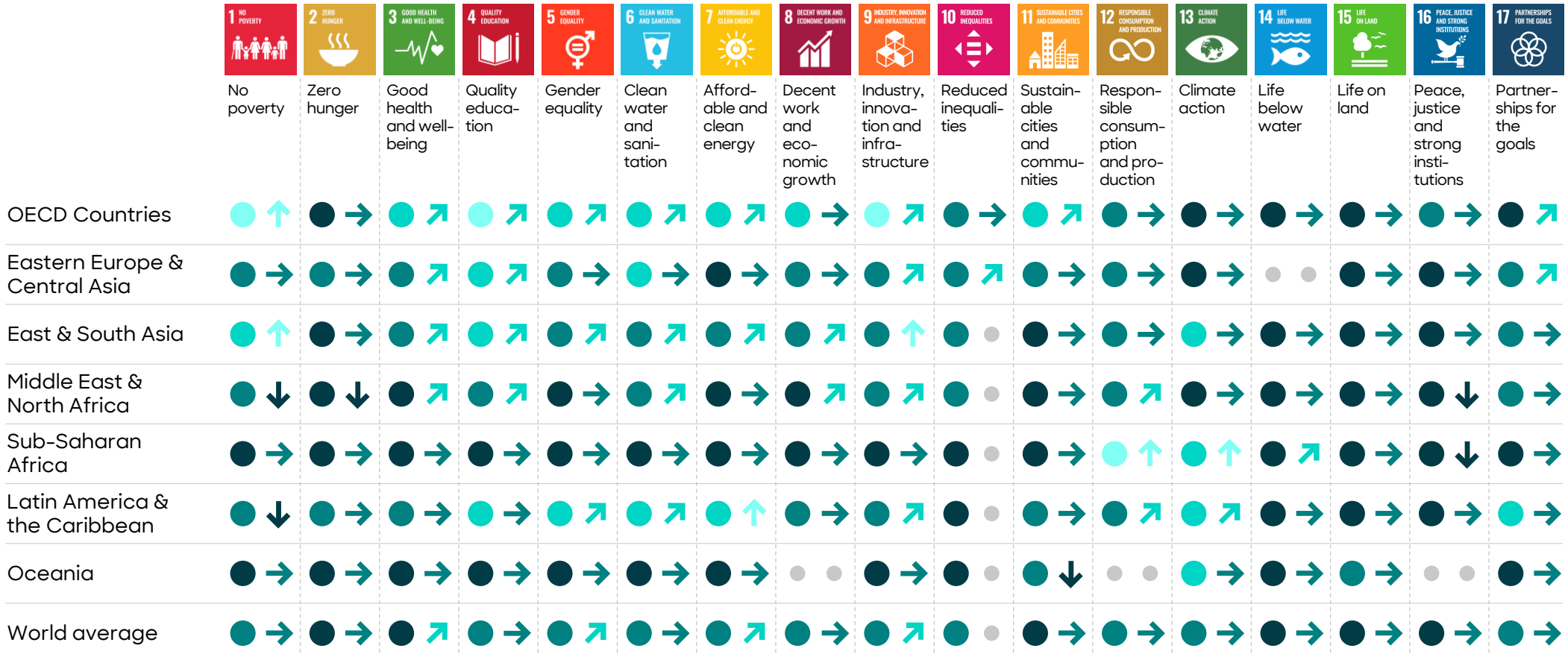
UN Sustainable Development Goals (SDGs) 2030

- The Sustainable Development Goals (SDGs) are a collection of **17 interlinked global goals** designed to be a **"blueprint to achieve a better and more sustainable future for all"** and intended to be achieved by 2030
- **Launched in 2015** by the United Nations General Assembly and subsequently ratified by all member nations, the SDGs represent a new **set of universal goals applicable to all countries –** in contrast to the earlier Millennium Development Goals (MDGs) which were broadly intended for action in developing countries only
- The **17 SDGs are defined in a list of 169 SDG targets; progress is tracked** by 232 unique indicators visualized on a **tracker dashboard –** but global monitoring for some indicators is not currently possible
- Due to the scope of the 17 goals and their 169 defined targets, **all countries face significant challenges in fulfilling** these commitments
- To accelerate sustainable solutions to all the world's biggest challenges, **2020-2030 has been designated the Decade of Action** – albeit the coronavirus crisis has dampened progress

Source: UN; Roland Berger

Even though many SDGs are already being addressed in many regions, numerous challenges continue to persist around the world

SDG dashboard by region, levels and trends 2025[1)]



1) Data availability for 156 countries, population-weighted averages

Source: Sachs et al.; UN; Roland Berger

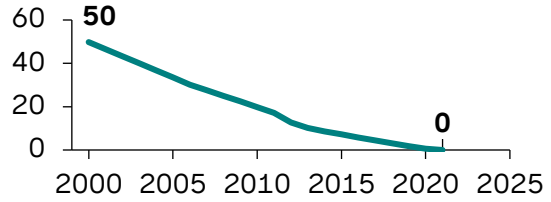
While global SDG progress remains uneven overall, several countries are demonstrating measurable improvements across key indicators

Selected countries achieving or making good progress on SDGs

SDG 1 No poverty

China

Poverty headcount ratio[1)] [%]

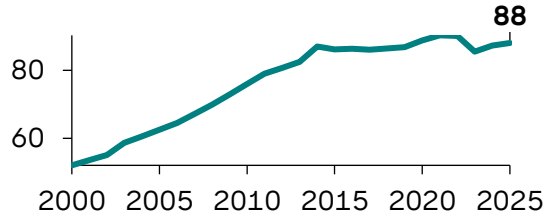


China has achieved one of the most notable **poverty reductions** in history, cutting its poverty headcount ratio from **50%** in 2000 to virtually **zero** by 2021, driven by sustained economic growth that moved many millions into higher-paying manufacturing jobs

SDG 4 Quality education

India

Lower secondary completion rate [% of relevant age group]

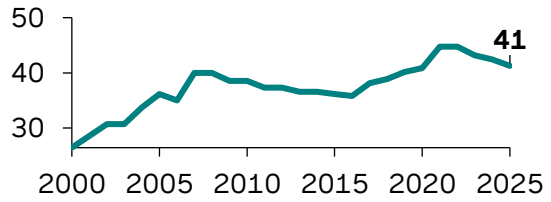


India has steadily raised its lower secondary **school completion rate** from around **60% in 2000** to **88% in 2025,** driven by large-scale government programs and the Right to Education Act of 2010, which made elementary education a constitutional right

SDG 5 Gender equality

Argentina

Proportion of seats held by women in national parliaments [%]

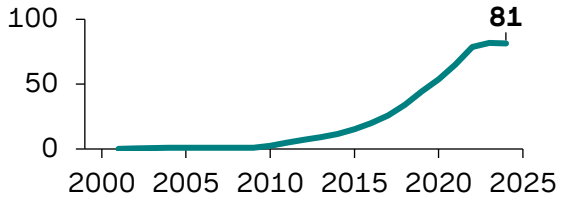


Argentina has made significant progress toward **gender equality in parliaments.** The share of women in parliament rose from around **27%** in 2000 to **41%** in 2025, mainly due to gender quota and parity laws

SDG 9 Industry, innovation, and infra-structure

Iraq

Population using the internet [% of population]



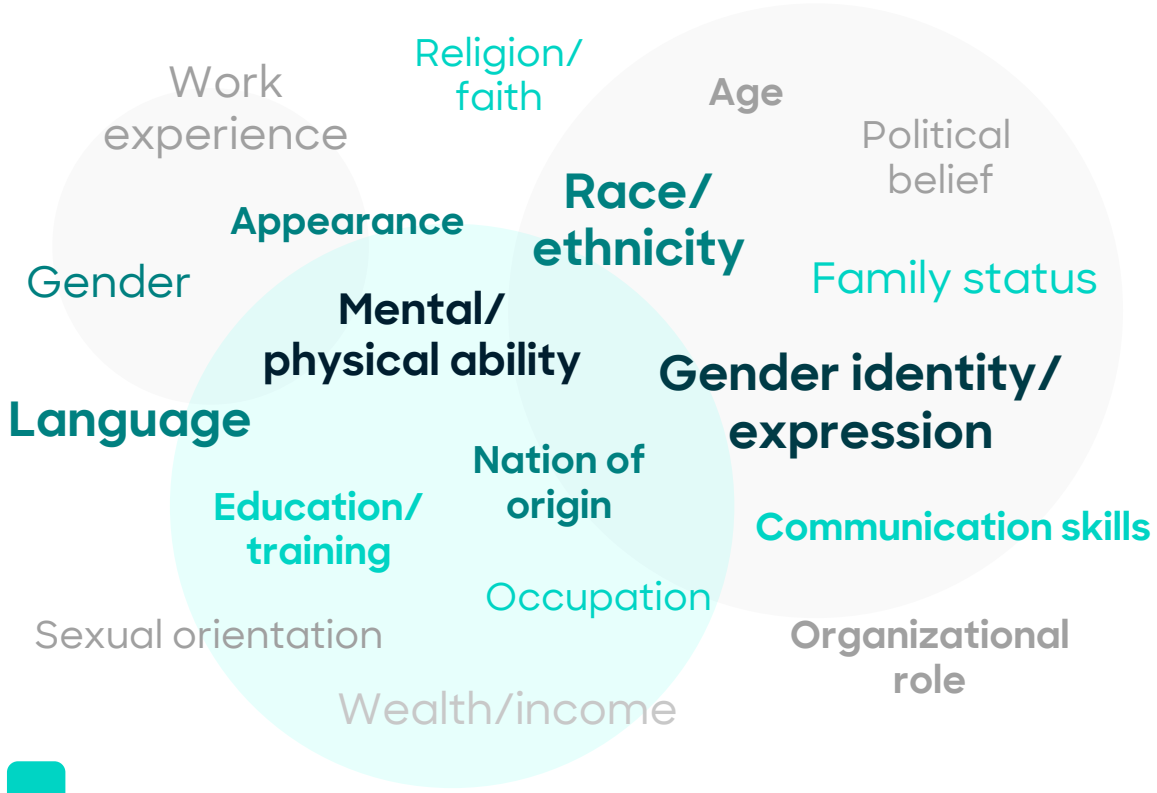
Iraq has seen a dramatic **rise in internet usage** among its population, from near zero in 2000 to **81% in 2025,** driven largely by the nationwide rollout of 4G LTE mobile networks in 2021, a boom in affordable smartphones, and a very young population

1) Ratio of people living at USD 3.65/day (2017 PPP)

Source: Sachs et al.; UN; World Bank; Roland Berger

SDGs touch on some of the many diverse aspects of societal and cultural development, their lived individuality and changing complexity

Selected aspects of individuality and diversity



Our ability to reach unity in diversity will be the beauty and the test of our civilization

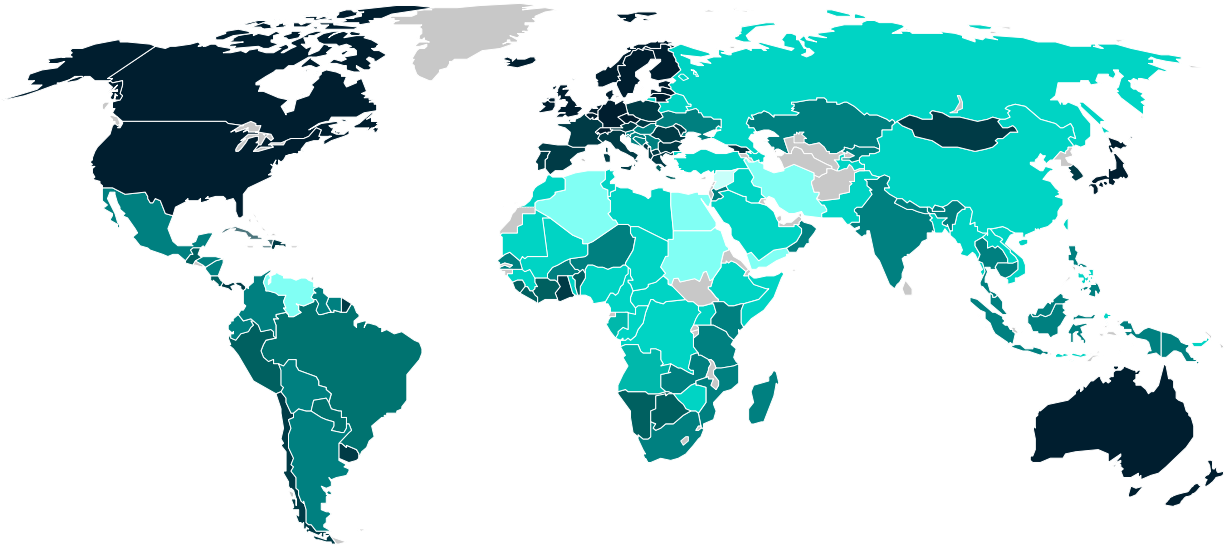
– Mahatma Gandhi

- Diversity encompasses many dimensions: some **aspects of diversity** are easily **discernable,** and/or are often **permanent.** Others may be more **acquired** or **fluid** over time, or are typically less obvious – or even hidden, such as education, religious beliefs, or political affiliations
- Combinations of these dimensions shape our values and cultures, our expectations and behaviors, yet any number of these aspects also pose a **risk of exclusion, preferential treatment,** or **discrimination**
- Due to enshrined **human rights** and progress on equal rights, but also globalization, freedom of movement, and migration, the world is becoming **more diverse** as well as more **diversity-aware,** the latter laying the foundation for **inclusion** and **equity**
- However, the concepts of diversity and inclusion are complex and often **mean very different things in different countries or settings;** this, however, does not negate the necessity to call out issues of **bias, underrepresentation,** or **exclusion –** in society and communities, in the workplace, in education, and elsewhere
- Where **differences are leveraged to create value,** the sum will always be greater than its parts: **diversity matters** because it ensures the representation of multiple viewpoints and backgrounds; **inclusion matters** because it creates a (mutual) culture of respectful acceptance and fair engagement
- Diversity and inclusion require **context** as much as the ability and willingness to be open to **change**

Source: Johns Hopkins University; Roland Berger

The status of human freedom paints a mixed picture – How will global values be shaped in the future?

Human Freedom Index



Less freedom — More freedom — No data

Less free - the trajectory of global human freedom:

- Since 2000, the **Human Freedom Index**, a broad measure of human freedom understood as the absence of coercive constraint, and based on a composite of 50% personal and 50% economic indicators, **is on an overall downward trajectory to 6.17**[1)] with the sharpest **decline** noted during the COVID-19 pandemic, from 6.36 in 2019 to 6.16 in 2021
- The index is rather widespread between 0 and 10: Switzerland has the highest value (9.15), Syria the lowest (3.27). There are **91 countries with a decreasing level of freedom** and **67 countries with increased ratings.** Personal freedom indicators, in particular, declined markedly

What to look out for toward 2050

Through to 2050, the **global consensus on values** based on human rights and civil, personal, and economic freedoms will **shift alongside the global power shift.** Changes in values, culture, and beliefs, in geopolitical power, socio-economic evolution, and technology signify what lies ahead for current and future generations

Selected push-and-pull factors include:

- Tendencies towards **rivalrous multipolarity –** what does it mean for **global values and norms?**
- If **global powers** (emerging and established) **approach protecting human rights** (also beyond their borders) and adjust their own self-determination policies – or not
- Whether **collective efforts to solve global problems** (e.g. climate change, biodiversity loss, SDGs, etc.) lead to a **common recognition of important human rights –** or not
- Whether **emerging middle classes** push for more (democratic) **rights and freedoms**, as historically has been the case – or not
- How **digital technologies** (Internet, AI, etc.) and **digital sovereignty evolve** vis-a-vis privacy concerns, information control, surveillance, changes in labor markets, etc.

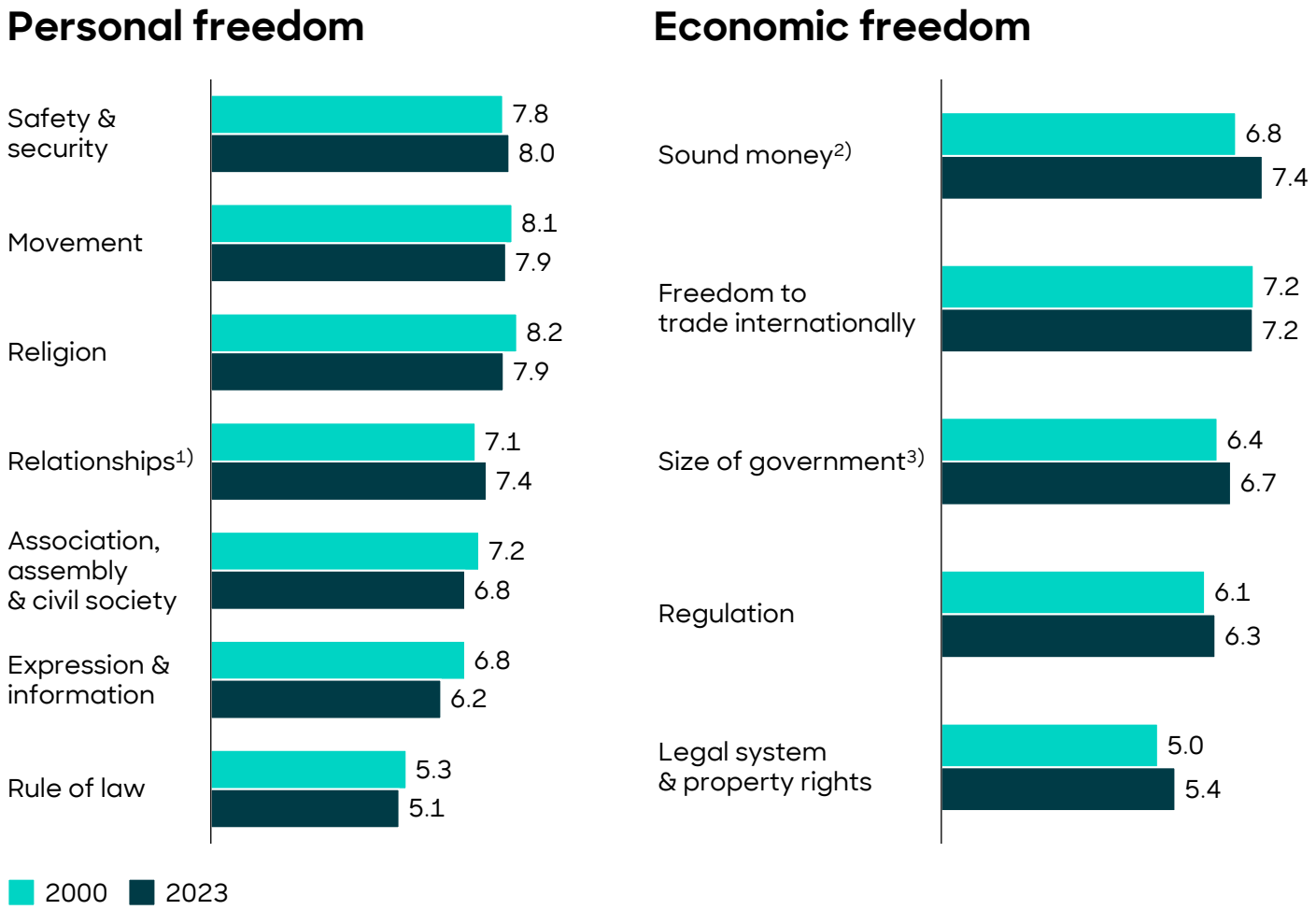
2050

1) 2023, latest data

Source: Cato Institute; Fraser Institute, Foresight Alliance; Roland Berger

Personal and economic freedom are broadly improving, but progress varies among countries and across freedom dimensions

Human freedom score by area, global averages, 2000 and 2023



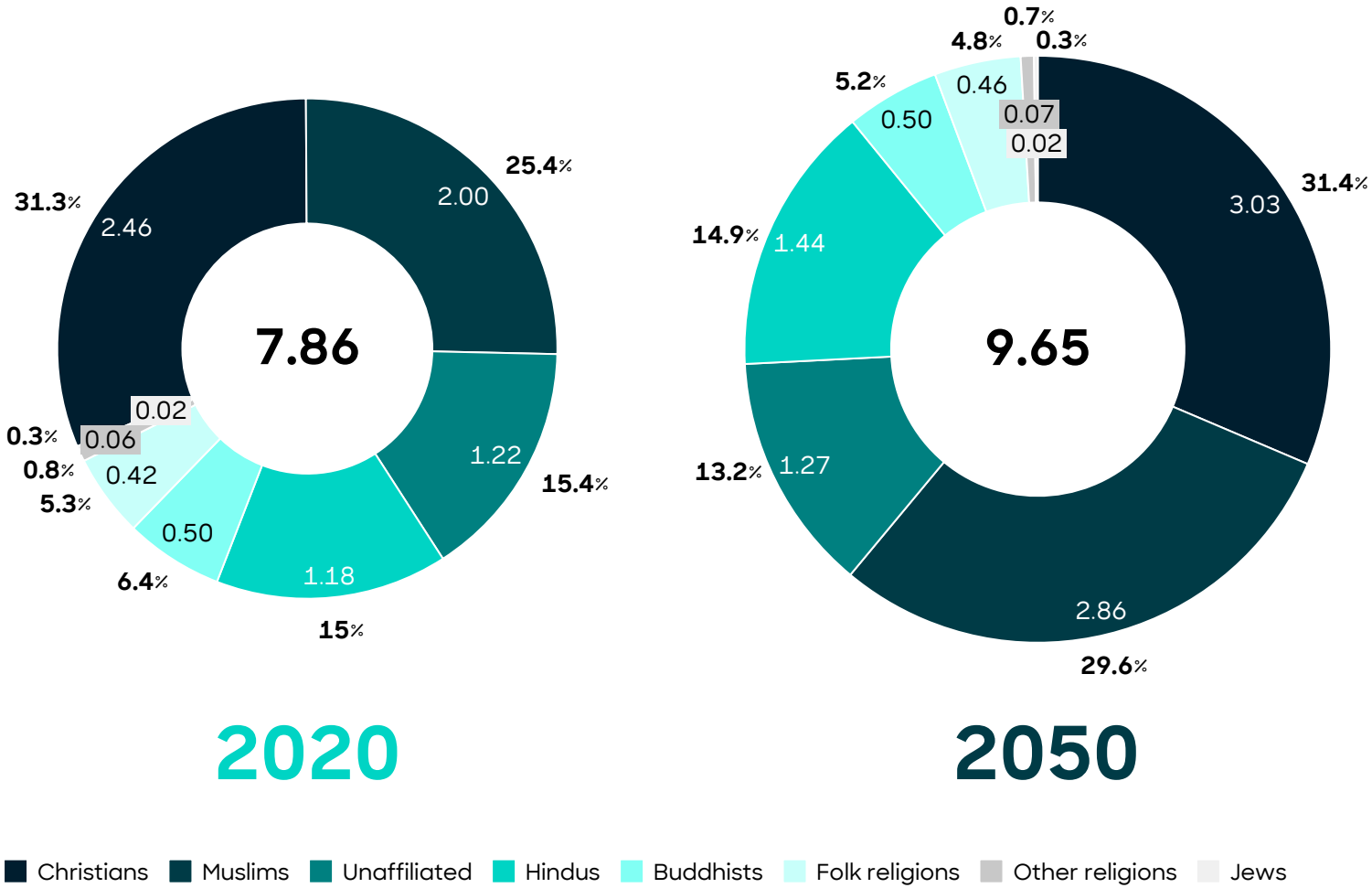
- The Cato Institute's **Human Freedom Index** uses **87 distinct indicators of personal and economic freedom** in the following areas: rule of law; security and safety; movement; religion; association, assembly, and civil society; expression and information; relationships; size of government; legal system and property rights; sound money; freedom to trade internationally; regulation. It covers **165 jurisdictions,** thus **representing 98% of the world's population**
- **Personal freedom** safeguards **individual rights and autonomy,** enabling people to make **choices** about their lives. **Progress** has been **uneven** across dimensions, with persistent **gaps in areas such as rule of law** and identity-related freedoms
- **Economic freedom** reduces reliance on state structures and enhances choice by **enabling market participation, capital mobility and entrepreneurship.** Advances are particularly visible in areas such as sound money and size of government
- There is an **unequal distribution of freedom in the world,** with only **13.8%** of the world's population living in the **top quartile** of jurisdictions in the index and **39.4%** living in the bottom quartile

1) Measures the degree of personal freedom in private relationships; 2) Measures the stability and reliability of a country's currency and monetary system; 3) Measures how much the government intervenes in the economy through spending, taxation and state control;

Source: Cato Institute; Roland Berger

Religion is a fundamental personal freedom – All major religious groups are increasing. By 2050, Christians and Muslims will have a near equal share

Religious affiliations: Number of people and shares of global population, 2020 and 2050[1] [bn, %]



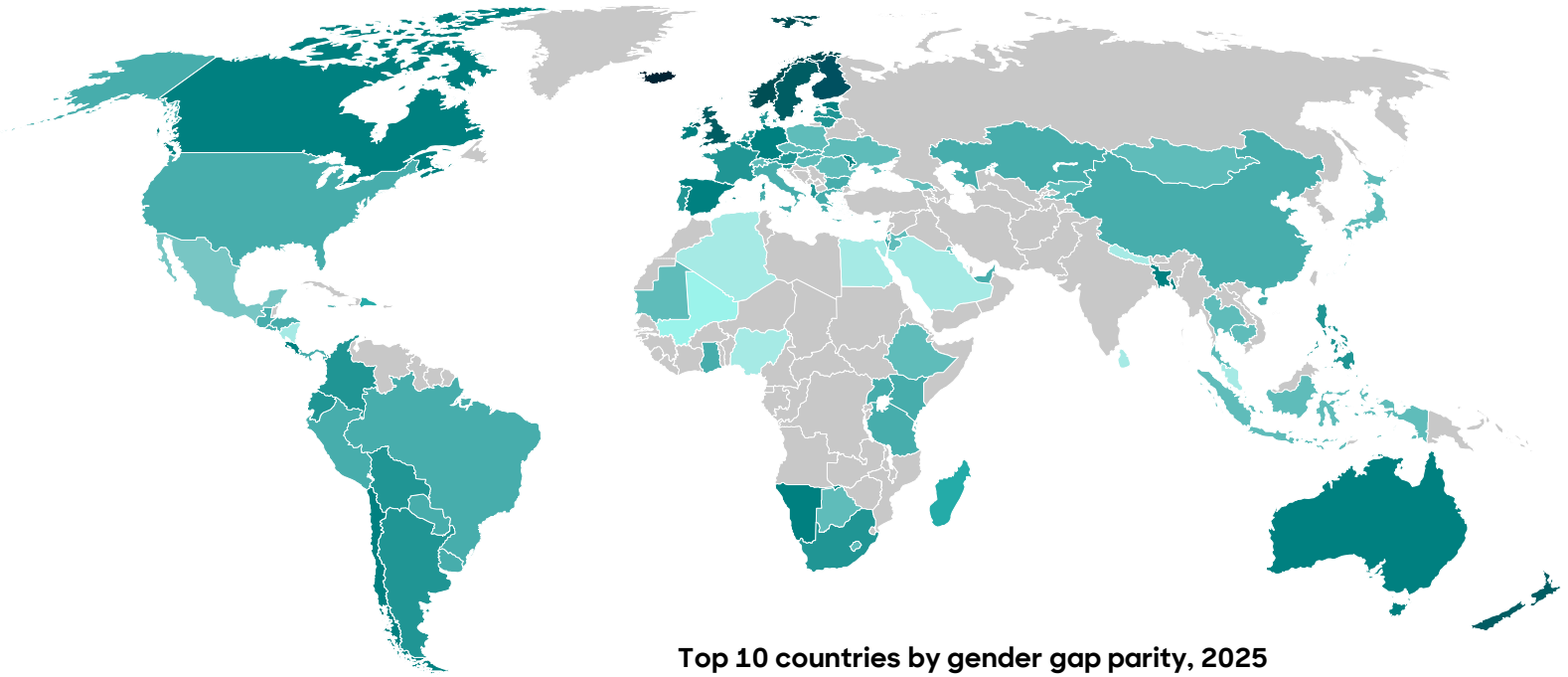
- **Population dynamics** affect the **future growth of religions:** religious affiliation is primarily shaped by demographic dynamics rather than conversion. **Population growth is fastest in highly religious regions** such as Sub-Saharan Africa and parts of the Middle East
- **Muslims are projected to grow faster than any other major religious group** due to younger populations and higher fertility rates, and are expected to approach the size of the global Christian population **(2.86 billion)** by 2050
- **Christianity will remain the world's largest religious group in absolute terms,** but its geographic center is **shifting towards Sub-Saharan Africa,** reflecting faster population growth outside Europe and North America
- While the number of **religiously unaffiliated people** may increase in absolute terms, their **share** of the global population **is projected to decline** due to lower fertility rates and older age structures
- The **majority of the global population is expected to remain religious,** with around **87% affiliated to a religion by 2050** and nearly two-thirds identifying as either Christian or Muslim

1) Absolute figures are derived by applying Pew Research Center's latest percentage projections to current UN Population Division global population estimates (WPP 2024)

Source: Pew Research Center; UN; Roland Berger

At the current pace based on a steady country sample, closing the global gender gap will take more than 120 years

WEF Global Gender Gap Index, 2025



Top 10 countries by gender gap parity, 2025

- Iceland
- Finland
- Norway
- United Kingdom
- New Zealand
- Sweden
- Republic of Moldova
- Namibia
- Germany
- Ireland

0%[1] **100%**[1] No data available

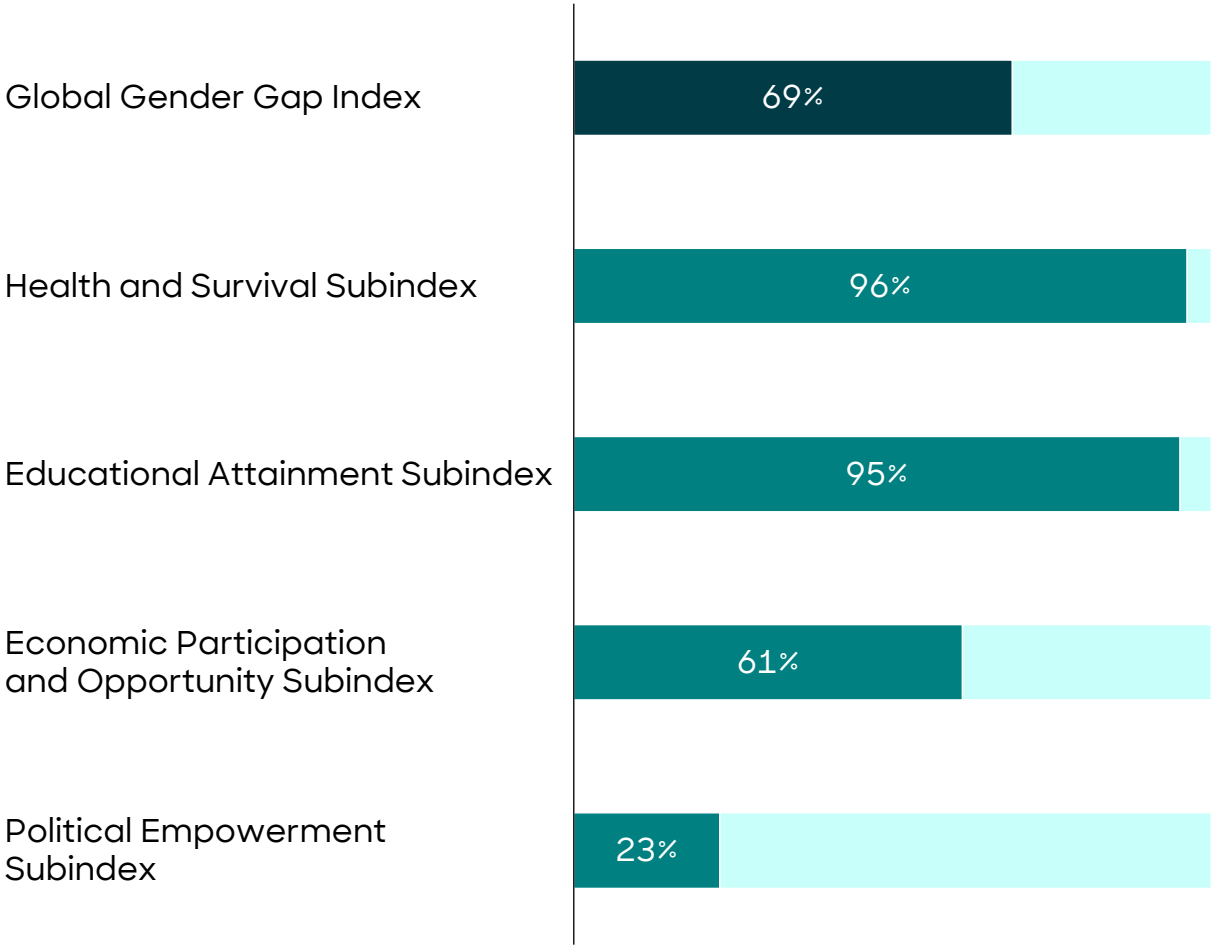
- The WEF's Global Gender Gap Index (2025) **benchmarks gender parity** across **148 economies,** providing a basis for the analysis of gender parity developments across two-thirds of the world's economies
- According to the WEF, **no country has yet achieved full gender parity:** the **global gender gap score** stands at **69.0%** (for the 148 economies analyzed)[1]
- In addition, the analysis also examines a steady **subset of 100 economies** that have been included since the start of the index in 2006. In this constant set, the **gender gap has narrowed** by 0.4 percentage points compared to 2024 to **69.0% in 2025.** For this subset, the **closure of the gender gap has been estimated at 123 years**
- Among top ranked countries, **Iceland** is the only country to have closed **more than 90% of its gender gap (gender gap 2025: 7.4%)**
- **Most top ranked** countries (2025) **stem from Europe,** bar few exceptions but **New Zealand** (17.3%, 5th) and **Namibia** (18.9%, 8th) **have held the two remaining spots in the top 10 since 2021**

1) The percentage indicates the size of the gender gap that still exists

Source: WEF; Roland Berger

Gender parity measured along 4 dimensions highlights greatest room for improvement necessary in political and economic spheres

WEF Global Gender Gap Index, by subindex, 2025[1)] [%]



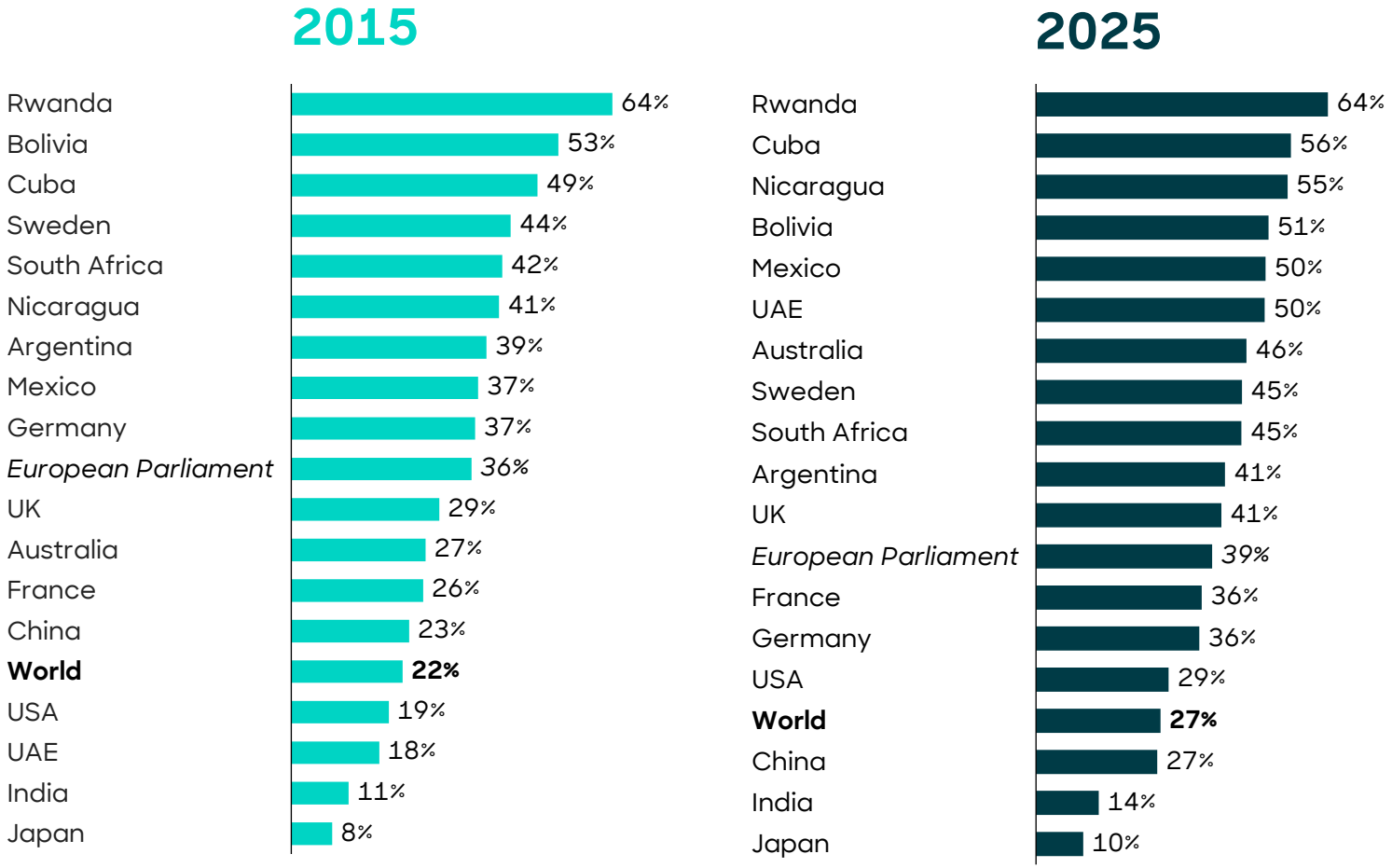
- The **Global Gender Gap Index** annually benchmarks the current state of gender parity across **four key dimensions**
- To date, two of these dimensions have closed the most: on **Health and Survival,** (96.2%) and on aspects of **Educational Attainment** (95.1%)
- However, globally, the second-largest gap to bridge is in **Economic Participation and Opportunity** (61%), while **Political Empowerment** (22.9%) has the furthest way to go
- Thus, at the current pace, **political parity** will still take **162 years to fully close this gap,** while full **economic parity** is projected to take another **135 years** if current trends persist
- Among **the five components of the Economic Participation and Opportunity Subindex,** the widest disparities across economies are observed in the parity scores for **estimated earned income** and the **share of legislators, senior officials and managers**
- The **Political Empowerment** Subindex has the **widest variations,** ranging from 0.6% in Vanuatu to 95.4% in Iceland. Components include the proportion of years with a **female head of state** over the past 50 years, share of **female ministers,** and the proportion of **women in parliament. Nearly half of the economies** analyzed **have had no female head of state in the past 50 years**
- But, the population-weighted **global average of 22.9%** is skewed toward the lower end due to the **poor performance of the world's most populous economies** in this area

1) The percentage indicates the size of the gender gap that still exists; population-weighted averages, 148 economies

Source: WEF; Roland Berger

In politics, gender parity remains a distant goal in many countries – Only six major countries have achieved parity

Women in national parliaments: Top five in 2025 and selected other countries/legislative bodies and world average, 2015 and 2025[1] [share in %]



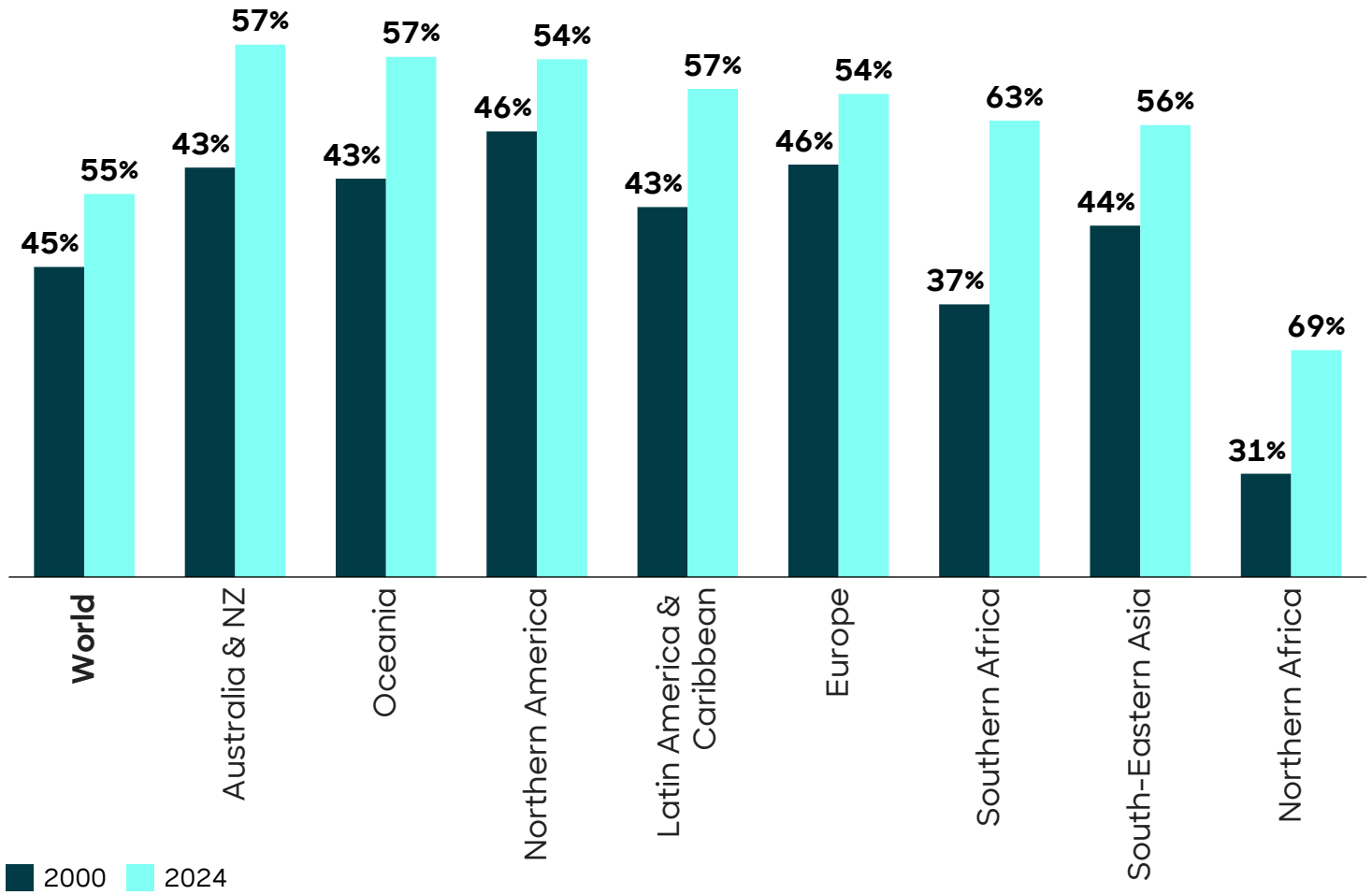
- **Equal participation** and leadership by women in political and public life is essential – however, data shows that **women are underrepresented** at all levels of such decision-making **worldwide**
- Achieving **gender parity in political life** appears far off for most countries. Globally, **just over one quarter (27.5%) of parliamentarians are women** at present
- At the current rate of progress, **gender parity in national legislative bodies** will **not** be achieved **before 2063**
- While the number of **women heads of state/government** has reached **25** (up from 19 in 2015), in fact it has stalled compared to the peak of 27 in 2023. However, as of mid 2026, several women have taken office as new heads of state/ government including in **Japan,** Namibia, and Lithuania
- By 2025, and aside from Andora, only **six major countries** have achieved **parliamentary parity:** Rwanda, Cuba, Nicaragua, Bolivia, Mexico, and the **UAE,** with the latter making the far greatest progress over the past decade

1) Data rounded and generally reflects the composition in the respective year; in the case of the European Parliament, since the last election; world average it is calculated by taking the total number of women currently in parliament (across lower/single houses) divided by the total number of filled seats worldwide

Source: UN; IPU; European Parliament; Roland Berger

Gender inequality in the economic sphere is a global concern: In every region, the workplace gender gap remains significant – Progress is slow at all levels

Proportion of women in managerial positions by region, 2000 and 2024[1], [%]



1) Managerial positions include executives, senior officials, legislators, administrative and commercial managers, production and specialized services managers

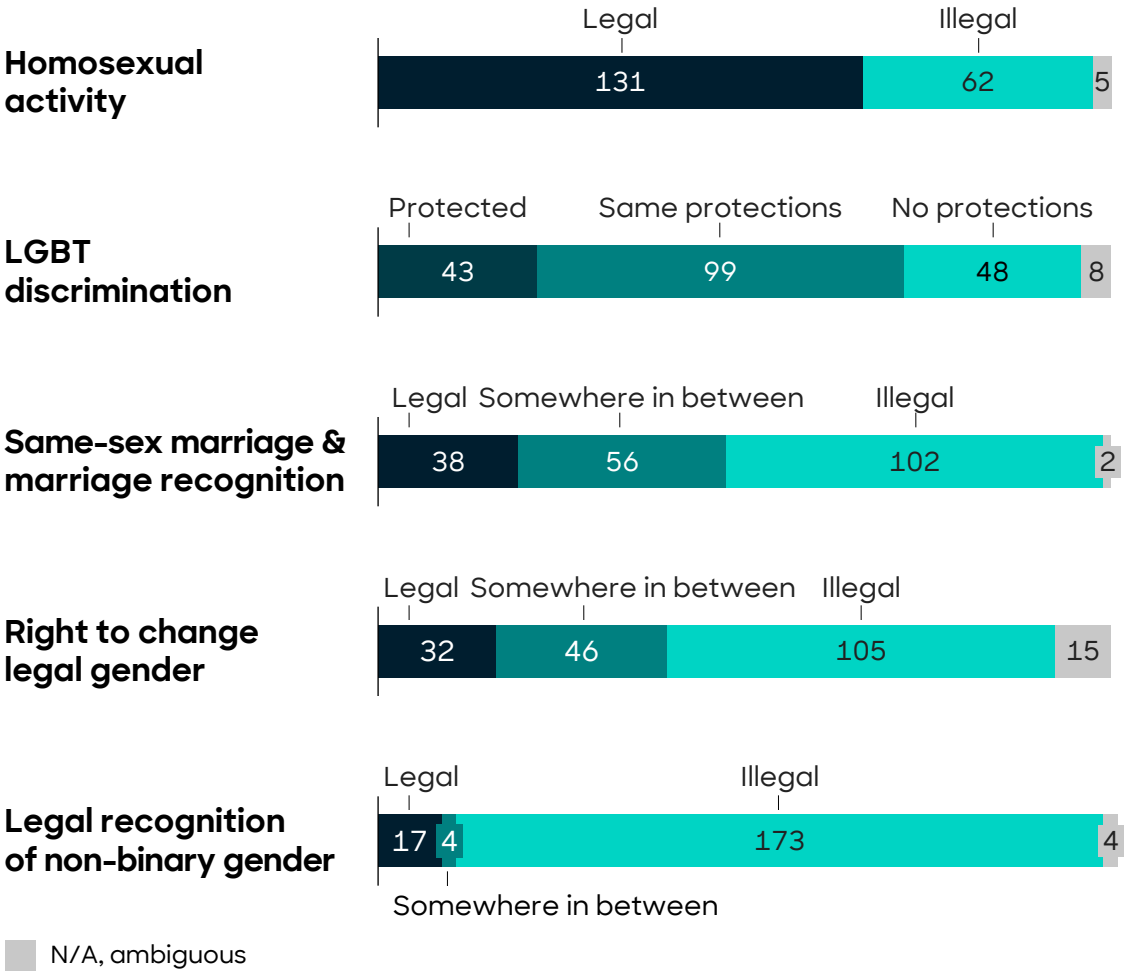
2) MSCI's All Country World Index: 2,811 companies

Source: UN; MSCI; Reuters; The Times; Roland Berger

- **Globally, women held only around 30% of managerial positions** in 2024 across public and private sectors – up from just under 25% in 2000, and with a markedly lower share in Northern Africa and many parts of Asia. Across all regions, the **rate of improvement is slight**
- **Underrepresentation of women** at the very top has even more room for improvement: projections based on the over 2800 constituents of the global MSCI (ACWI) index show that **gender parity on corporate boards may not appear until** 2038 – with progress in the US particularly stagnant
- Furthermore, women held **CEO positions in only 163 of the 2,811 companies.** In Qatar, none of the 12 constituents of the ACWI had female directors. In the US, only 1 of 593 companies had no women directors
- Having **women in leadership positions helps:** Research from UK universities has shown that **having women in senior leadership roles can ensure that companies perform better,** as those with more than **30% female executives** are more likely to **outperform** organizations with a lower gender balance

Aspects of gender diversity and gender identity are legally recognized in a number of countries – Though to varying degrees

Status of LGBTQ+ laws 2025, number of countries, selected aspects



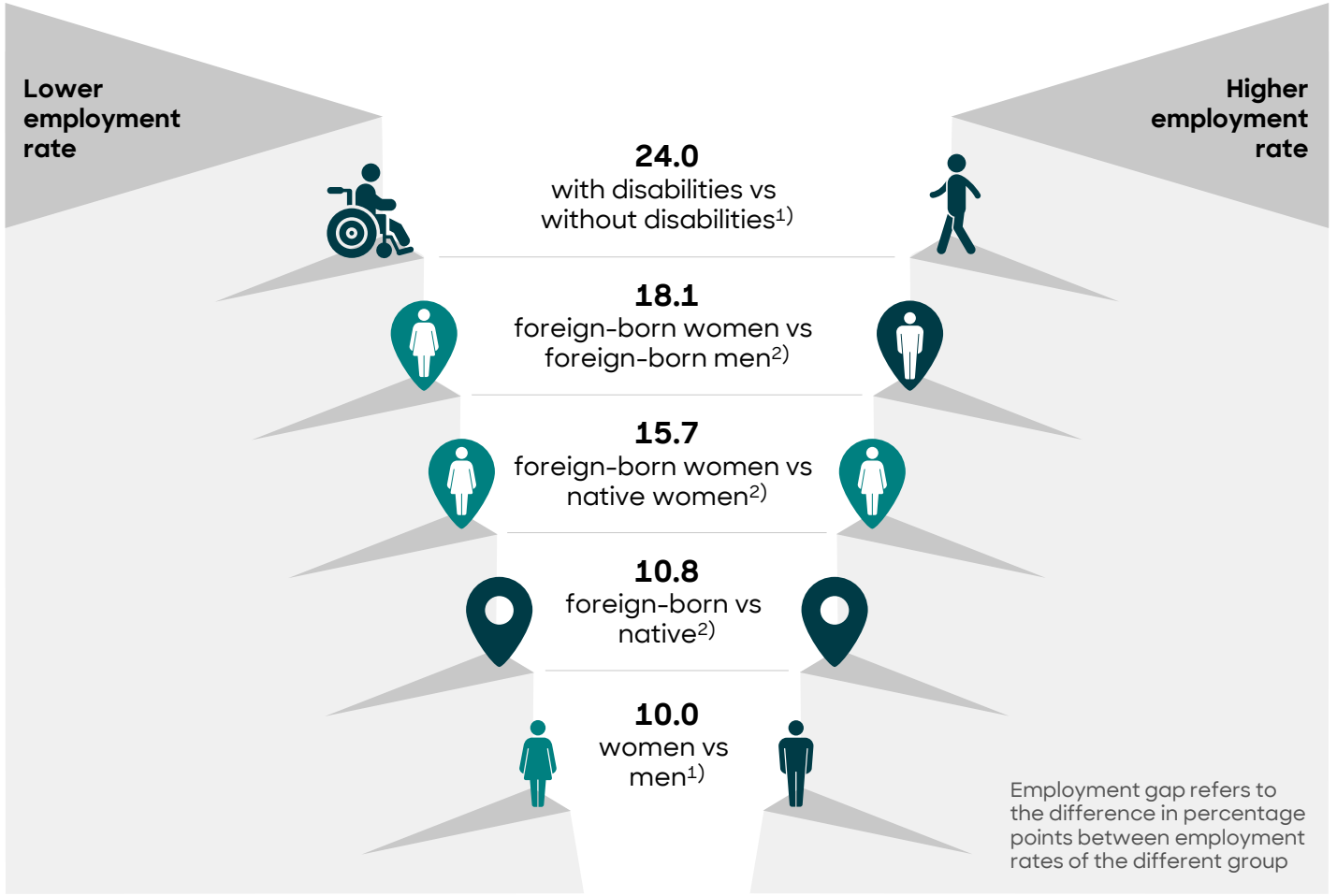
- The United Nations SDGs aim to end poverty as much as **gender inequality by 2030** on the basis that these goals **apply to everyone, everywhere and will "leave no one behind"**
- This last principle is important not just for (often discussed binary) **gender equality** goals but for **gender diversity** and its expression in the broad spectrum of **gender identities as well as sexual orientation,** now most often referred to as **LGBT+** (Lesbian, Gay, Bisexual, Transgender, Questioning, +)[1], an inclusive but non-exhaustive umbrella term
- **Nationally and internationally,** united **activism** around a common mission remains the most important source of influencing **norm change,** most clearly seen where change has occurred in the **legal sphere** for gender and sexual minority communities
- Since 2013, the countries which have **legalized homosexual activities** rose by 9 – from 122 to 131 in 2025. But **change is not necessarily one-directional:** as recently as September 2025, Burkina Faso reversed its decision to become one of the 62 countries where it is currently illegal. **Seven countries are even imposing the death penalty as punishment**
- But laws alone cannot bring about change in attitudes; **norm change** must come with support from the general public – often **in conjunction with religious acceptance**
- Focused campaigns for the **legalization of same-sex marriage** have been long standing in several countries, while other more recent actions for the legal recognition of **non-binary gender identities,** for example, necessitate further **social and cultural acceptance**
- **Discriminatory laws** that don't acknowledge specific gender identity and diversity needs and **negative social attitudes** have all **combined to hold LGBTQ+ people back.** The impacts are felt by communities and organizations in all parts of the world

1) People may fit more than one of these terms

Source: Equaldex; Roland Berger

Globally, around 1.3 billion people are affected by disability – The disability employment gap is large, even in richer areas like the EU

Employment gaps in the EU, 2024 [pp]

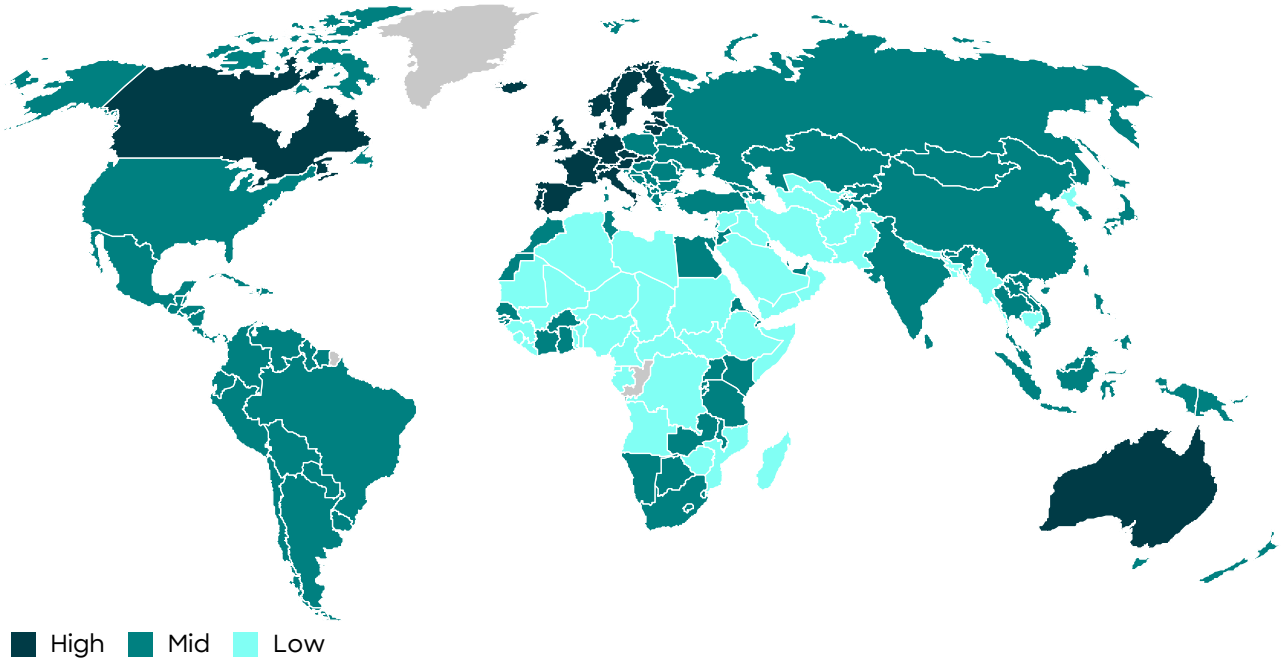


- According to the latest WHO estimate, approximately **1.3 billion individuals** worldwide, around **16% of the global population,** experience **significant disabilities** in 2023. If aging and chronic disease trends continue, **prevalence is projected to climb beyond the current 16%**
- Labor force participation among **people with disabilities** is notably low, with an average **employment rate of about 40%** in OECD countries
- **Differences** between employment rates of people with disabilities **are high among OECD countries,** ranging between 20-30% in Greece, South Korea, Ireland, and Spain and 50-60% in Sweden, UK, Estonia, Iceland, Canada, and Switzerland
- In the **EU, the employment gap due to disabilities is significantly higher** than the gap between **foreign-born individuals and natives,** as well as the gap between women and men
- UNICEF has pledged to allocate 10% of its annual budget to **children with disabilities** by 2030, expanding inclusive services across 50 countries
- Since 2015, **disability has been embedded in 11 of the 17 UN Sustainable Development Goals** (SDGs). The year 2030 will mark the most significant moment of accountability in the history of global disability policy

1) Age group 20-64 years; 2) Age group 25-54 years
Source: Eurostat; WHO; UN; OECD; UNICEF; UN; Roland Berger

Globally, significant gaps remain in Diversity, Equity, and Inclusion, with leading countries advancing while others fall behind

Diversity, Equity, and Inclusion (DEI) ranking, by country, 2026[1)]



Top movers in DEI ranking, 2025-2026

Country	Change 2025-2026	Global Rank 2026	Category
Gabon	16	158	Low
Nicaragua	14	118	Mid
Puerto Rico	13	110	Mid
Algeria	10	121	Low
Tajikistan	10	159	Low

Country	Change 2025-2026	Global Rank 2026	Category
Liberia	-25	151	Low
Nepal	-24	136	Low
Solomon Islands	-19	128	Low
Guinea	-19	175	Low
United States	-16	43	Mid

- The map **reveals significant global differences in DEI performance** across 188 countries. Nordic countries, such as Sweden (#1), lead the ranking, due to their strong institutions, low corruption, and high levels of equality
- In contrast, **lower-ranked countries face structural challenges,** such as weak governance, significant corruption, and limited access to education and economic opportunities, leading to high levels of inequality and low inclusion
- Most of the countries that improved or deteriorated in ranking from 2025 to 2026 are developing countries. However, **the US is among the top five decliners,** having decreased its ranking position from #26 in 2025 to #43 in 2026

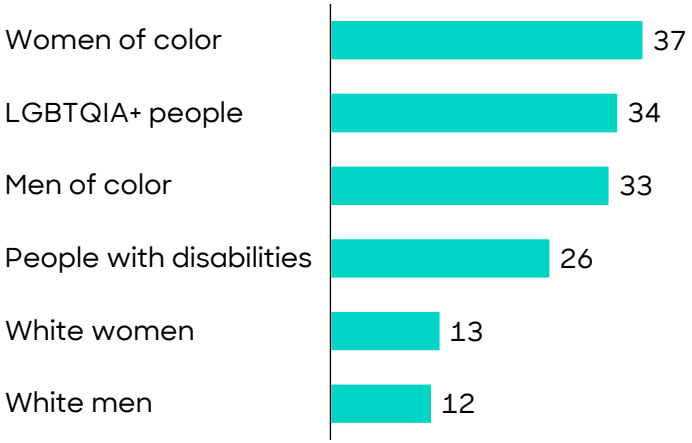
1) The DEI Country Index evaluates 188 countries based on 50+ indicators across the three pillars of diversity, equity, and inclusion, combining both country-level conditions and company performance into a comprehensive score

Source: Denominator; Roland Berger

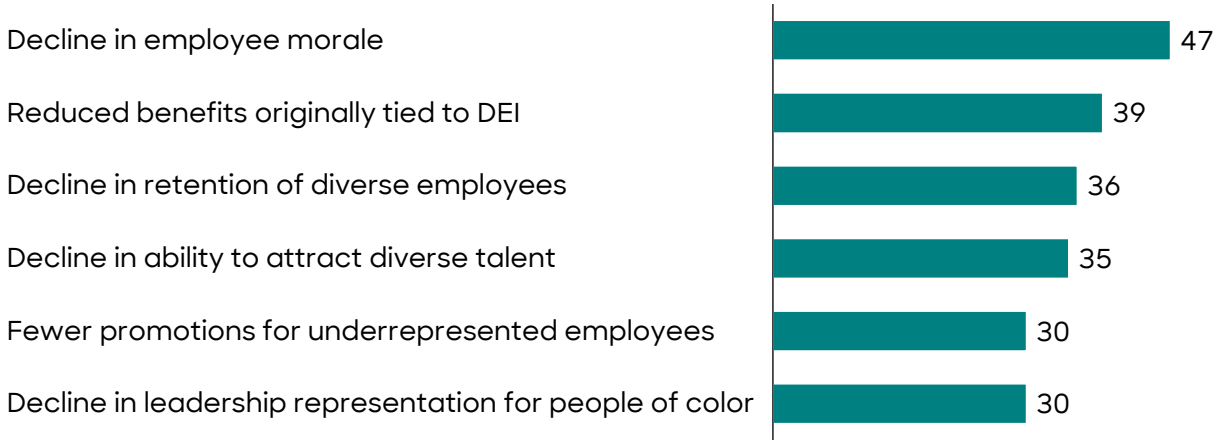
US corporations are rapidly scaling back their DEI efforts following the 2024 election – Reversing prior progress and reshaping hiring outcomes

July 2025 survey of US companies that had diversity, equity, and inclusion (DEI) programs before November 2024: Impact of President Trump's election

Share of companies reporting reduced hiring for specific groups since eliminating DEI [%]



Share of companies which experienced selected consequences as a result of cutting DEI [%]



- Rolling back DEI programs is **not only a policy shift but also a behavioral signal** within organizations that leads to immediate changes in hiring priorities, especially reducing opportunities for historically underrepresented groups such as women of color (37%) and LGBTQIA+ talent (34%)
- The data indicates that **DEI initiatives play a structural role in shaping talent pipelines**: once these initiatives are removed, companies struggle to maintain diverse hiring outcomes. This suggests that inclusion does not sustain itself without active governance and incentives
- Beyond hiring, companies experience **broader organizational side effects.** Declining morale (47%) and reduced retention of diverse employees (36%) highlight how cuts to DEI can **weaken employee engagement and long-term workforce stability**
- Overall, the findings suggest that **scaling back DEI creates a self-reinforcing cycle,** where reduced diversity in hiring and advancement further limits representation in leadership and decreases the organization's attractiveness to diverse talent

Source: Resume Templates; Fortune; Roland Berger

In the workplace, fostering diversity, equity, and inclusion practices is key to growth – DEI enhances performance, innovation, and work culture

Key benefits of diversity, equity, and inclusion (DEI)

DEI

Talent attraction and retention

A commitment to DEI helps **attract and retain** a wider range of **top talent** by fostering a culture where all employees feel valued and respected

Innovation and problem-solving

Diverse teams are **more creative** and **resilient,** leading to better problem-solving and **innovation**

Financial performance

Studies consistently show that organizations with strong DEI practices **outperform** their peers financially

Employee engagement and satisfaction

A more inclusive workplace culture improves **employee satisfaction** and engagement

Customer and market growth

Companies with DEI initiatives better **reflect and understand** an increasingly **diverse customer base,** which can lead to market growth and stronger relationships

- In the **workplace, DEI stands for Diversity, Equity, and Inclusion,** a **framework of policies and practices** that create an organizational culture where a wide range of backgrounds, experiences, and perspectives are welcomed, valued, and represented. **Diversity** refers to the **presence of differences, equity focuses on fair treatment** and **equal opportunity,** and **inclusion** ensures that all **individuals feel a sense of belonging**
- **Fostering DEI** in organizations is a key part of **corporate strategy.** Away from the current divisive politicization of DEI and the backlash created by the Trump administration, **DEI is becoming a matter of personal conviction for inclusive leaders** who, looking ahead, believe it is the **smart business decision.** Many organizations are simultaneously expanding and deepening their DEI strategies, as the **business case is clear:** it is key to growth.
- DEI is not just about values – it's about economic value creation: continued **benefits** of DEI include **enhanced financial performance, innovation, and talent acquisition.** Organizations that strategically integrate DEI see **improved employee engagement and retention, stronger customer relationships,** and **more resilient, creative work cultures**
- In the longer term, organizations that currently feel the pressure due to their US market exposure, will need to carefully consider the financial, cultural, and reputational risks of watering down or abandoning DEI policies as **customers, employees and other stakeholders are watching closely**

Source: The Conference Board; Roland Berger

Corporate actions – Let's talk about opportunities arising from megatrends regarding people and society

Conclusion and corporate impacts

Impact: Companies active in ageing countries will be challenged by a shrinking talent pool

Actions

- Take a systematic approach to addressing workforce issues and leveraging AI and automation to transform workforce management: identify which jobs and skills require upskilling versus redeployment. Pinpoint where hiring is needed and what emerging capabilities are required. Determine which roles offer the highest automation potential and feasibility of implementation. Strategically allocate resources based on data-driven scenarios rather than intuition. Measure and track progress with quantifiable metrics at the duty and task level. Offer continuous training for your staff reflecting the drastically shortened half-life of skills
- Broaden your hiring practices: when hiring external skills, also consider a more inclusive talent pool; outsource functions to focus on value-enhancing skills

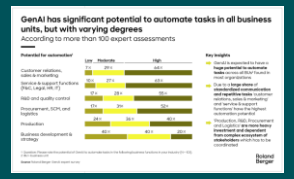
Impact: Customer profiles and target markets are changing due to demographic shifts and persistent urbanization trends

Actions

- Tackle the demographic shift: entering markets with high population growth and strong purchasing power can be a promising strategy for gaining global market share, recruiting talent, and manufacturing in or for those markets
- Address global aging: companies will do well understanding the needs and benefits of an aging workforce and customer base. Both groups require varying degrees of adaptation: the former requires training and life-long learning opportunities to leverage their expertise and knowledge, while the latter requires new or adapted products and services
- Take advantage of business opportunities in cities: ongoing urbanization trends are driving the demand for smart, sustainable infrastructure solutions for buildings, transportation, and digital connectivity

Learn how Roland Berger can help you to create corporate impact

RB analysis
How AI and automation are transforming workforce management



RB Report
Vietnam momentum shift

Source: Roland Berger

1.1 Population
1.2 Migration
1.3 Education & Labor
1.4 Values & Culture

Corporate actions – Let's talk about opportunities arising from megatrends regarding people and society

Conclusion and corporate impacts

Impact: Migration pressure towards countries of the Global North gives rise to an increasingly diverse workforce and customer base

Actions

- Develop a comprehensive strategy for the recruitment and retention of a diverse workforce, recognizing the value of varied, international perspectives, inputs and skills
- Establish employee resource groups or affinity networks that provide support, networking, and mentorship opportunities for employees from diverse backgrounds
- Facilitate international exchanges and collaborations among highly talented employees and utilize the mobility of skilled professionals for global business objectives
- Recognize the linguistic diversity within the labor force and among customers, offering multilingual support and communication to cater to diverse requirements
- Adapt marketing, product, and service strategies to effectively target and engage a culturally diverse customer base, aligning with evolving demographics

Impact: Advancements in Artificial Intelligence (AI) have the potential to boost productivity across diverse sectors

Actions

- Devise and convey a comprehensive AI integration strategy – away from AI hype – that aligns AI initiatives with core business objectives, enhancing operational efficiency and competitiveness
- Establish dedicated AI talent acquisition and development programs to ensure the company has the necessary expertise to effectively harness AI's capabilities
- AI is a also a key-enabler of the "lights-out factory", a production plant that runs with minimal human intervention. Taking incremental steps is a realistic way to reach this long-term goal

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RB offering
Strategic workforce planning

RB Report
The lights-out factory

Source: Roland Berger

Corporate actions – Let's talk about opportunities arising from megatrends regarding people and society

Conclusion and corporate impacts

Impact: Stakeholders' expectations and demands are evolving with regard to Diversity, Equity, and Inclusion considerations

Actions

- Stick to DEI fundamentals despite current headwinds: enhance transparency in reporting by clearly communicating DEI (and ESG) efforts, achievements, and progress through comprehensive, regular reports and dedicated sustainability disclosures. Communicate DEI's universal benefits and tangible business impact
- Integrate DEI into strategy: DEI should be seen as a core part of overall business strategy, not a separate, optional initiative
- Rethink talent assessment: broaden hiring practices to move beyond familiar profiles and embrace the value diverse backgrounds bring to decision making
- Actively engage with stakeholders, including employees, investors, customers, and the wider community, to gather feedback and insights on DEI initiatives, and demonstrate commitment to addressing their concerns. Some markets will require more flexibility than others

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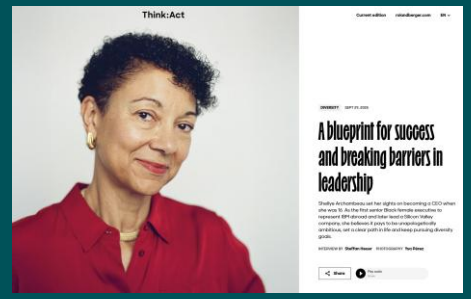
RB Think:Act Magazine
A blueprint for success and breaking barriers in leadership



Source: Roland Berger

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Megatrend 1 – People & Society

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