

A person is climbing a set of stairs. The stairs have grey concrete treads and risers. The side walls of the stairs are painted with large, colorful geometric shapes in shades of blue, orange, yellow, and red. The person is wearing dark blue leggings and white sneakers with brown soles. They are captured in mid-stride, with one foot on a higher step and the other on a lower step.

TRENDS SHAPING EDUCATION 2022

Marc Fuster
EUNEC seminar
The Hague, 15 June 2022



Trends Shaping Education: What? Why?



Intention and purpose

Inform strategic thinking

Stimulate reflection about the future of education

NOT a statistical compendium or prescription of policy



Policy makers

- Ministry retreats, strategic thinking workshops



Researchers/teacher educators

- Inclusion in teacher education curriculums, education futures



Educational practitioners

- Futures thinking, global mega-trends



Students

- Tool in classrooms, strategic thinking for associations





Trends Shaping Education: How?

To be included,
data needs to
be:

Internationally
comparable

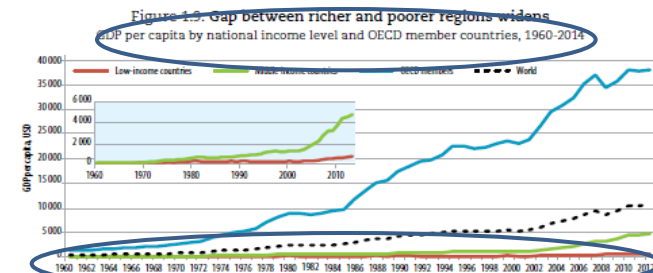
Long term

Robust

1. GLOBALISATION

INCREASING AFFLUENCE, INCREASING INEQUALITY

Affluence has increased in OECD countries in the last 30 years, but so has global inequality. There is a widening income gap between richer and poorer countries, and between richer and poorer individuals within countries. In most countries, the gap between rich and poor is at its highest level in 30 years. This increase in income inequality raises economic as well as social and political concerns. Inequality within countries hinders GDP growth, as better educational resources and opportunities are more widely accessible to higher-income individuals. One of the key means to promote equity and decrease inequality is through education, but for regions still struggling to build schools or ensure the security of their children in the classroom, ensuring quality education that is accessible for all is a difficult goal.



Note: GDP per capita is gross domestic product divided by midyear population. Data are in current US dollars.

Source: World Bank (2015), "GDP per capita", World Development Indicators.

<http://dx.doi.org/10.1787/888933316056>

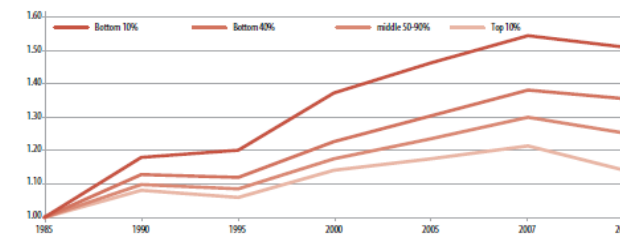
While per capita income levels for all countries have risen since 1960, so has the level of income inequality. Between 1960 and 2013, GDP per capita for middle-income countries experienced the largest growth, over 3 500%, while GDP per capita of low-income countries grew by only 700% in that time period. However, the GDP per capita of OECD nations has also grown in that time, and still largely outstrips the rest of the world. In fact despite the impressive growth of the middle-income countries, GDP per capita in 2014 was still roughly comparable to that of OECD member countries in 1975, 40 years ago. And despite all the progress made by middle-income countries, the gap between the richer and poorer regions is not decreasing.

In addition to an increase in inequality between countries, levels of income inequality have also increased within countries themselves. Today, in OECD countries, the richest 10% percent of the population earn 9.6 times the income of the poorest 10%. While all households have seen an increase in income levels since 1985, those in the top ten percent have seen a far larger increase than those in the bottom 10% and even the bottom 40%.

1. GLOBALISATION

This pattern is sustained and increases over time. Moreover, even though the 2007-2008 financial crisis had an impact on all households, it also served to increase inequality between the highest and lowest income brackets: households with income in the bottom 10% saw the greatest decreases in levels of real household income.

Figure 1.10. Lower and lowest incomes increasingly left behind
Trends in real household incomes at the bottom, the middle and the top, OECD average, 1985 = 1



Note: Income refers to disposable household income, corrected for household size.

Source: OECD (2015) In It Together: Why Less Inequality Benefits All, <http://dx.doi.org/10.1787/9789264235120-en>.

And education?

- Initial education and lifelong learning play a role in lifting people out of poverty by, for example, providing them with the right kinds of skills for the labour market. What kinds of incentives would strengthen this function of education? And what is the role of non-formal learning in this process?
- What responsibility do education systems have in teaching students about the challenges present in struggling and conflict ridden countries, and creating a sense of empathy, concern and support?
- Should OECD countries expand the role of tertiary education systems in sponsoring students from low-income countries? Could greater emphasis be placed on supporting tertiary offerings in poorer regions of countries?

Links to education



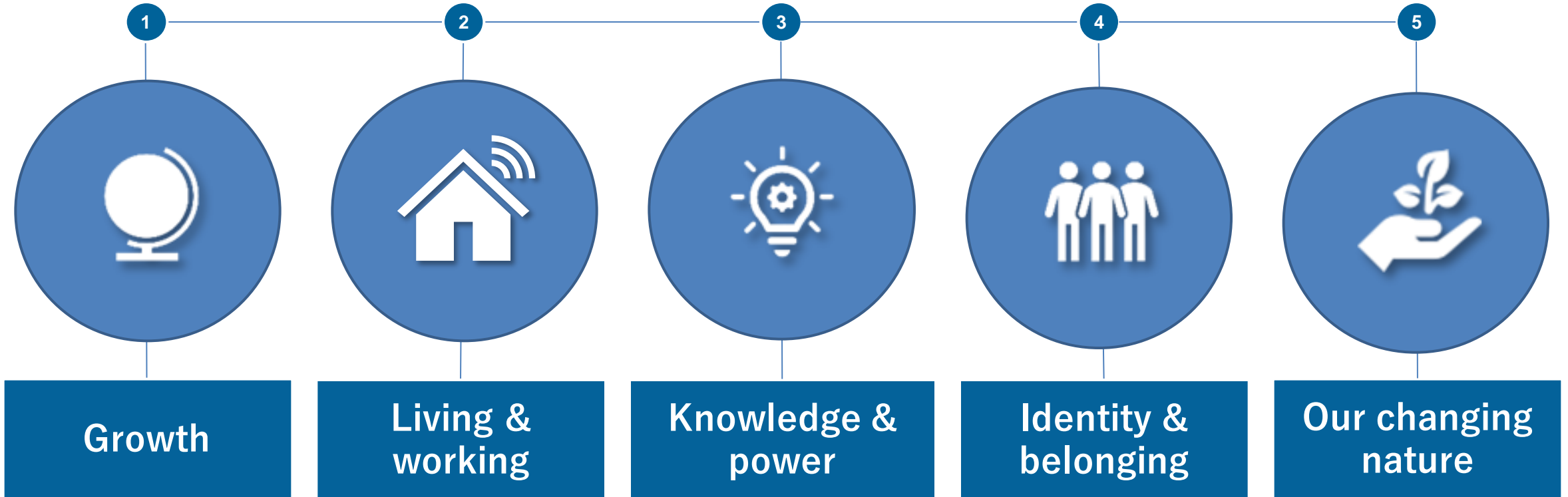
Trends Shaping Education: How?

- **Brainstorming** ideas, selecting and compiling relevant data: OECD, experts
- **Fact checking:** OECD (11 Directorates, Units and partner Agencies), countries
- **Link to education:** EDU/SKC, experts, countries, civil society representatives
- **Future thinking:** OECD, (foresight) experts



Trends Shaping Education 2022

Five thematic chapters:





Growth



Growing prosperity

How does increasing affluence affect inequalities?

A new source of growth

In which ways are intangible assets driving innovation and productivity?

Demographic pressures

What are the impacts of population ageing on growth and living standards?

A growth revolution?

Can we reconcile shared prosperity and environmental sustainability?

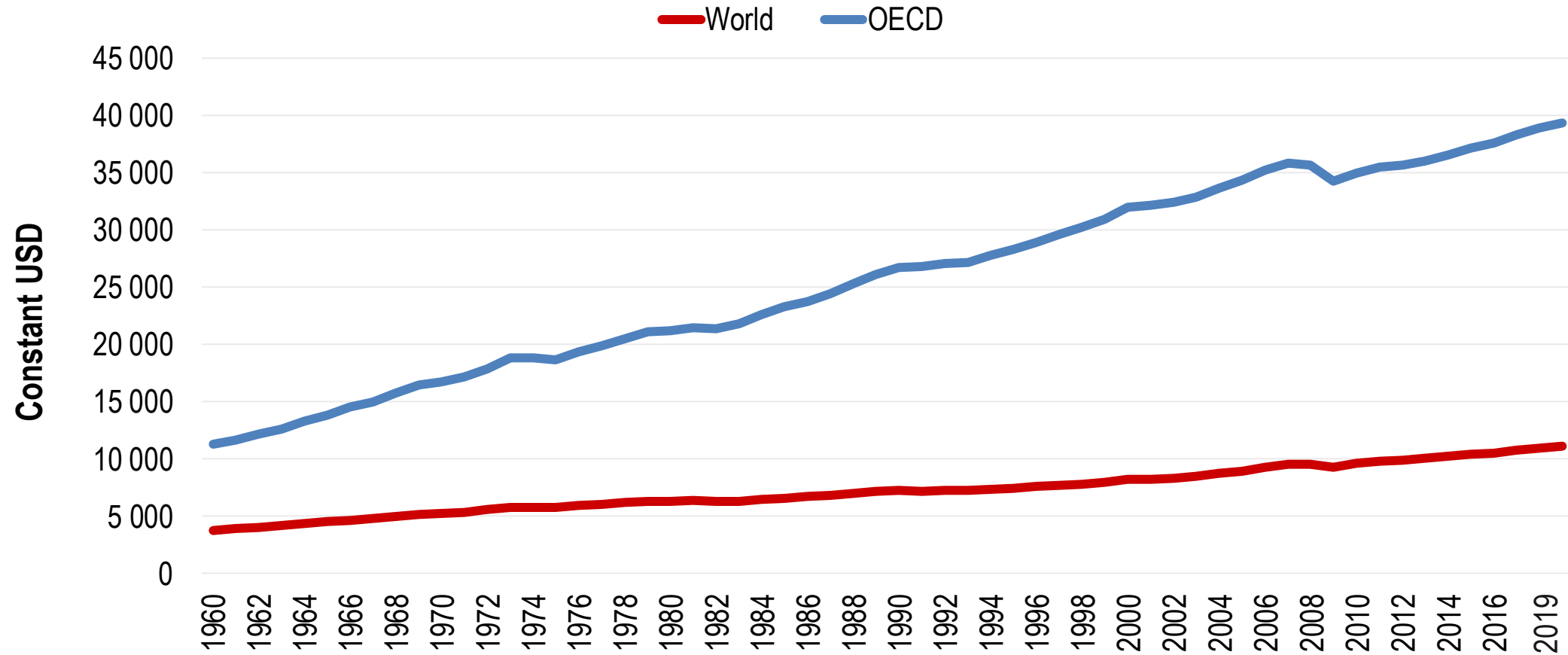
To infinity and beyond

What opportunities and challenges do new economies bring?



Increasing affluence – growing unequal

Gross domestic product (GDP) per capita, constant 2015 USD, 1960-2019

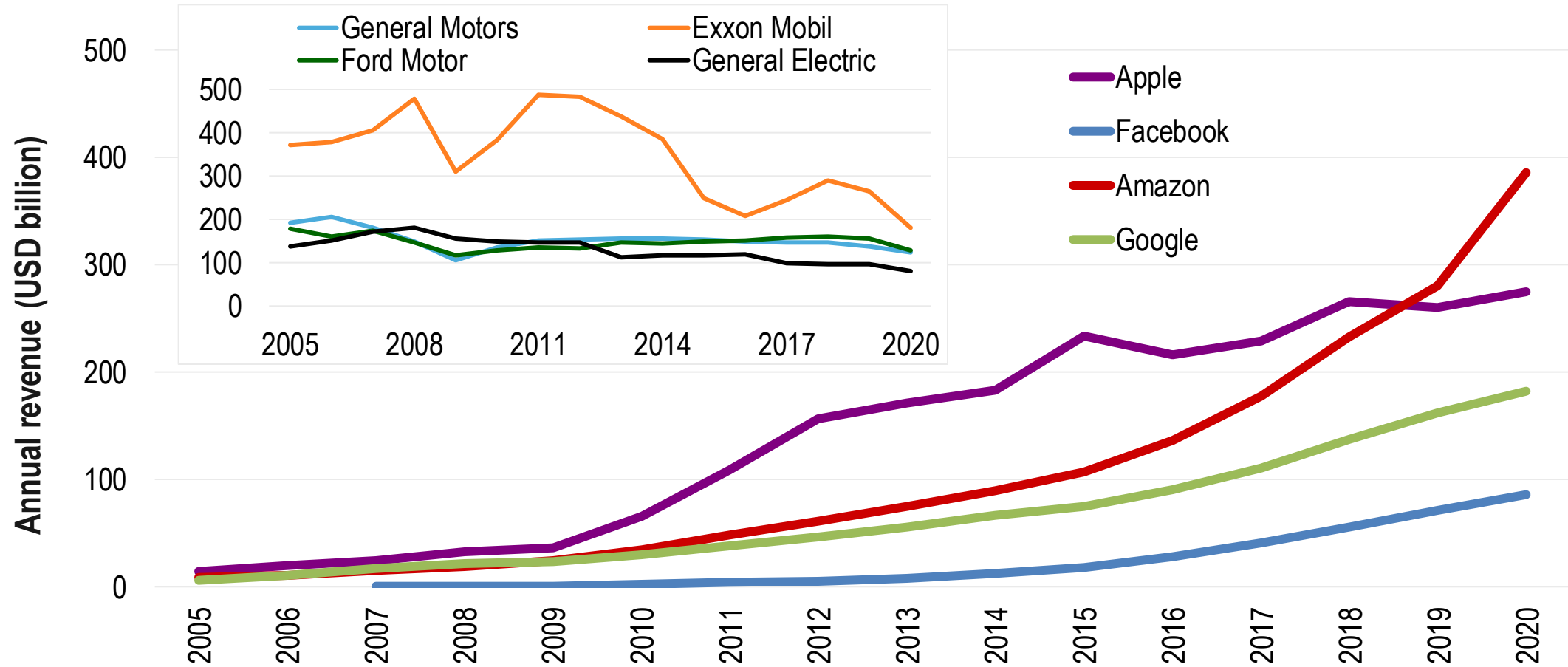


Source: World Bank (2021), "GDP per capita (constant 2015 US\$)", (indicator), <https://data.worldbank.org/>.



The rise of Big Tech

Annual revenue of top four companies from the Fortune 500 in 1960 vs “Big Four” tech companies, 2005-2020



Source: OECD(2019), *An Introduction to Online Platforms and Their Role in the Digital Transformation*, <https://doi.org/10.1787/53e5f593-en>; companies' annual reports; and <https://macrotrends.net>



Knowledge and power

Knowledge societies

How do we get to know what we know?

Are the data too big to fail?

In what ways are AI and “big data” affecting our decision making?

Opening up science

How are digital technologies changing scientific practices?

Knowledge governance

What impacts does knowledge production have on society?

Speaking truth to power

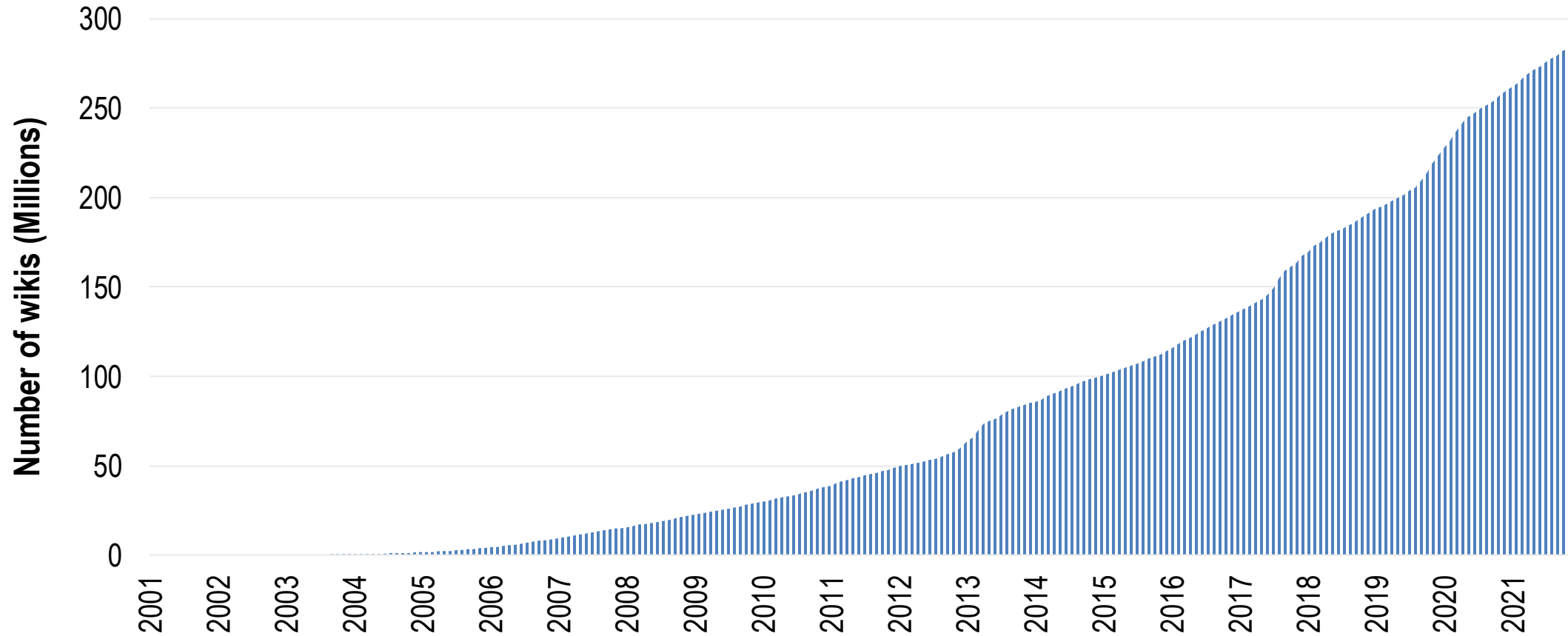
What roles do expert and lay knowledge play in our democracies?





The wisdom of crowds

Number of pages in all wikis, 2001-2021

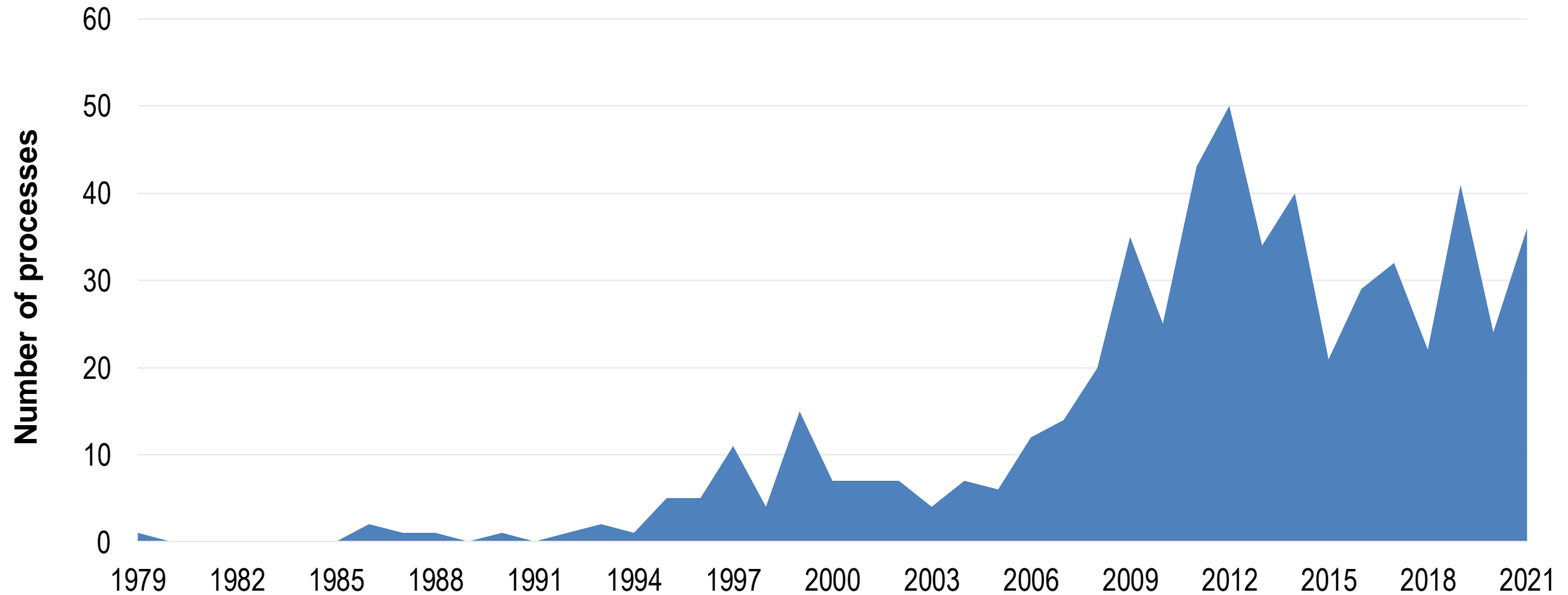


Source: Wikimedia (2021), Pages to Date, All Wikis, <https://stats.wikimedia.org/>



A wave of deliberative politics

Number of representative deliberative processes over time, OECD countries, 1979-2021



Source: OECD (2021), OECD Database of Representative Deliberative Processes and Institutions (database), <https://airtable.com/>.



Living and working

Work to live or live to work?

How is our work-life balance evolving?

New employment for a new age?

What are the impacts of new working arrangements on our well-being?

The quantification of life

To what extent is digital tracking affecting our lives and relationships?

21st century families

How are family structures and roles within the family evolving?

Quality of life

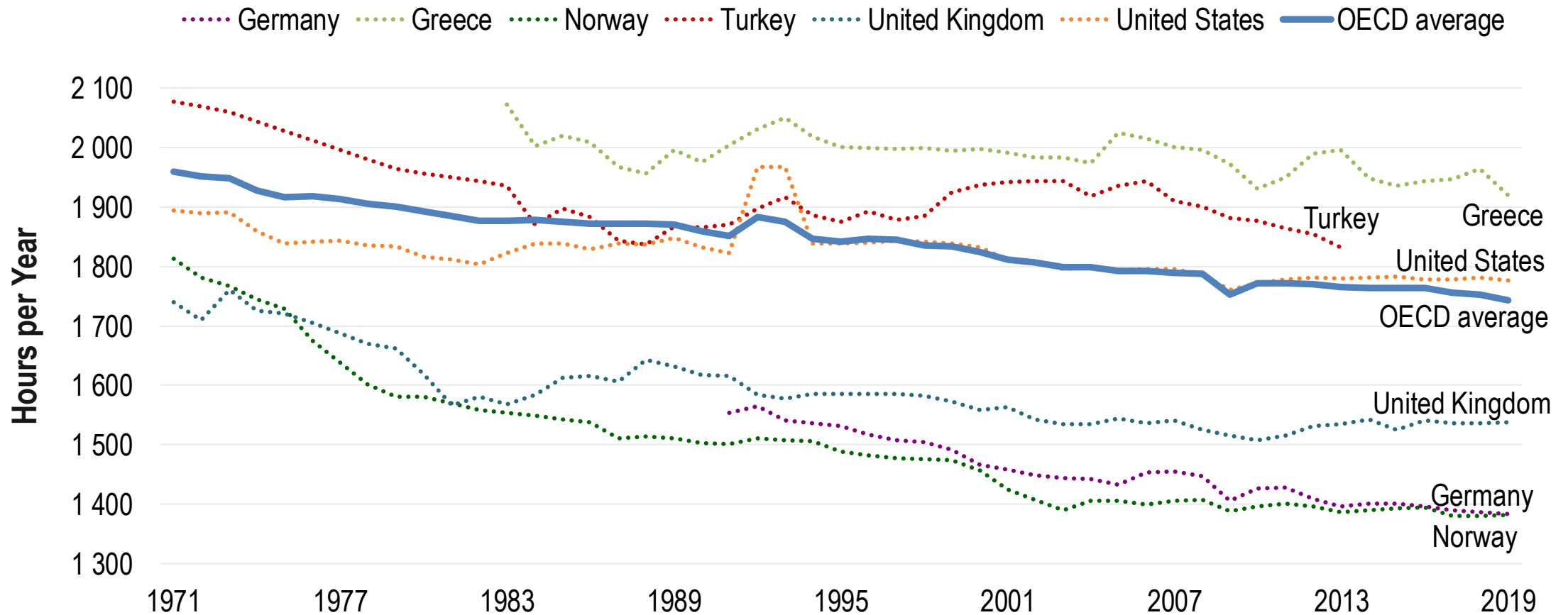
How are personal safety and housing trends changing?





In pursuit of a work-life balance

Average annual hours actually worked per worker, 1971-2019



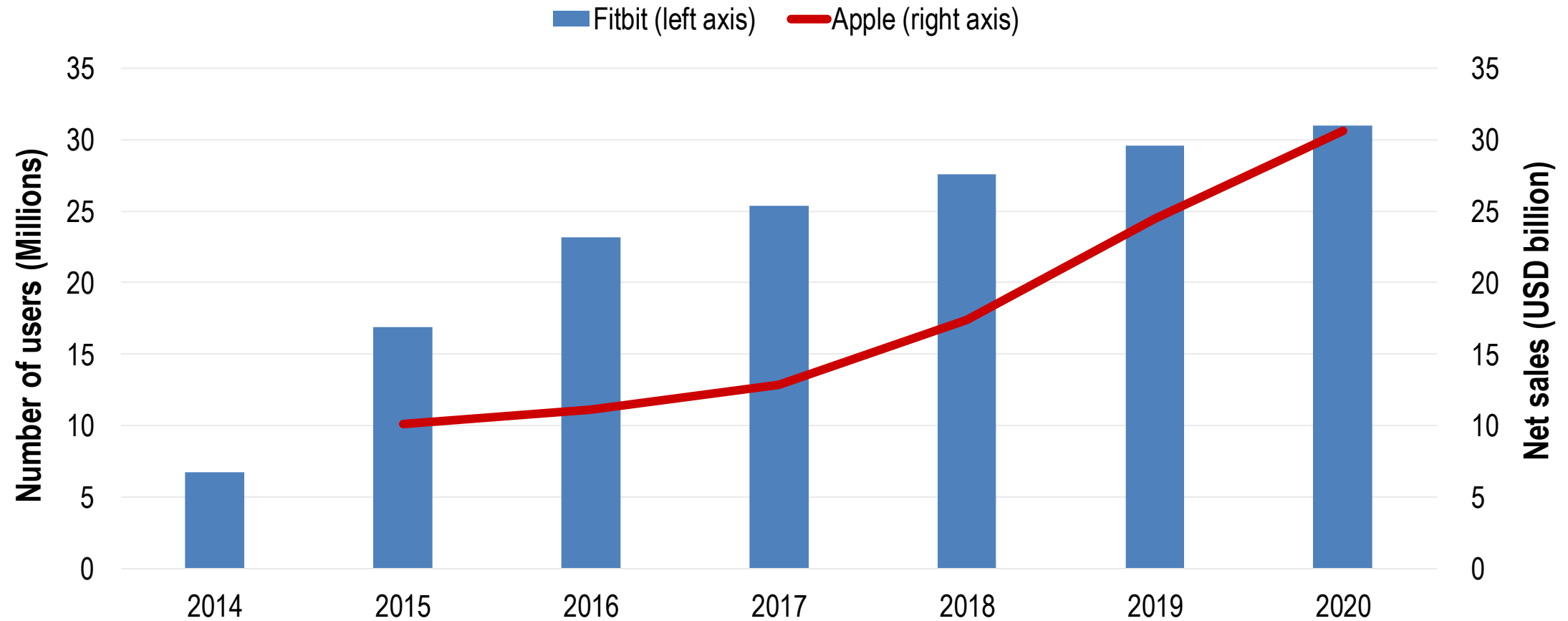
Source: OECD (2021), *OECD Labour Force Statistics* (database), <https://stats.oecd.org/>

Figure 2.1



An app a day keeps the doctor away?

Fitbit active users (2014-2020) and Apple wearables, home & accessories net sales (2015-2020)



Source: OECD calculations from Fitbit full year results (2014-2020), <https://investor.fitbit.com/>, and Apple annual reports on Form 10-K (2015-2020), <https://investor.apple.com/>.



Identity and belonging

You can go your own way

What role do social institutions play in our individualising world?

It's a small world after all

How are we diversifying, nationally and in our multilateral systems?

Speak your mind

How are the interests, behaviours and demands of citizens changing?

All for one, one for all

Where are we in the fight against discrimination and social exclusion?

The many profiles of us

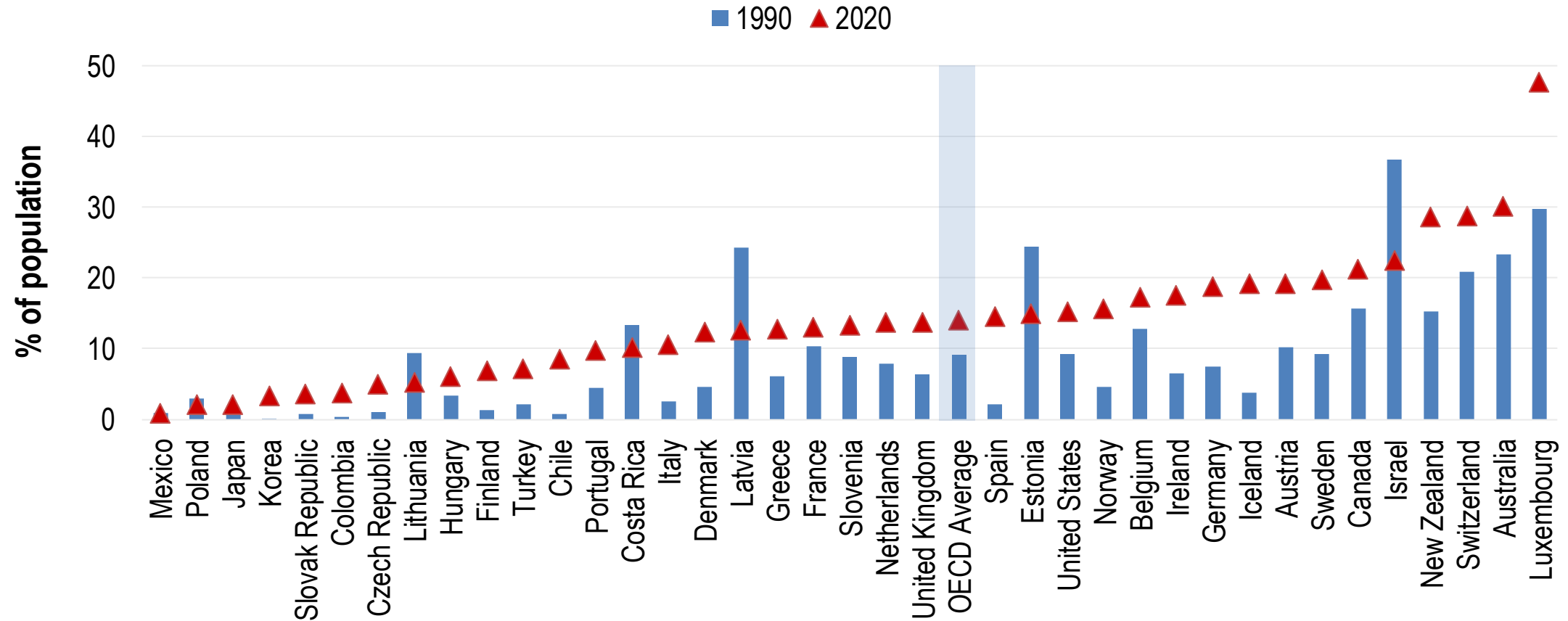
How is the digital world changing identity exploration and development?





Increasing migration

International migrant stock by country of destination, OECD countries, 1990-2020

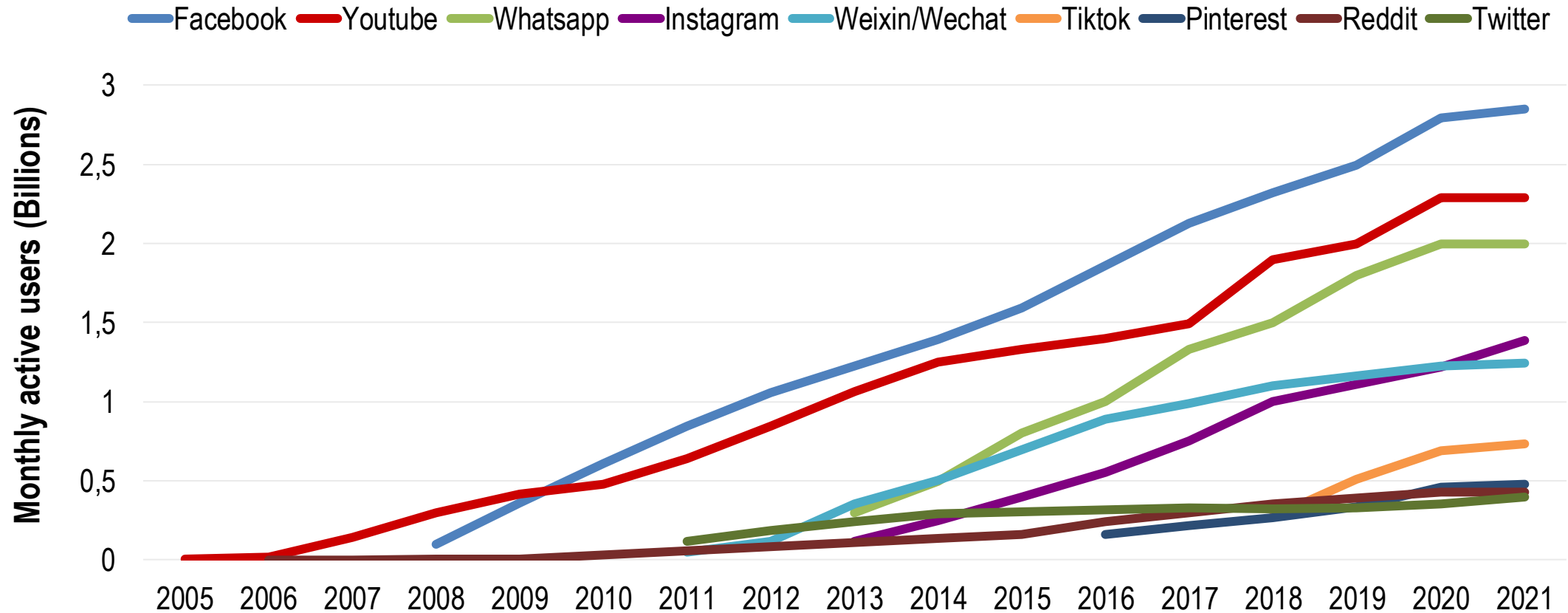


Source: UNDESA (2021), International Migrant Stock 2020, <https://www.un.org/>.



Multiple identities

Number of monthly active users on social media platforms, 2004-2021



Source: OECD calculations from companies' annual reports; Ortiz-Espina (18 September 2019), <https://ourworldindata.org/>; Iqbal (13 May 2021), <https://www.businessofapps.com/>; Sherman (24 August 2020), <https://www.cnbc.com/>; Statista (2021), <https://www.statista.com/>.



Our changing nature

There is no Planet B

Is the pace at which we are using our planet's resources sustainable?

The natural world

How is our relationship with the natural world evolving?

Food for thought

How is food production and consumption affecting our well-being?

Our human body

Are we moving towards a new paradigm of human enhancement?

No one lives in cyberspace

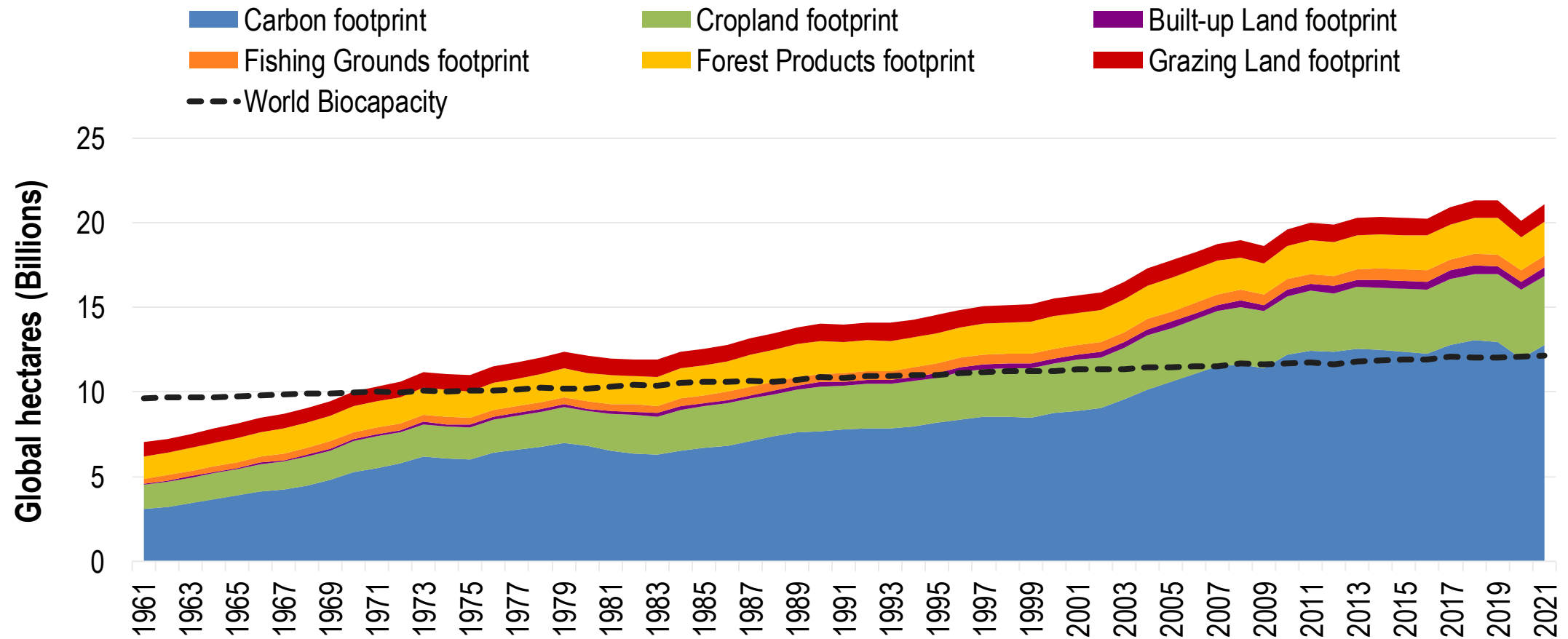
How is digitalisation changing communication and social interactions?





An outsized ecological footprint

Humanity's ecological footprint by land type against Earth's biocapacity, global hectares (gha), 1961-2021



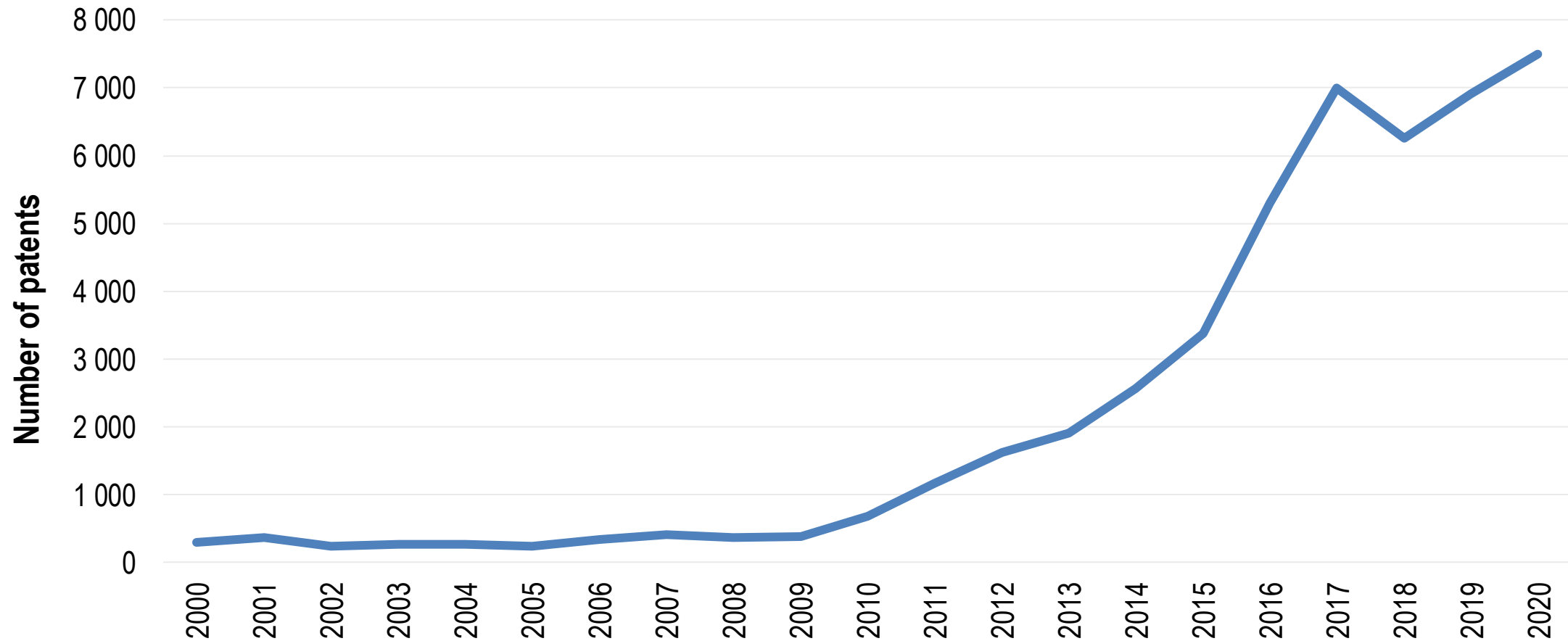
Source: Global Footprint Network (2021), *National Footprint and Biocapacity Accounts*, <https://data.footprintnetwork.org>;
Lin, Wambersie and Wackernagel (2021), "Estimating the Date of Earth Overshoot Day 2021", <https://www.overshootday.org/>

Figure 5.1



Where the (virtual) wild things are

Global number of new patents/applications related to AR/VR in gaming, 2000–2020



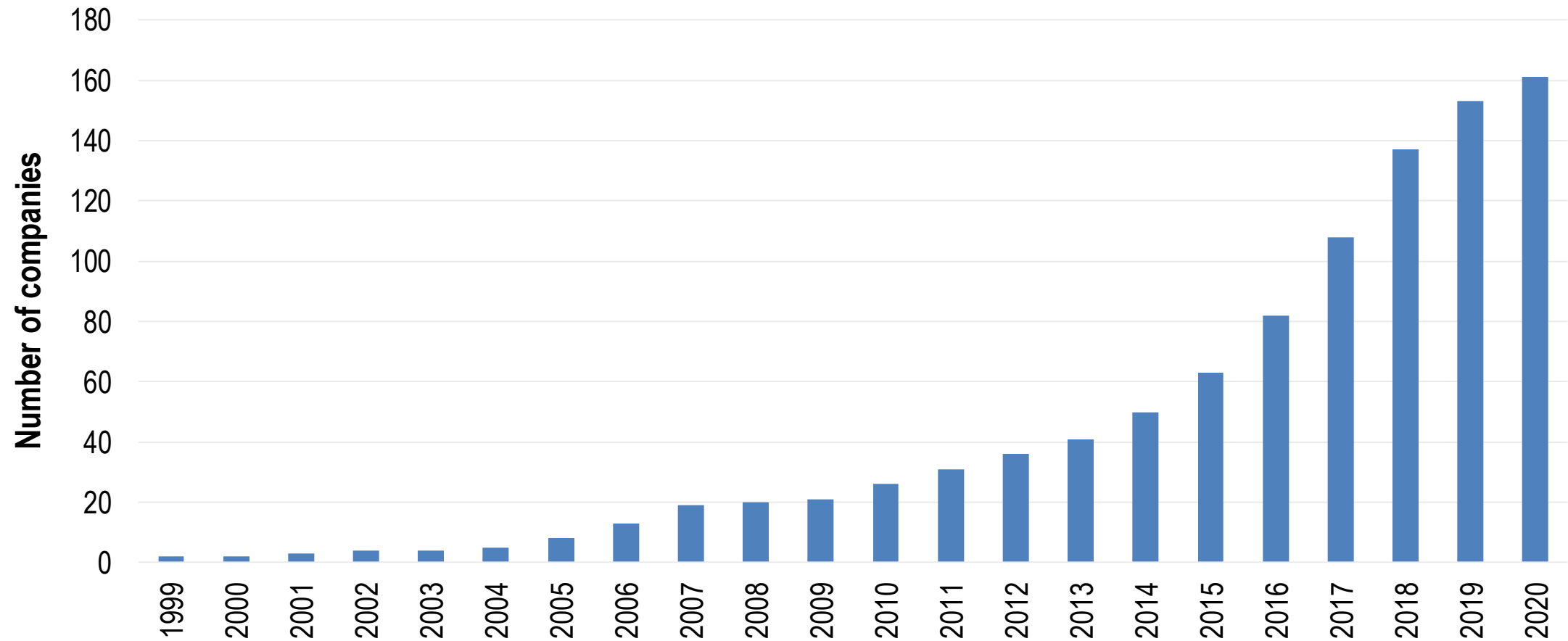
Source: MaxVal Group, Inc. (19 August 2020), “Tracking Influential Augmented and Virtual Reality Patents In Gaming”, <https://www.maxval.com/>.

Figure 5.9



Forever young: Augmented humanity

Cumulative number of ageing biotech companies, 1999-2020



Source: AgingBiotech (2021), *Aging companies dataset*, <https://agingbiotech.info/companies/>.



And the future?

ACCELERATE

Will the pandemic further accelerate open science trends?

Increased funding, open access and data, and fast-track publication accelerated COVID-19-related scientific production. Over three in four of all COVID-19 publications are open access.

COVID-19 biomedical and life sciences research publications, 2020

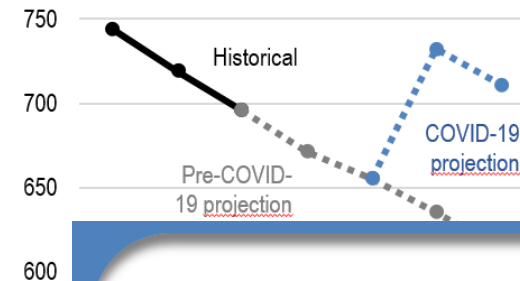


BEND

Crises disproportionately affect the most vulnerable. Will we be more resilient for the next one?

The pandemic interrupted more than two decades of continuous progress in poverty reduction. While extreme poverty is once again declining, almost 100 million more people were pushed into poverty in 2020.

Global extreme poverty, millions of people, 2015-2021

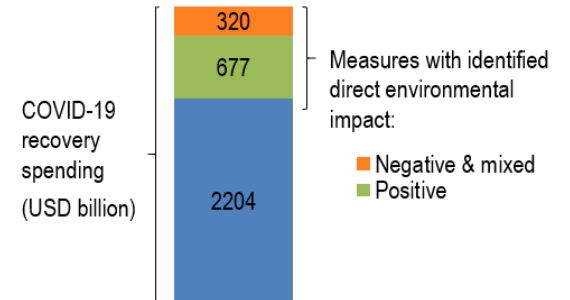


BREAK

As the economy recovers, will it break with an unsustainable model?

OECD and key partner countries deployed unprecedented economic recovery packages. Despite the urgency of action on climate, about one in three measures with direct environmental impact are expected to have negative or mixed effects.

Estimated environmental impact of COVID-19 recovery measures, mid-2021



OECD (2021), <https://www.oecd.org/coronavirus/>

*Not all trends
are created
equal*



The future will surprise us!





Thank you!

- For more info and resources:
 - Visit the [book page](#) (slide bank, blog, launch video...)
 - Have a look at the [project's website](#)
 - Get in touch
 - Marc.FusterRabella@oecd.org