



The world in 2030

Global Economics | April 2019



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Economics

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First, a quiz

In the last 20 years, the proportion of the world's population living in extreme poverty has...?

A More than doubled

B Remained roughly the same

C Almost halved

The results

But bearing in mind it's multiple choice... what share of the world gets this right?

A 50%

B 25%

C 7%

What factors drive long-term growth?

- A growing, young, population
- A well-educated workforce
- A healthy population
- Stable political environment
- Improving technology
- Open to trade

Africa dummy variable

Agriculture as % GDP
Average years of total schooling
Current account balance
Capital stock as % GDP
Capital stock per head

China dummy variable

Change in share of population that is working age

Civil liberties index
Cost of investment index
Democracy index

Electricity consumption per capita

Female participation rate

Fertility rate

GDP per capita (real USD)
Government spending as % GDP
Gross government debt as % GDP

Human Capital Index

Investment as % GDP

Industry as % GDP

Inflation rate (trend)

Life expectancy

Mobile phone ownership

Openness (exports + imports as % GDP)

Participation rate (in employment)

Political rights index

Primary school enrolment rate

Private sector debt (% GDP)

Rule of law index

Services as % GDP

Share of population that is of working age

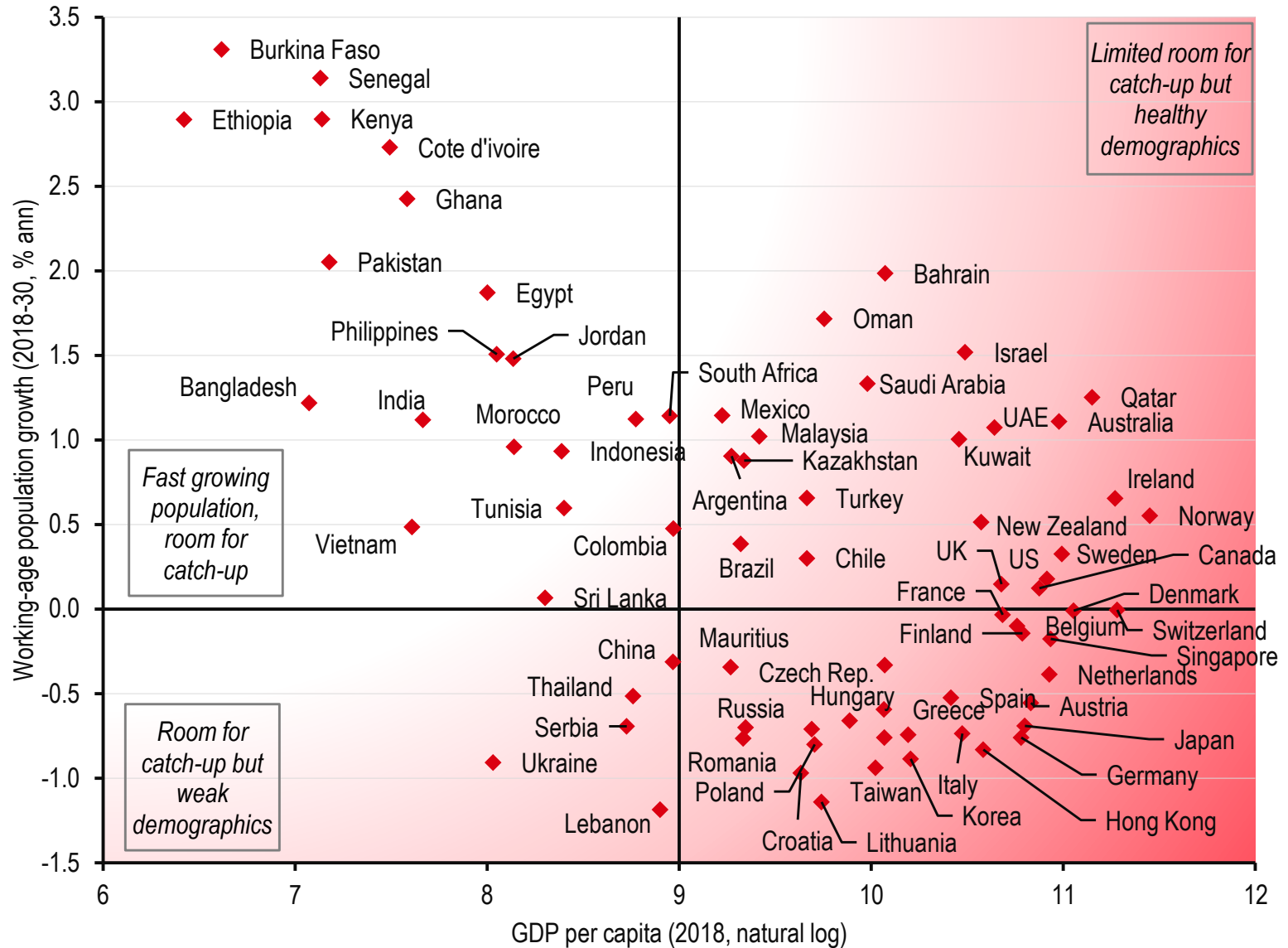
Urbanisation rate

US dummy variable

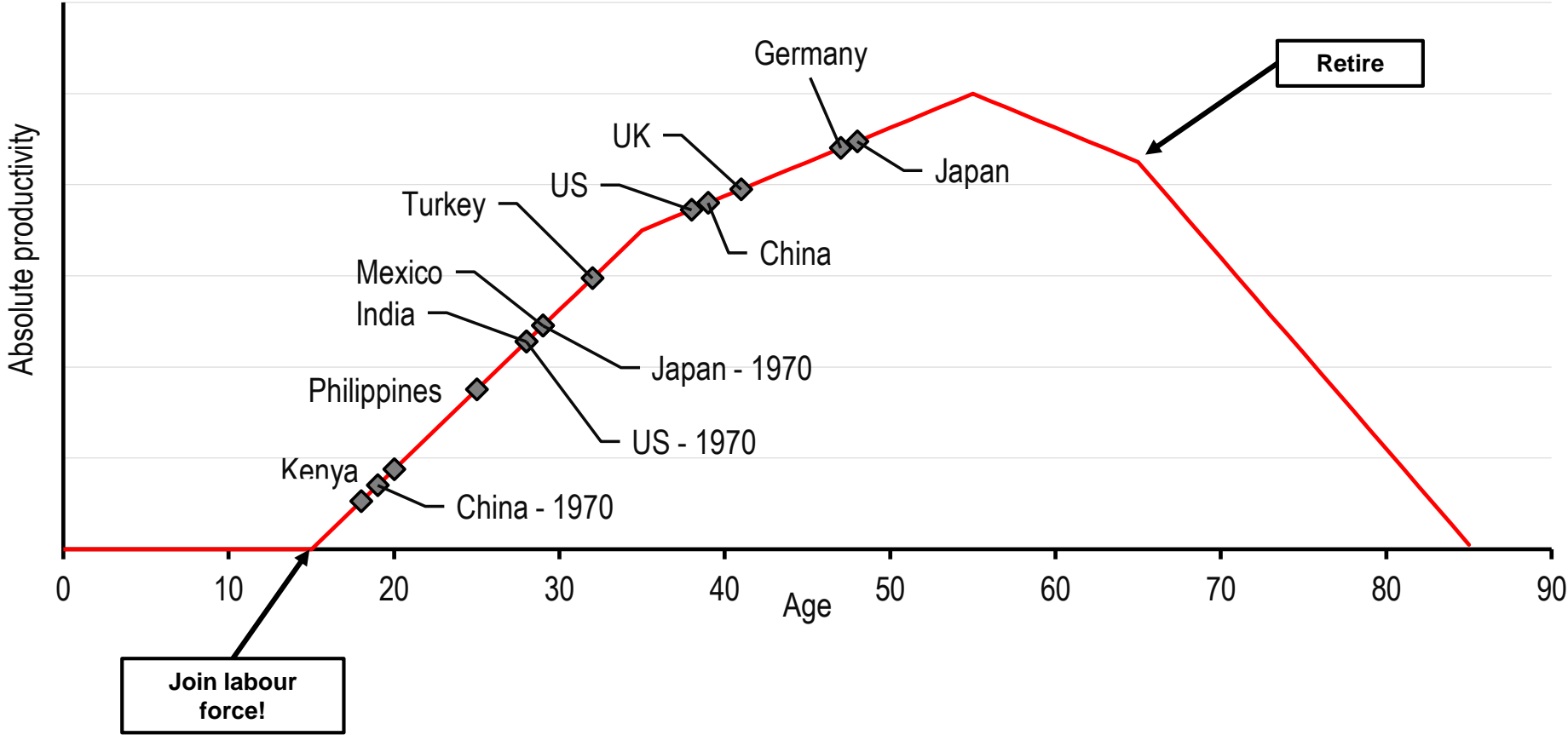
Working –age population growth

Youth unemployment rate

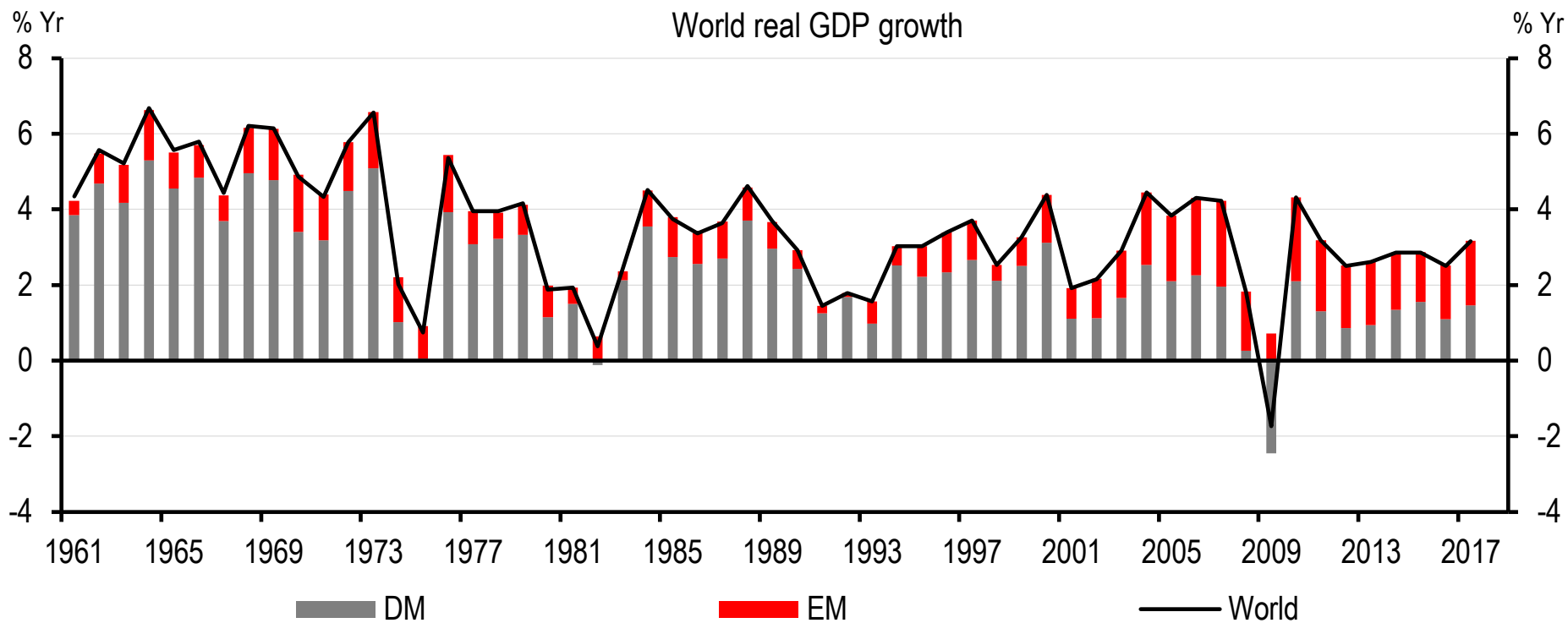
Young, poorer countries should have higher growth potential



Demographics matter in a number of ways



Global growth has been remarkably steady on a longer-term time horizon



How will the global rankings change?

Biggest economies (in 2030)

	Country	Ranking change	
1	China	+1	(2 to 1)
2	US	-1	(1 to 2)
3	India	+4	(7 to 3)
4	Japan	-1	(3 to 4)
5	Germany	-1	(4 to 5)

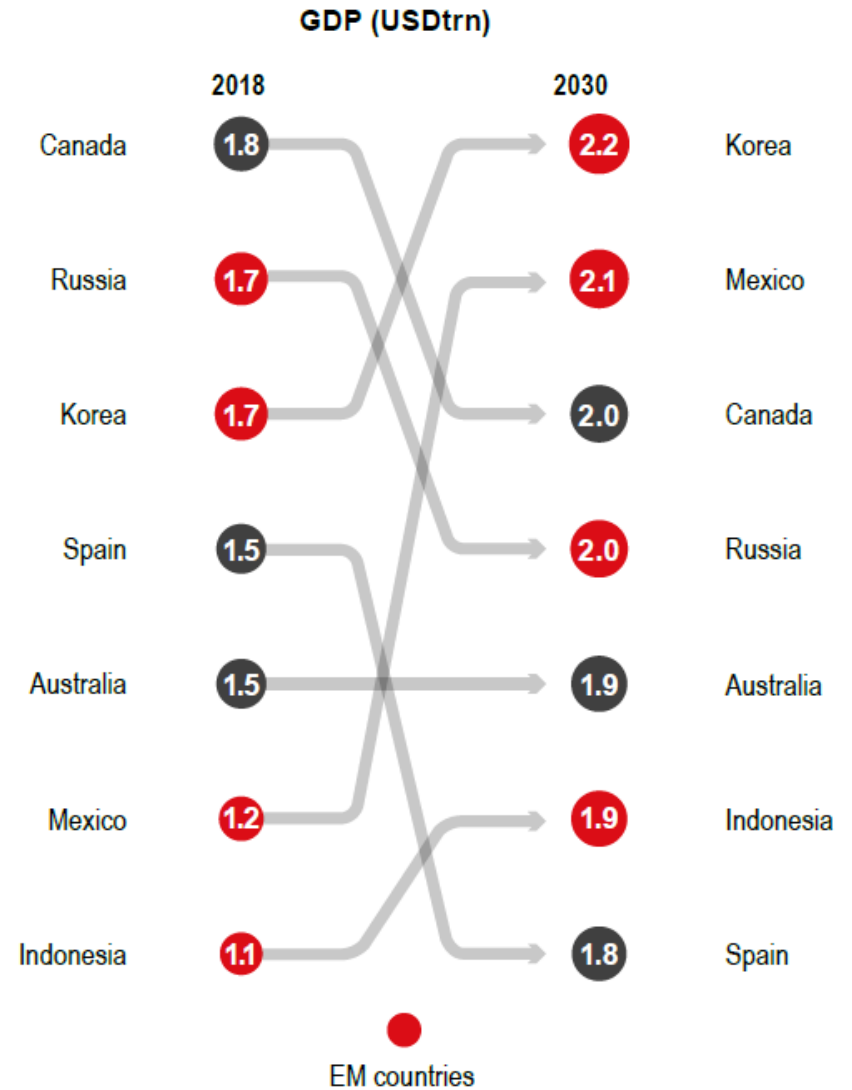
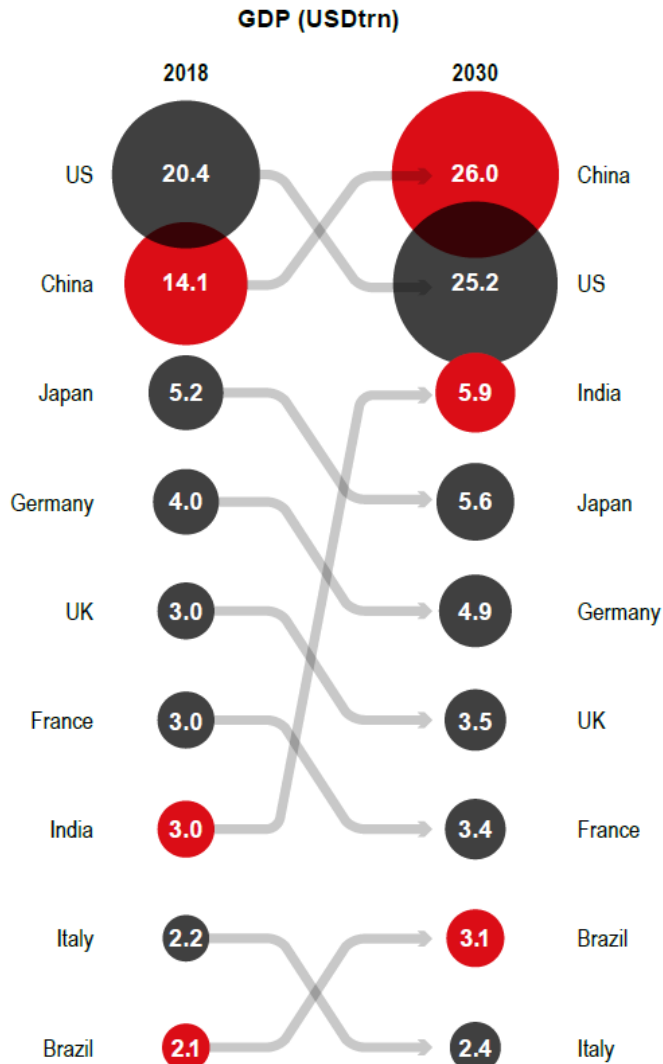
Biggest risers

Country	Ranking change	
Bangladesh	+16	(42 to 26)
Philippines	+11	(38 to 27)
Pakistan	+10	(40 to 30)
Vietnam	+8	(47 to 39)
Malaysia	+5	(34 to 29)

Biggest fallers

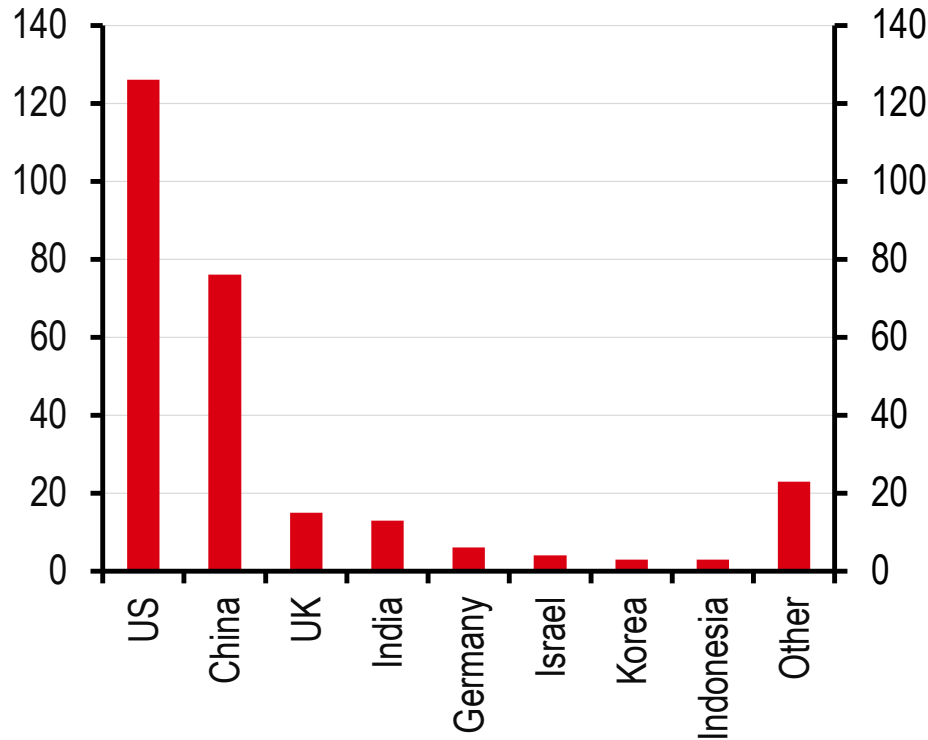
Country	Ranking change	
Norway	-10	(27 to 37)
Denmark	-9	(33 to 42)
Finland	-7	(41 to 48)
Austria	-5	(26 to 31)
Portugal	-4	(45 to 49)

2030: Long-term global GDP rankings



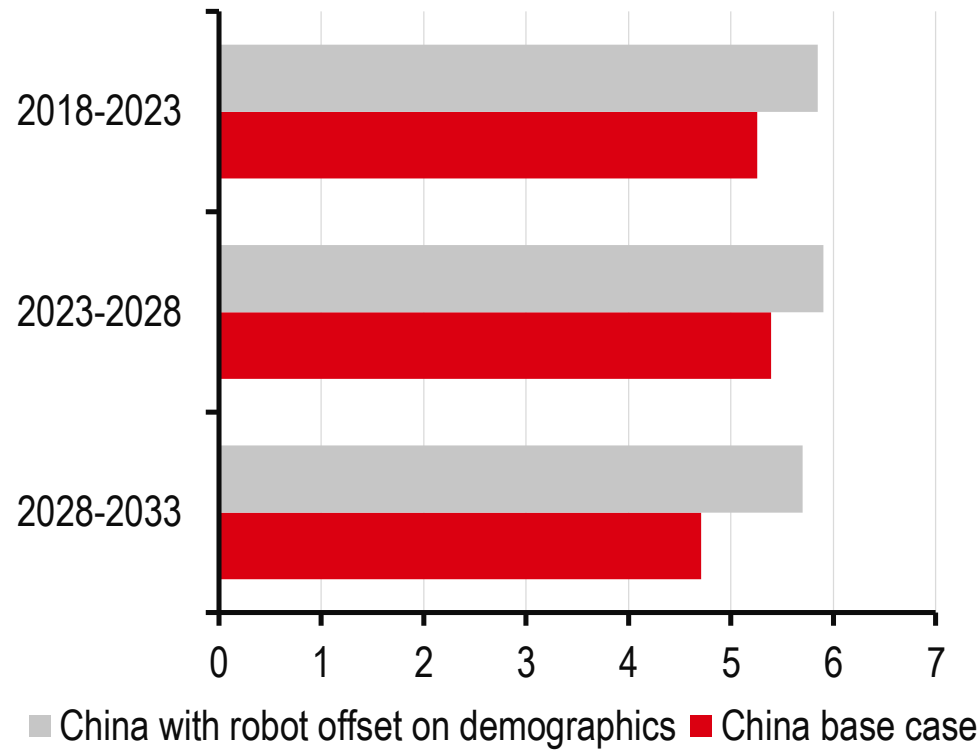
More automation could offset the impact of demographic decline on productivity

Number of tech 'unicorns'



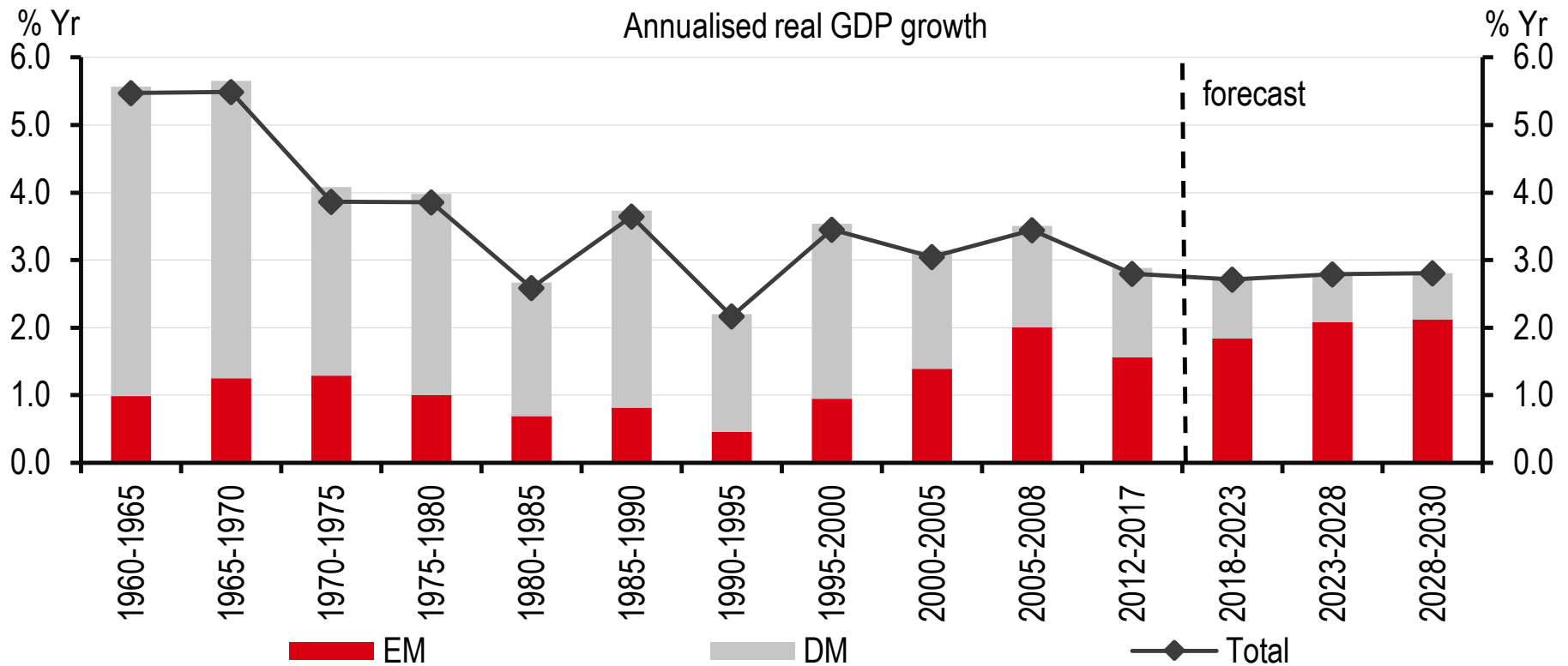
Note: A unicorn company is a start-up with a valuation over USD1 billion

China: Model real GDP growth projections (% Yr)



Note: Robot offset implies halving the rate of decline in the share of the population that is of working-age

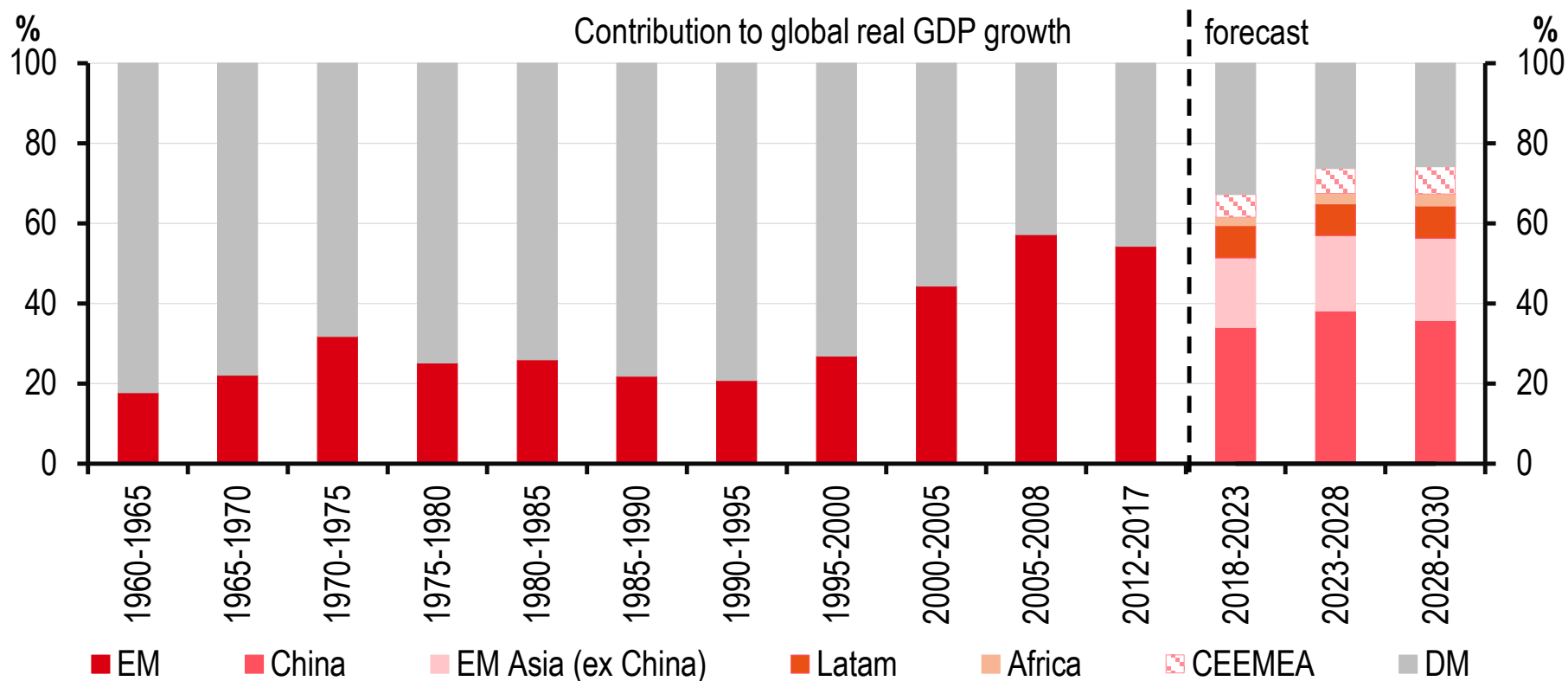
Global growth could stay close to 3%



Source: World Bank, HSBC estimates.

Global GDP growth is calculated using nominal GDP weights rather than PPP weights.

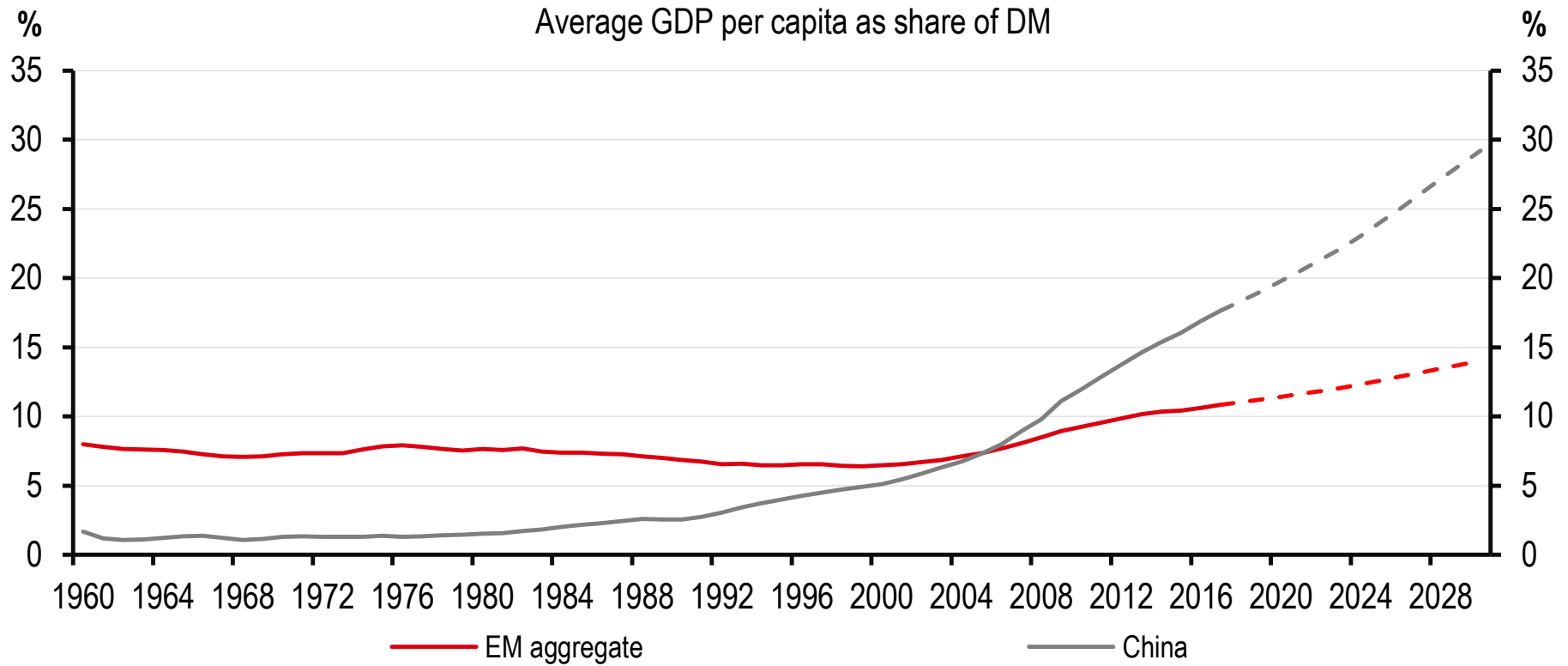
70% of global growth is set to come from EM – particularly Asia



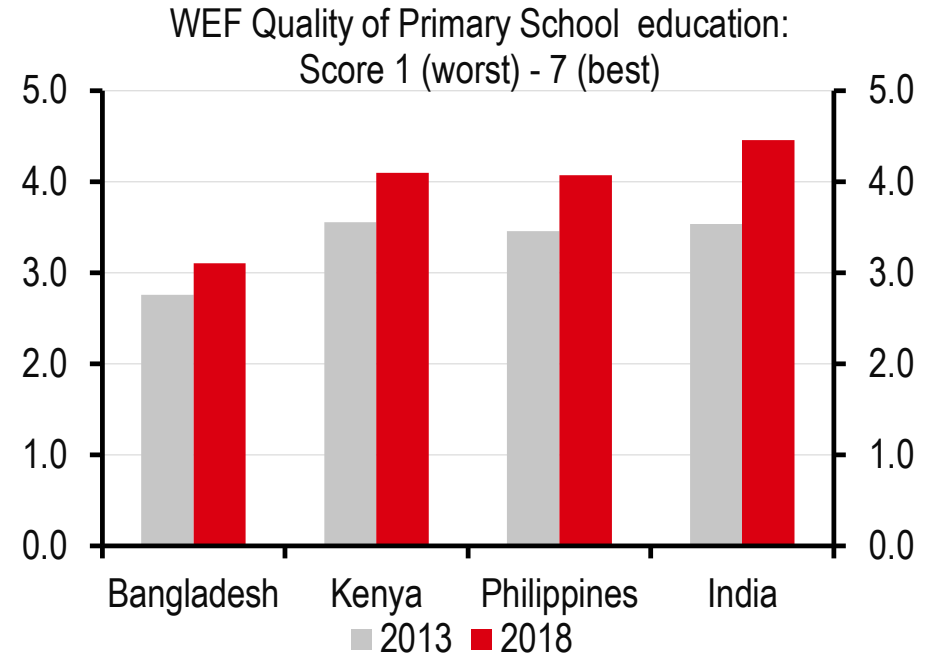
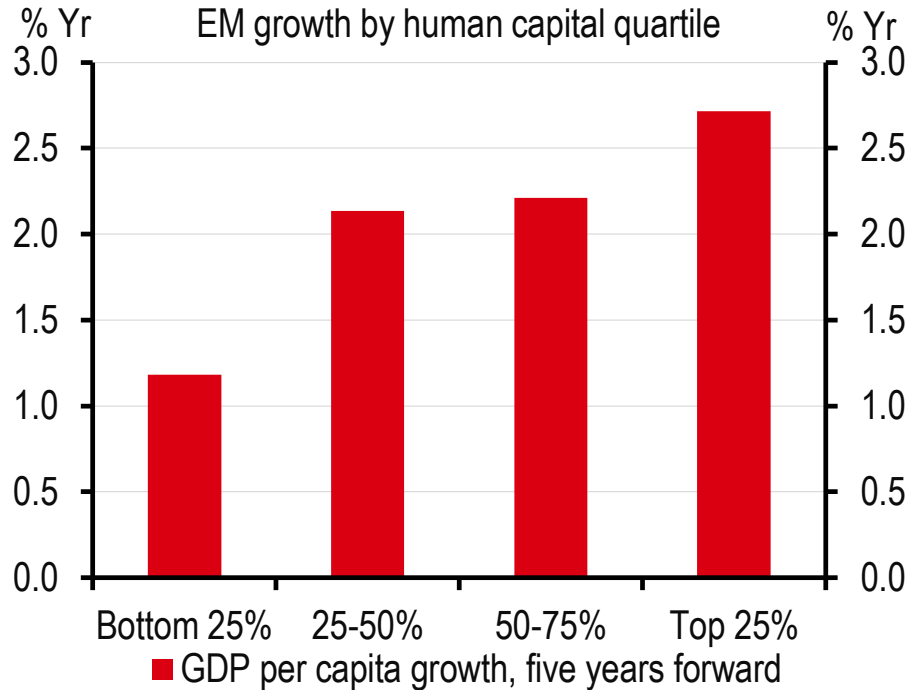
Source: World Bank data, HSBC estimates.

Note that the countries included in each of these regions are those listed in table 10 so the contribution from some EM regions which also include lots of countries which do not make it into the top 75 may be understated.

Emerging markets still have scope for catch-up



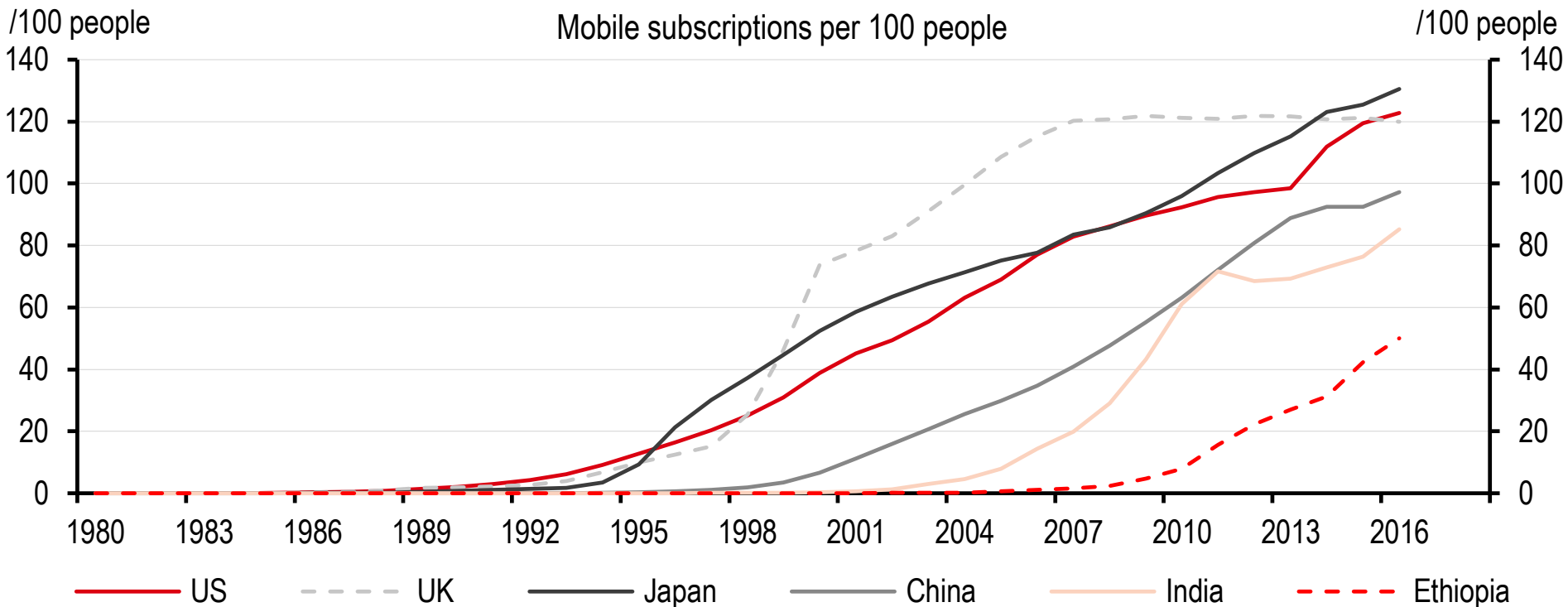
Better human capital can spur growth in EM and education quality is on the rise



Source: Penn World Tables, HSBC calculations, World Economic Forum Global Competitiveness Index

Note: Taking countries with a human capital index score that are in each percentile, we then took a 5-year forward annualised GDP growth and the chart shows a simple average.

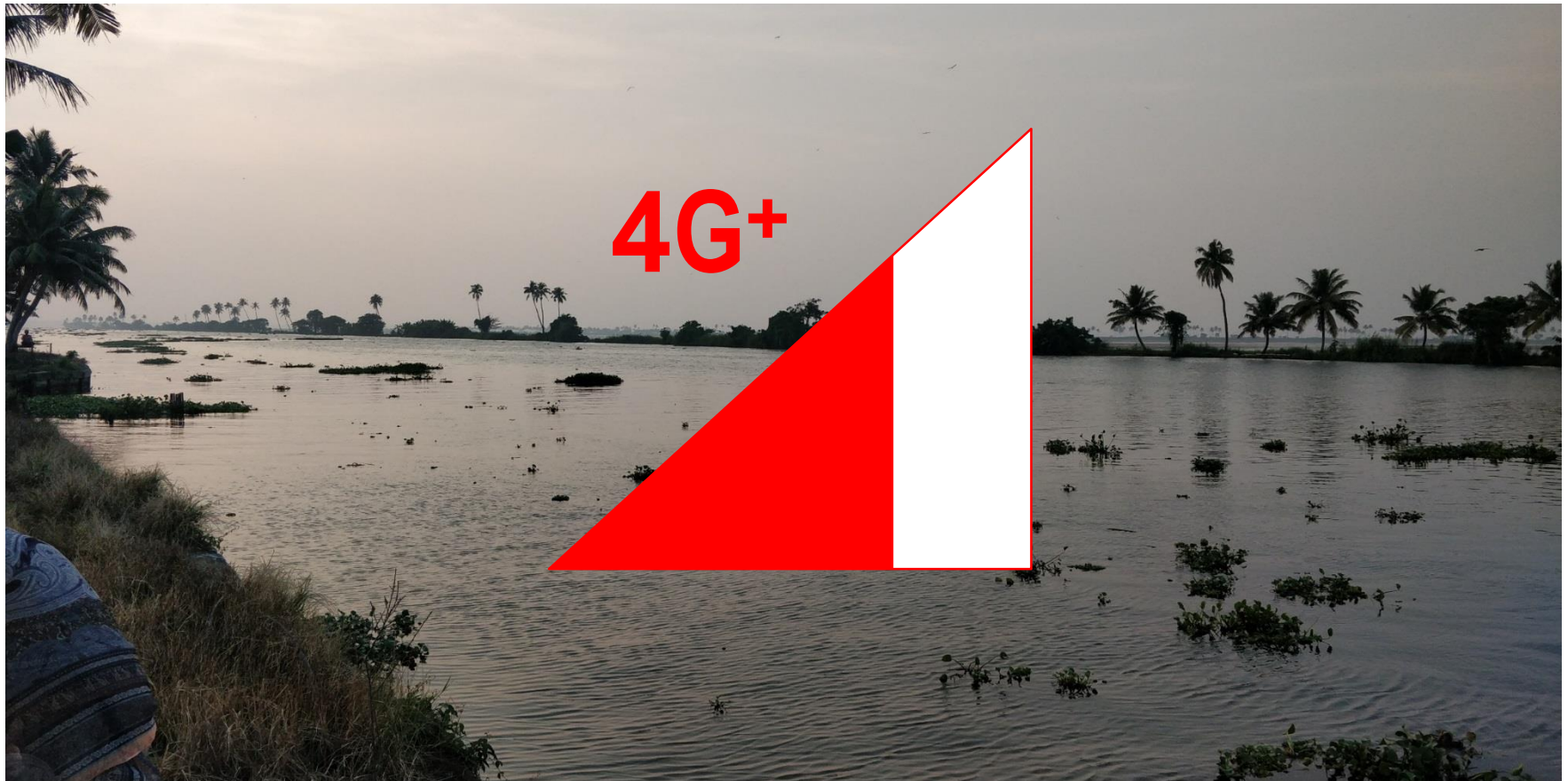
Some parts of the world have scope for catch-up in terms of technological availability



Source: World Bank WDI.

Note: Can be >100 due to multiple subscriptions per head. Mobile phone adoption is not a perfect indicator. In some emerging markets still at an early stage of development, mobile phone ownership is much higher – often because they have not had easy access to landlines – than in some much more advanced economies. But some of the other benefits of a more technologically-advanced economy on productivity will have been captured in the educational performance and healthcare indicators in the model.

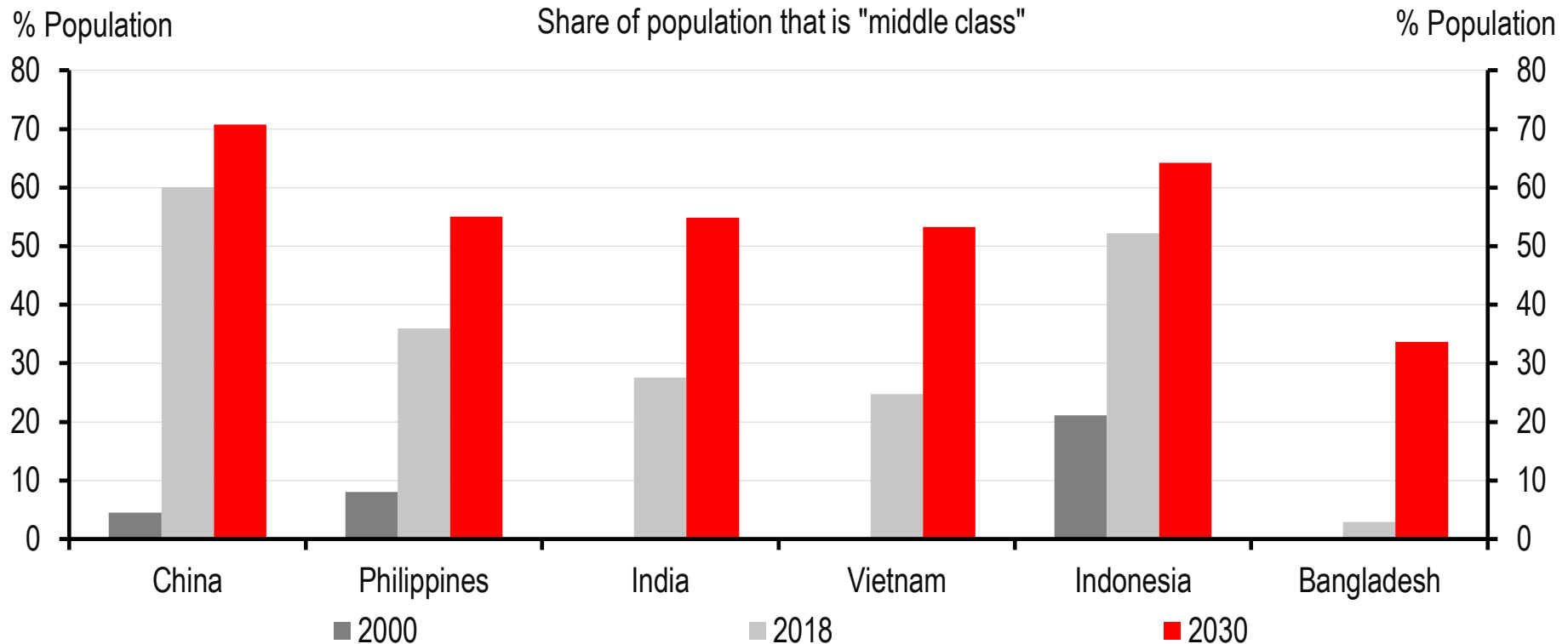
This could unleash a whole new pace of growth in EM...



Think about the education and healthcare implications...

- Access to university level education on your phone
- Access to news, weather forecasts and business information
- Easy sharing of healthcare practices

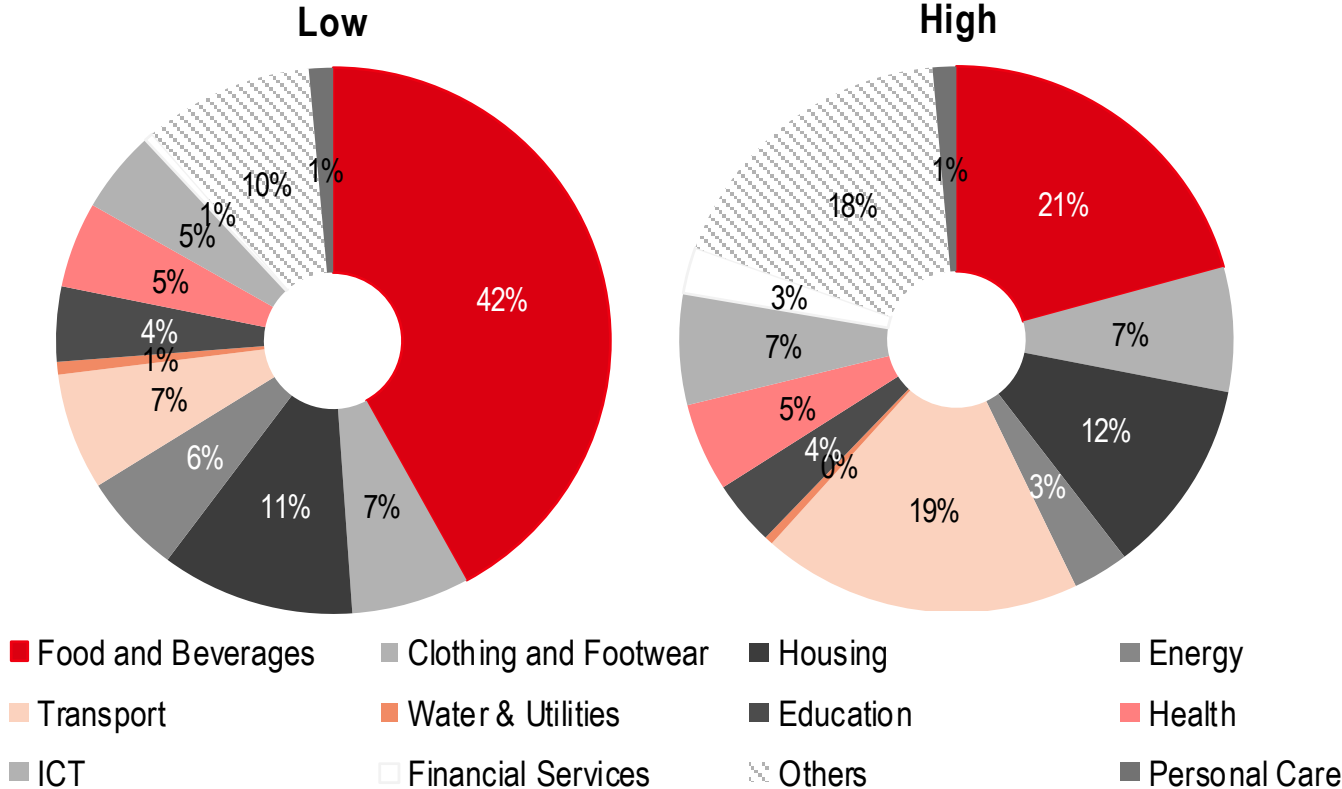
And if this leads to a new middle class...



Source: HSBC estimates. Note: We use a simple normal distribution function for the shape of the population where GDP per capita is the mean and the standard deviation is a function of the GINI coefficient, so a more unequal population has a larger standard deviation. We use the 'cut-off' for middle class as US\$11,000 in 2011 PPP, or USD\$14,300 for an average family of four members. Assuming that 75% of adults work, we can set the GDP per capita threshold for middle class to just over USD\$12,000 in 2011 PPP – implying that half of the population would be expected to be middle class in a country with this income level now, such as Peru.

...who spend differently, then the world will look very different!

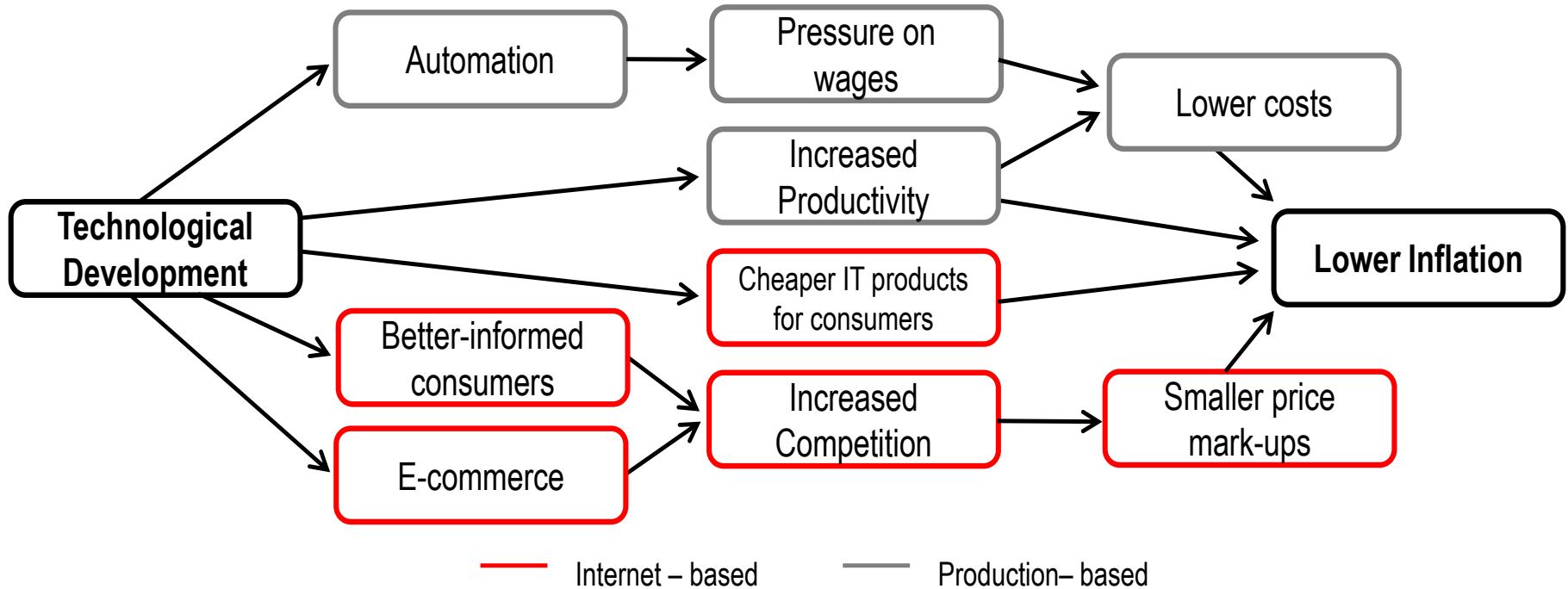
Consumption patterns by income group



Source: World Bank consumption database. Income groups are based on the World Bank's classification of income groups. Low is income of USD2.97-8.44 per capita per day and high income is above USD23.03 per capita per day.

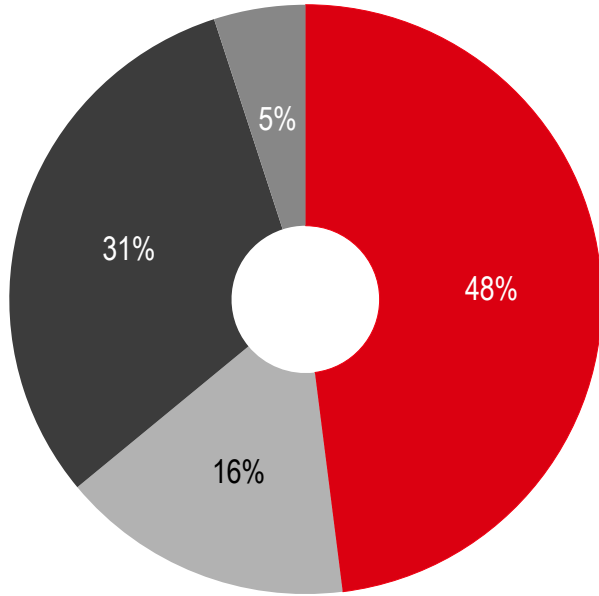
The disrupted economy

How is technology impacting inflation?



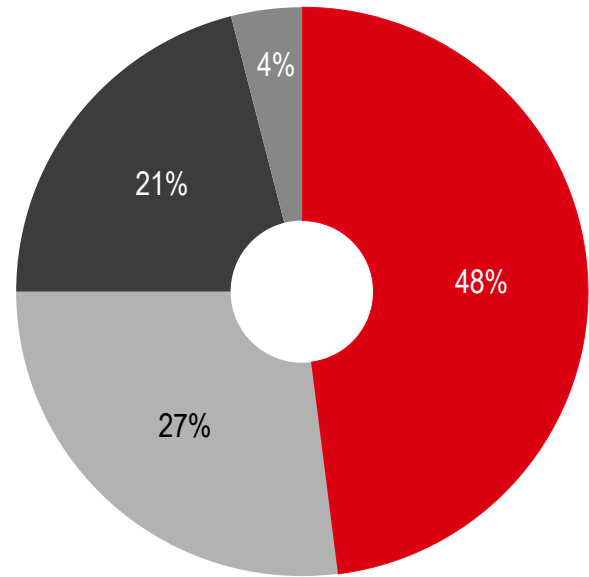
Will a robot take your job?

Share of stable, new and redundant roles 2018



■ Stable Roles ■ New roles ■ Redundant roles ■ Other

Share of stable, new and redundant roles 2022



■ Stable Roles ■ New roles ■ Redundant roles ■ Other

What jobs get automated today?

LOW SKILL

Shelf stacker: worth automating yet?



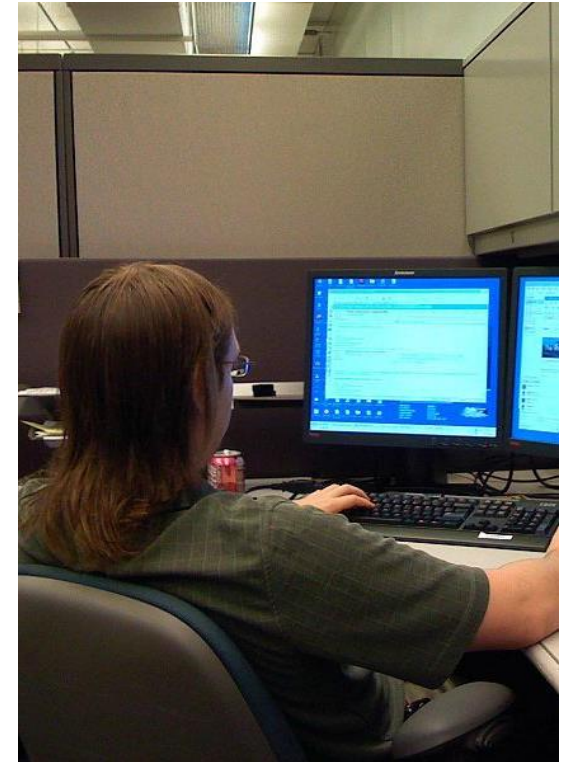
MIDSKILL

Till worker: Worth doing and can do



HIGH SKILL

Store manager: Is AI coming?



Some of my job is automatable

43%

automation risk for
economists

Some are less automatable

0.44%

automation risk for
dentists

Some are much more

99%

automation risk for
telemarketers

But we often forget about the new jobs!

Some provide online content...



@realDonaldTrump
has 58.6m followers on Twitter

Some play games...

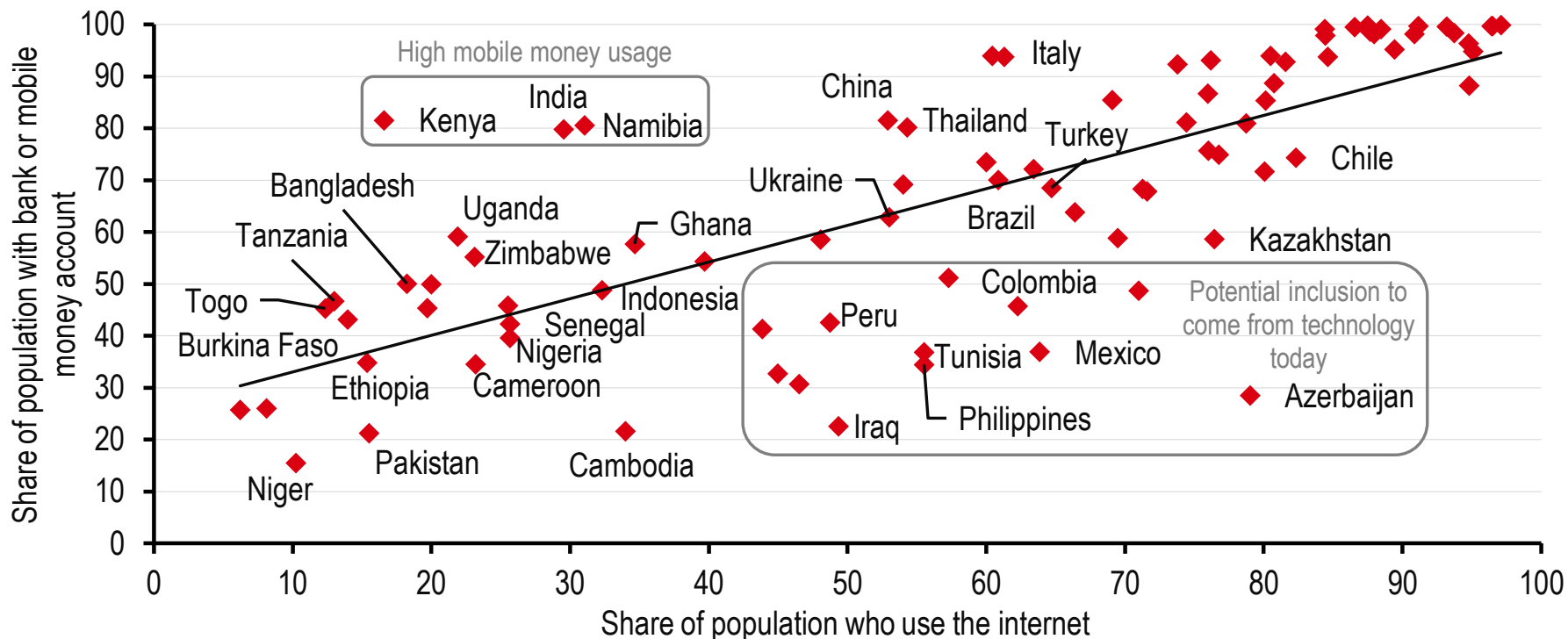
Tyler "Ninja" Blevins is a professional Battle Royale Player and Streamer on Twitch.tv/ninja.
He currently is playing Fortnite and COD Black Ops 4 Blackout.

He earns around \$500k a month.

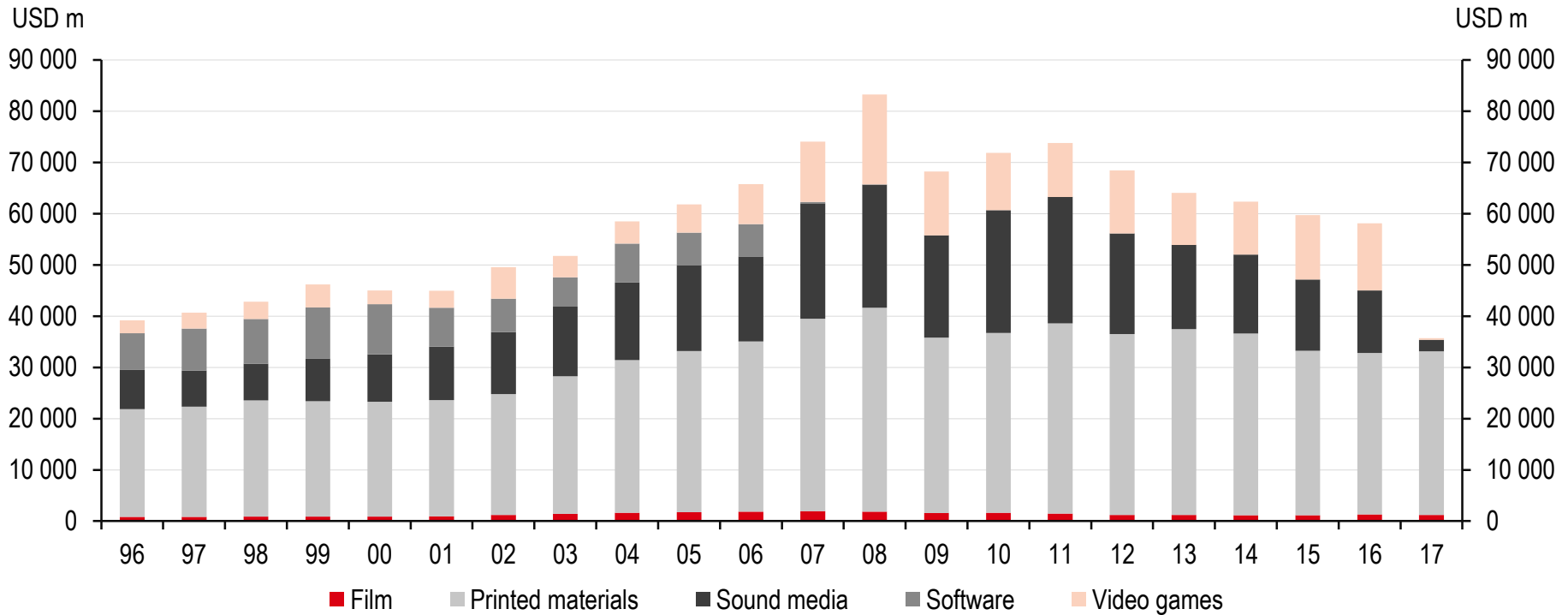
Some just utilise new technology

Like most of us in this room...

Will technology help emerging markets more?



How does tech change trade?



Disclosure appendix

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