McKinsey&Company

Disruptive trends and global sustainability

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Three messages

1 Tech disruption is arising from **multiple** sources- a first in history

2 Not only tech but other types of trends make established world **less resilient**

3 Necessary **to act and track progress now** in order not to deviate from SDG goals

1 The first time we have a parallel growth of disruptive tech

IT and how we use it

Mobile Internet

Cloud technology

Internet of Things

Automation of knowledge work

Changing the building blocks of everything

Next-generation genomics

Advanced materials

Smart Machines working for us

Advanced decision making

Autonomous and near-autonomous vehicles

3D printing

Rethinking energy comes of age

Energy storage

Advanced oil and gas exploration and recovery

Renewable energy

SOURCE: McKinsey Global Institute analysis

2 Not only tech, but other fundamental trends

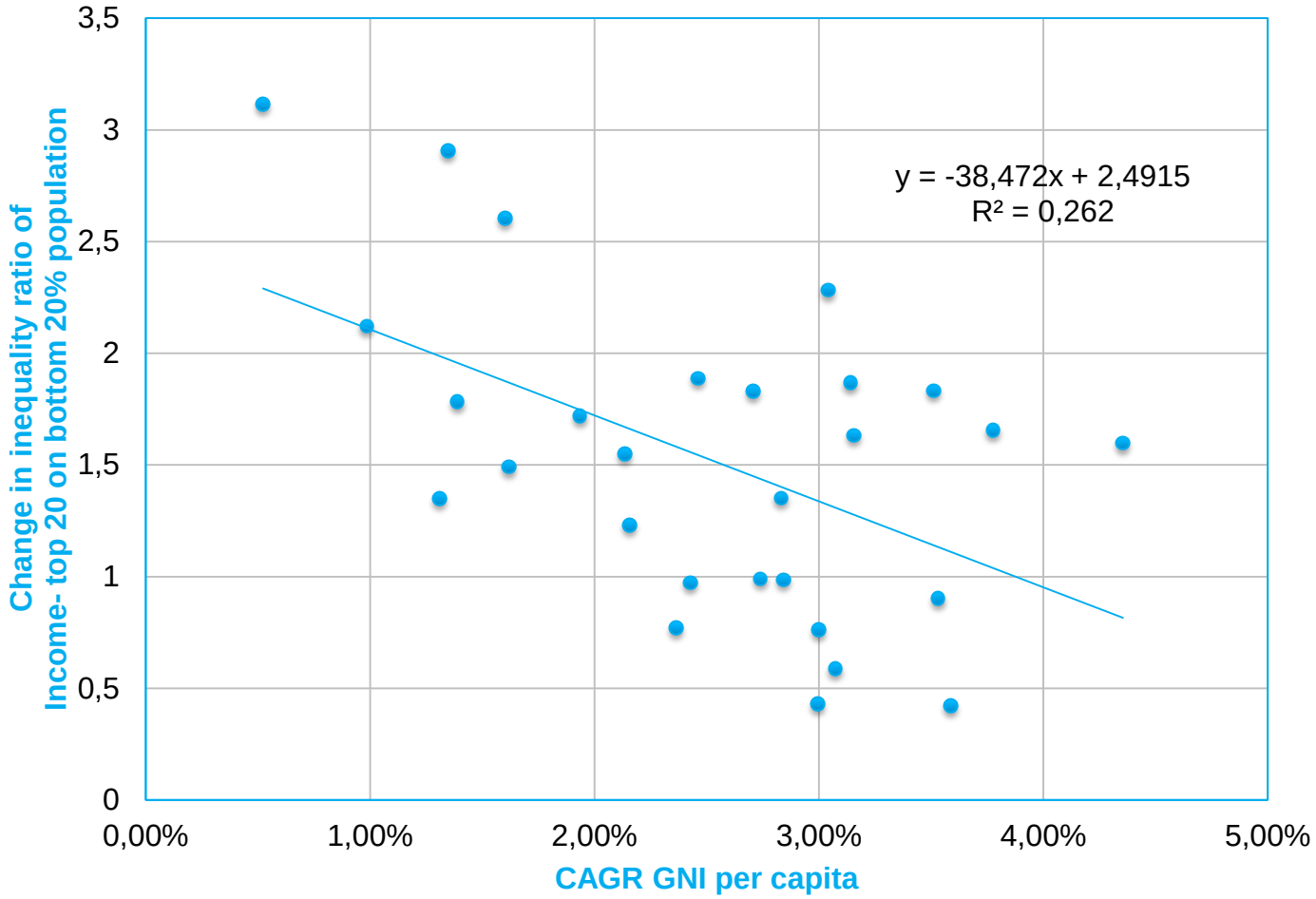
1	2	3	4	5
				
New expanding mid class in Asia; old shrinking class in Europe	Globalization and change in mix to data	Major technology disruption	Green and limited waste + climate change	Aging of population and urbanization

2 The combination of trends may lead to some major SDG challenges

Macro trends	Impact by 2030 on… Economic activity	Inequality	Citizen contributions	Trust
Aging of population	Stagnant working age population would reduce GDP per capita growth by 0.9 p.p. (and by ~0.7 p.p. assuming later retirement)		About 2 p.p. of GDP as additional spending for healthcare and pensions (0.75 p.p based on active policies)	Lower trust from higher spending and lower growth
Disruptive technologies	Productivity could significantly increase growth by 1.3 p.p., even though inequality could limit the upside	Unemployment could slightly increase but the share of labor could fall as well as the salaries of unskilled workers	Increased cost of unemployment and reskilling by about 0.5 p.p. of GDP	Higher displacement of workers and higher inequality would reduce trust, but higher growth would increase it
Rise of emerging markets	Reduced EU competitiveness would negatively impact GDP per capita growth by 0.4 p.p.	Increased unemployment would reduce income for the bottom 20%	No direct impact on spending	Increased unemployment could lead to lowering trust
Migration	Could Increase growth but at current integration levels per-capita growth unchanged	Most migrants will be poorer than the current population, increasing inequality	No incremental impact on spending	Perceived reduction in social cohesion
Climate change	Unclear impact from abating carbon emissions; about 0.3 p.p. additional GDP p.c. from shifting to a circular economy	Efforts on decarbonization could affect prices of goods, impacting the bottom more than the top	Additional 0.5-1 p.p. of GDP to close investment gap and ~5 Bn to manage higher costs of weather event	Indirect impact
Return of geopolitics (cyber, trade and tax wars)	Slight loss of productivity growth from costs of cyber attacks of about ~0.2 p.p. of GDP per capita growth	Lower scope for redistribution due to tax competition	Additional 0.5-1 p.p. GDP costs to manage cyber attacks and additional defense expenses to meet NATO requirements	Misinformation and lower corporate taxes would reduce trust whilst external threats may increase it
Macro trends together	Trends would balance each other out on growth, resulting in an average growth of ~2%	From 5.2 to 6.4 top/bottom 20 income ratio	Public expenditures could increase from 46% to ~49% of GDP	Trust could remain at the low levels of today

SOURCE:MGI analysis

2 In particular, level of growth per capita to hedge risk of inequality will be relatively challenging in developing economies



3 Critical needs

0 **No regret move-** embrace tech, embrace SDGs

1 Understand how tech will develop **and scale**

2 Understand how tech plays out **with other trends on both economic prosperity and other SDGs**

3 Track **markers of development** of trends and impact on SDG paths