

CHINA AS AN INNOVATION ECONOMY: LESSONS FOR EUROPE AND BEYOND

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SMART MANUFACTURING MEETUP,
DORPAT CONFERENCE CENTRE, TARTU,
4 NOV, 2019

MAIN MESSAGES



- THE INNOVATION PARADOX AND THE BATTLE FOR GLOBAL DIGITAL LEADERSHIP
- THE FLIGHT OF THE DRAGON (AND ITS VULNERABILITY)
- 10 IDEAS FOR EUROPEAN (INDUSTRIAL AND POLITICAL) LEADERS

THE INTERNET REVOLUTION IN A (STEVE JOB'S) LIFE

AN I-PHONE 6 COULD RECEIVE,
TRANSMIT AND ELABORATE 120,000
TIMES MORE INFORMATION THAN A
MACINTOSH 128K AND COST 28
TIMES LESS

1984



PRICE

3,000 (IN 1984
USD)

CAPACITY

128 KB

2016

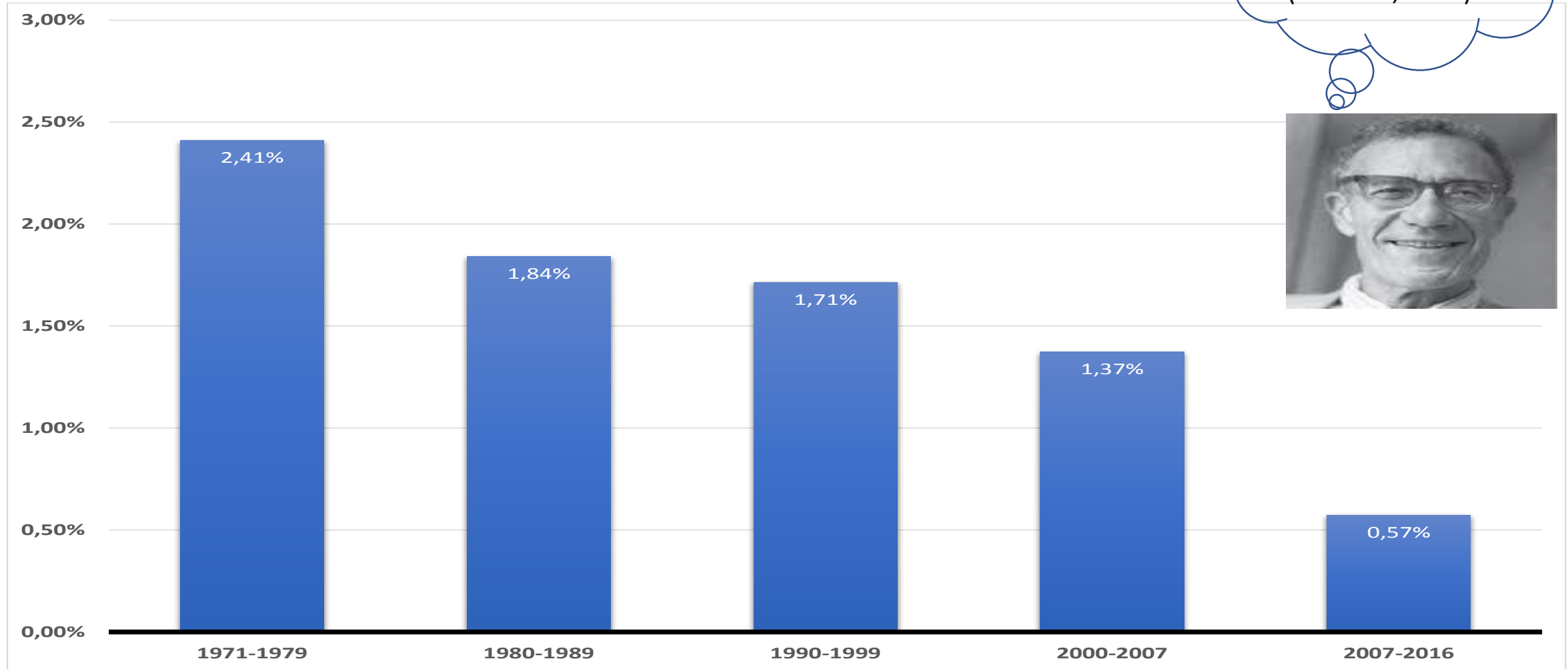


800 (IN 2016
USD)

16 GB

THE PARADOX OF INNOVATION (AS GREATEST SIGN OF DECLINE OF THE WEST).. PRODUCTIVITY GROWTH RATES (OECD, %)

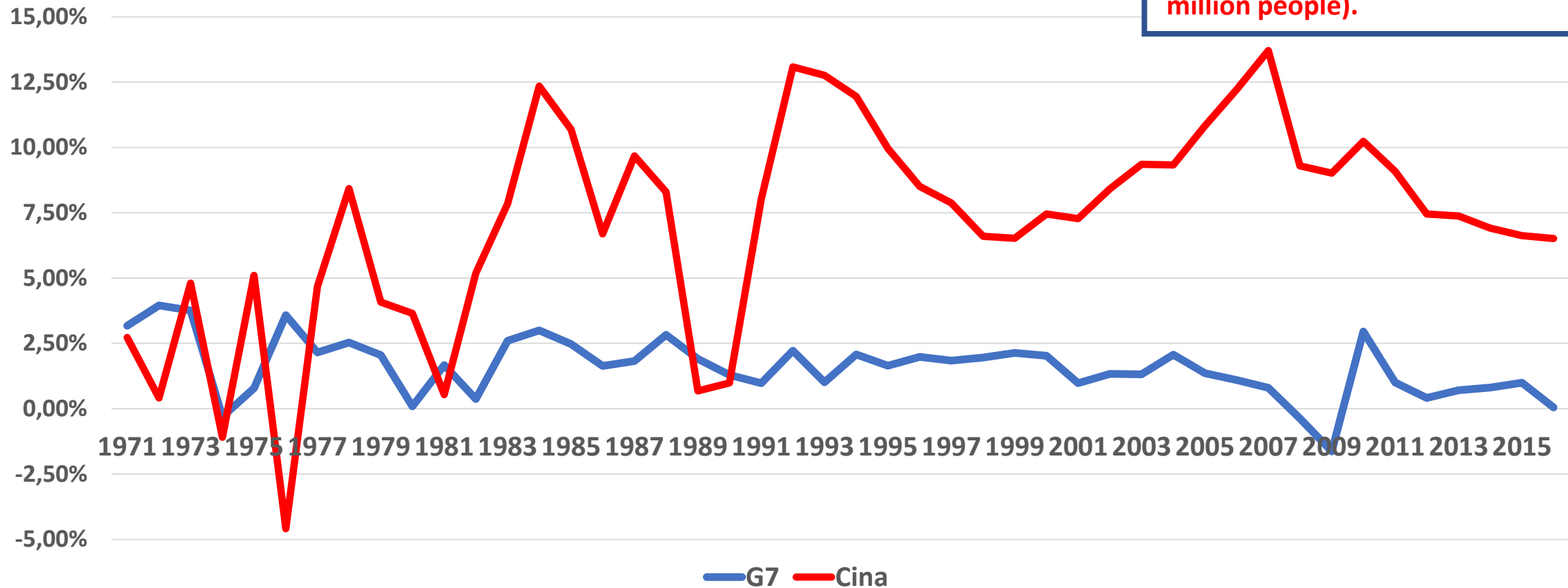
*You can see computer
everywhere but in the
productivity statistics
(R. Solow, 1986)*



SOURCE: OECD

.. WHICH DOES NOT EXIST CHINA

PRODUCTIVITY GROWTH RATE (IN USD 2010)

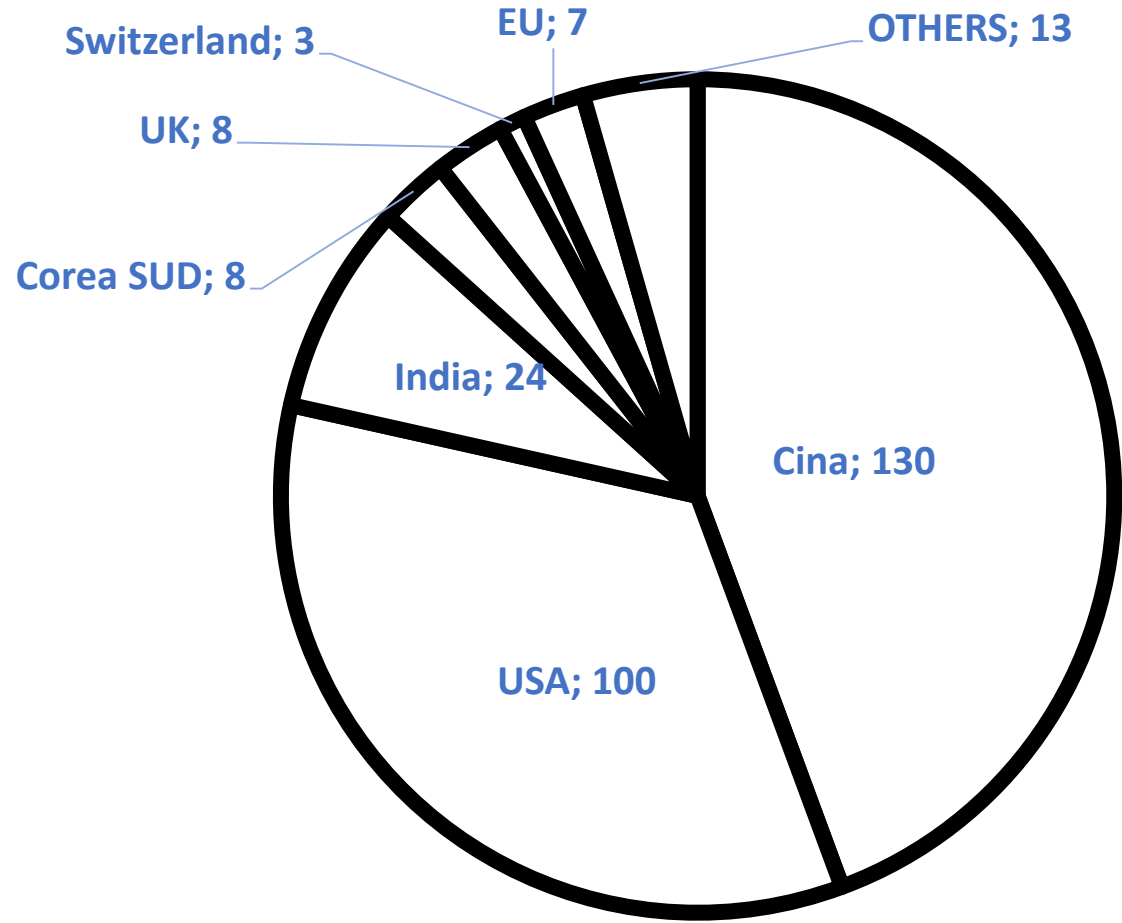


CHINA GDP GROWTH: 88%
productivity; 12% workforce. **G7**
COUNTRIES: 29% productivity; 71%
workforce. In the last ten years of
relative slow-down, China has doubled
its economy (+102%) employing the
same number of individuals (757
million people).

THE BATTLE FOR GLOBAL DIGITAL LEADERSHIP


FIRST TEN CORPORATIONS FOR MARKET CAPITALIZATION (LEFT) AND DISTRIBUTION OF UNICORN (START UP WHOSE VALUE IS HIGHER THAN ONE BILLION USD) PER COUNTRY (RIGHT)

1.	APPLE	851
2.	ALPHABET (GOOGLE)	719
3.	MICROSOFT	703
4.	AMAZON	701
5.	TENCENT	496
6.	BERKSHIRE HATHAWAY	492
7.	ALIBABA	470
8.	FACEBOOK	464
9.	JP MORGAN	375
10.	Industrial and Commercial BANK of CHINA	344



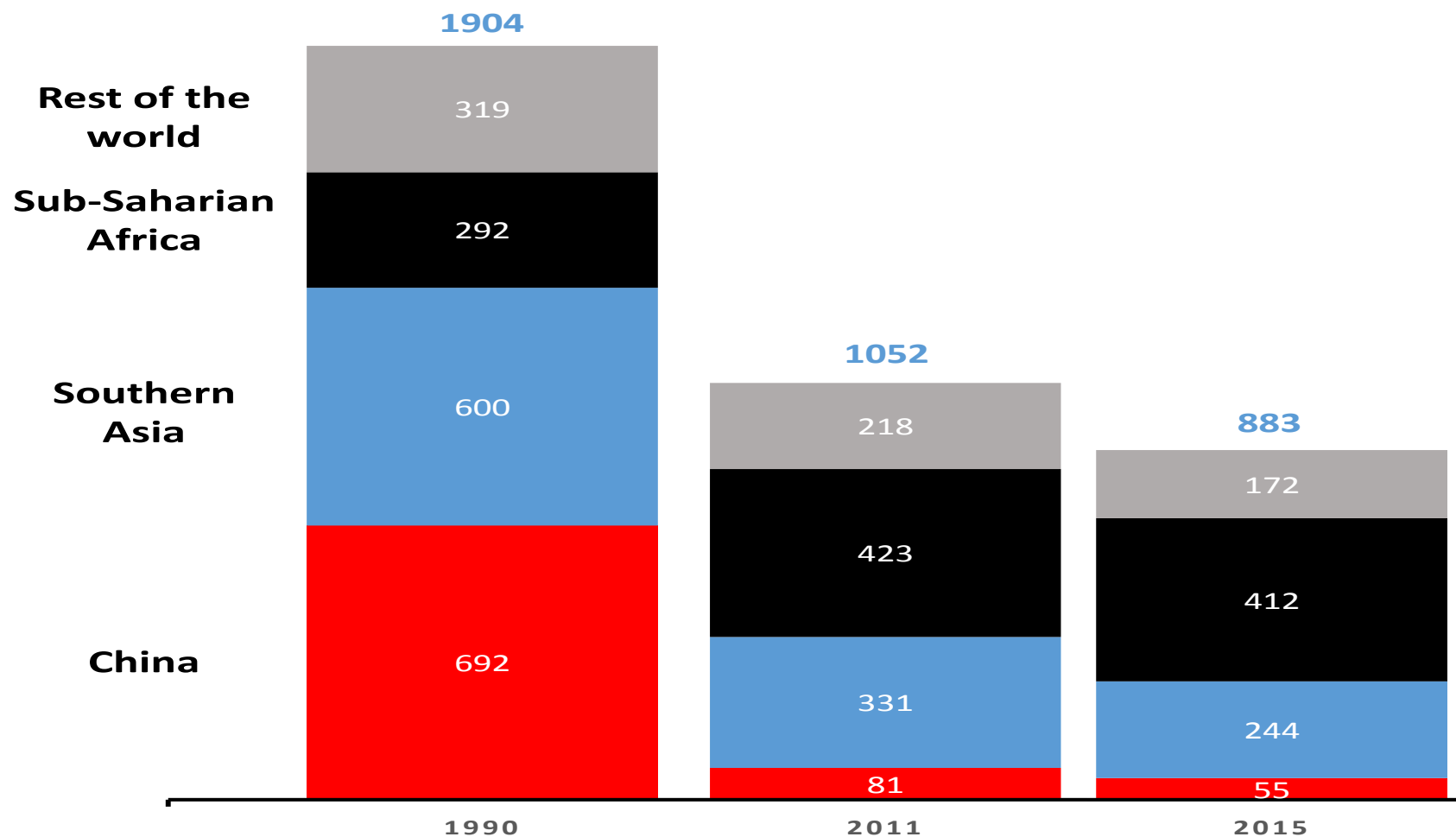
SOURCE: “Lezioni Cinesi” (2019) ON Bloomberg AND TechcrunchDATA

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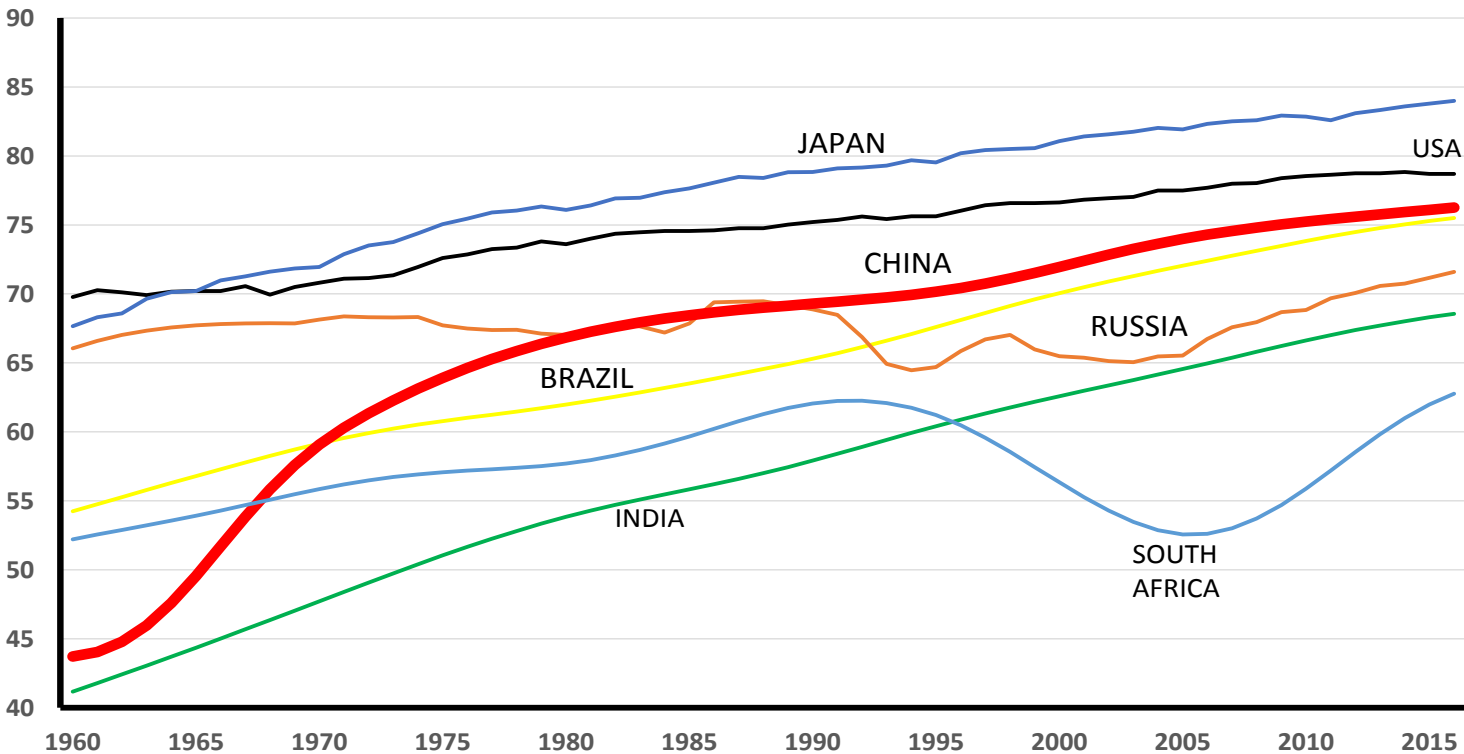
BEYOND ECONOMY: THE FIGHT TO POVERTY..

NUMBER OF PEOPLE LIVING UNDER THE POVERTY LINE (2 USD PER DAY)



... AND THE IMPROVEMENT IN WELL BEING OF PEOPLE

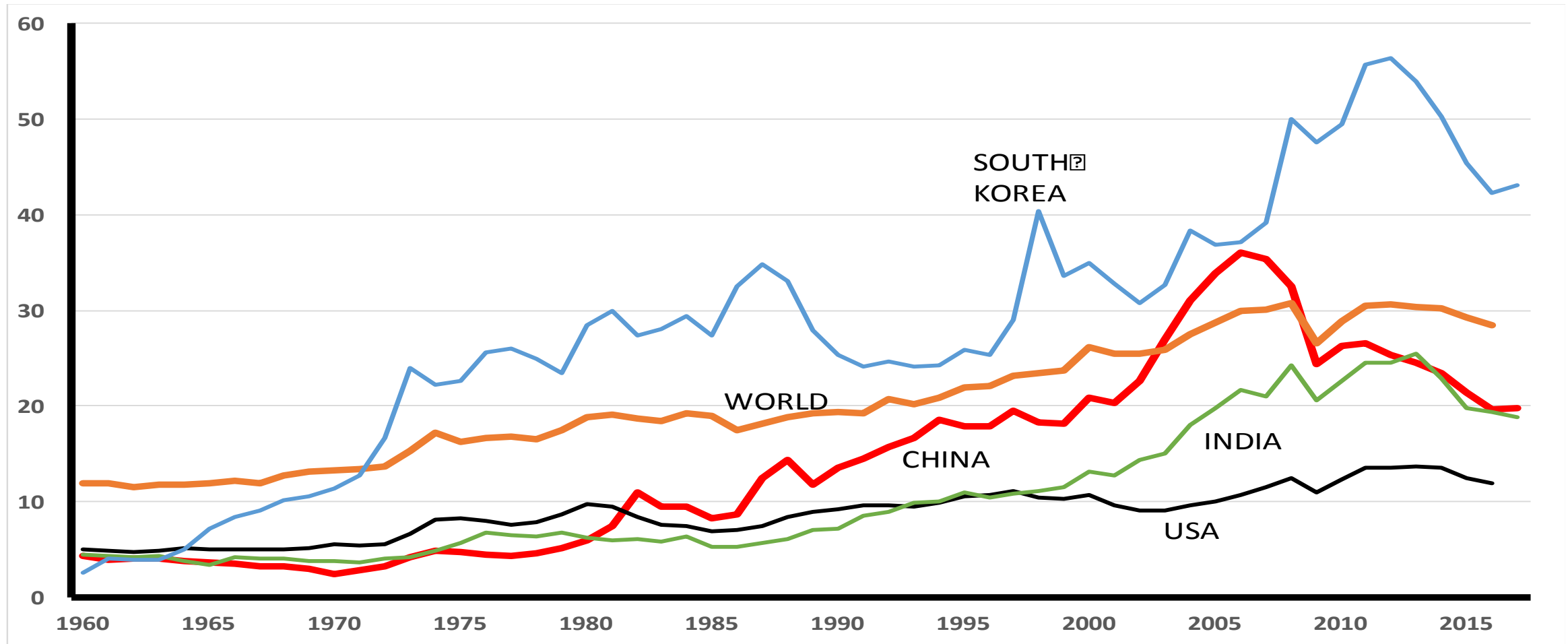
LIFE EXPECTANCY, YEARS



IN TERMS OF DISABILITIES ADJUSTED LIFE EXPECTANCY (DALE) A CHINESE CHILD IS EXPECTED TO LIVE LONGER THAN A US ONE

IT IS NOT ABOUT JUST “GLOBALIZATION”...

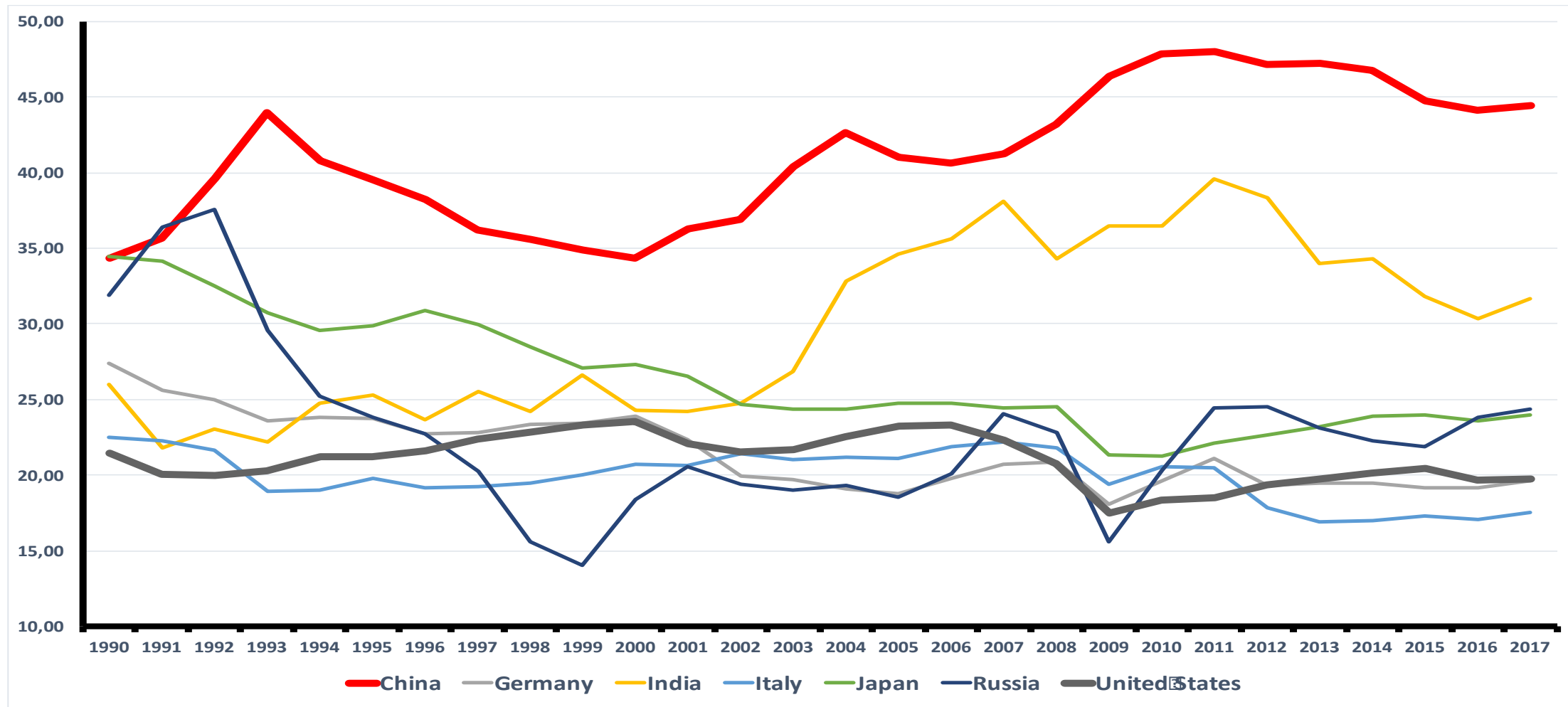
EXPORTS ON GDP (%)



SOURCE: “Democracy and growth in the 21st century” (2019) ON WORLD BANK DATA

.. IT IS THE ENTREPRENEURIAL STATE..

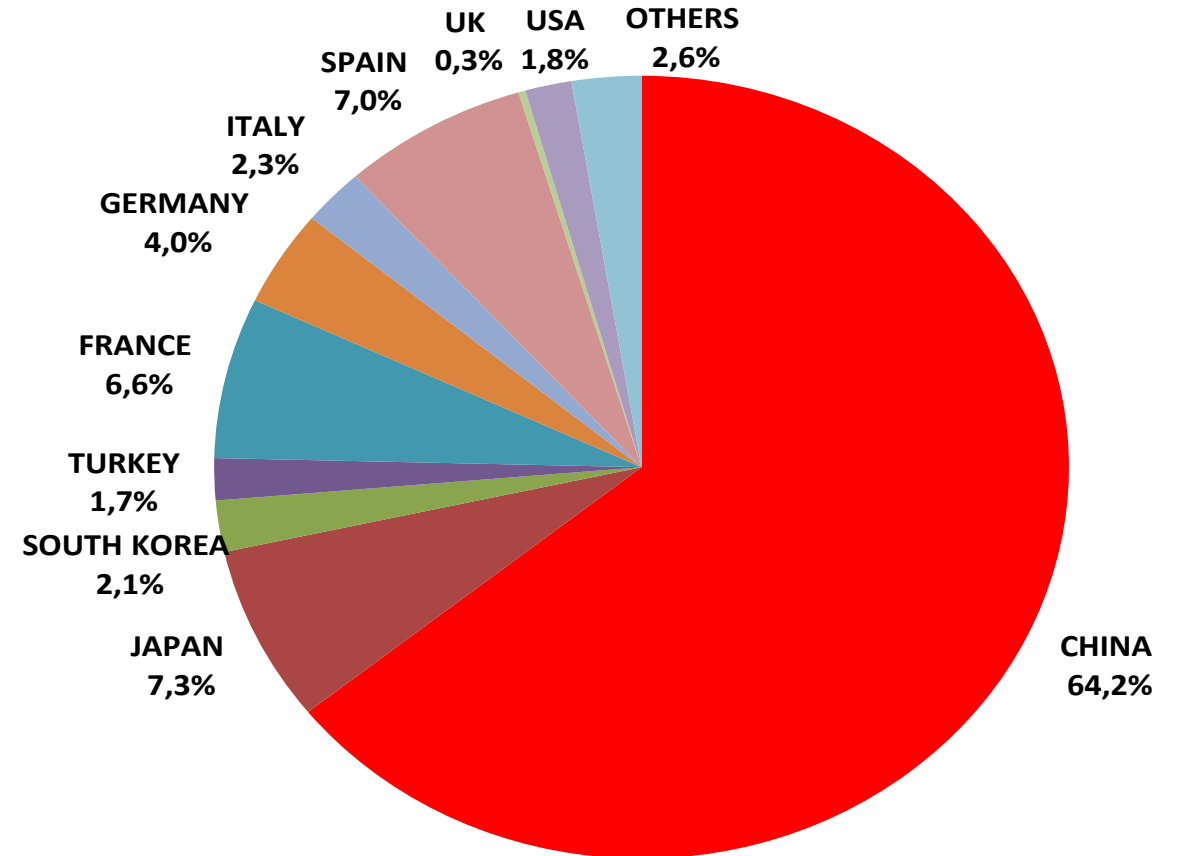
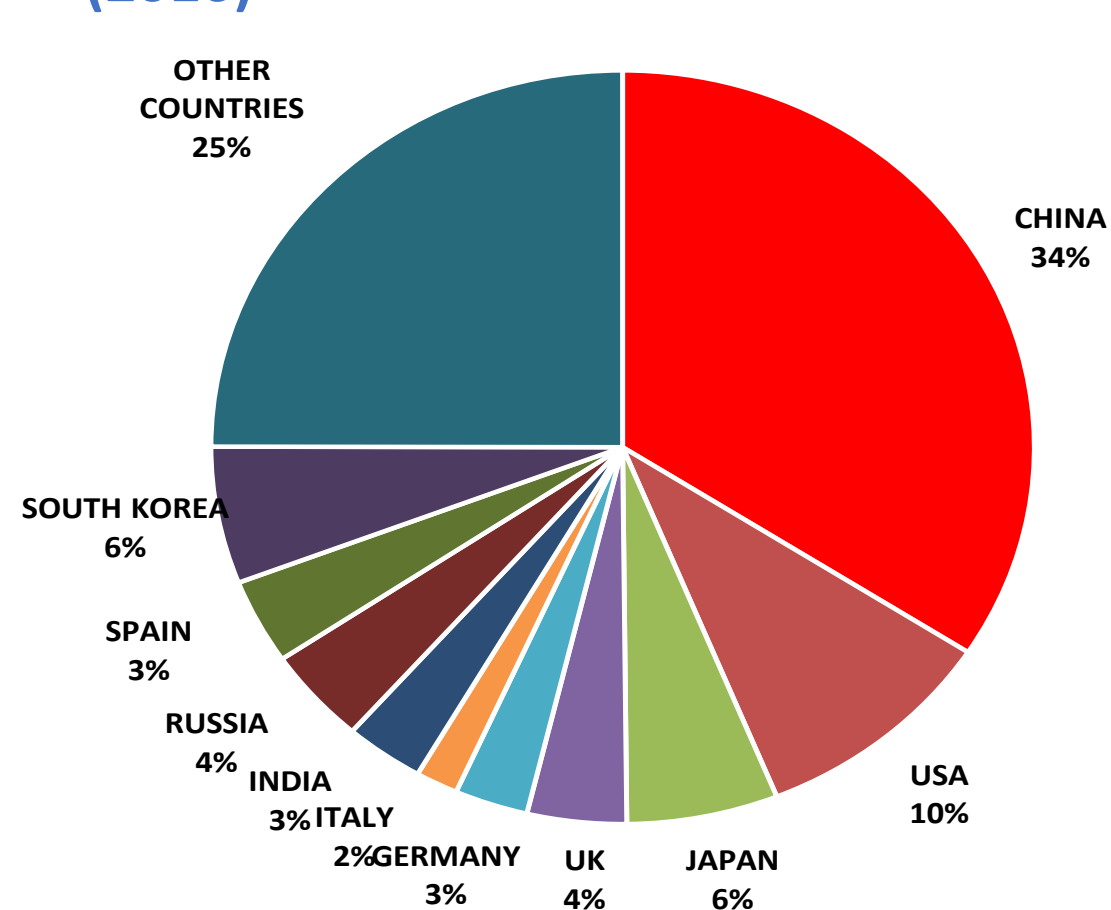
INVESTMENTS ON GDP (%)



SOURCE: "Democracy and growth in the 21st Century" (2019) ON WORLD BANK DATA

... THE INFRASTRUCTURE ...

DISTRIBUTION OF KM OF SUBWAY (dx) AND HIGH SPEED TRAIN (LEFT), WORLD (2016)



SOURCE: "Democracy and Growth in the 21st Century" ON UIC (Union International des Chemins Fer) and International Association of Public Transport DATA

.. THE REGULATIONS ..

THE CASE OF AVS - CHINESE FIRMS ARE TAKING A DIFFERENT ROUTE TO DRIVERLESS CARS: THEY MAY WIN (THE ECONOMIST, 12TH OCTOBER 2019)



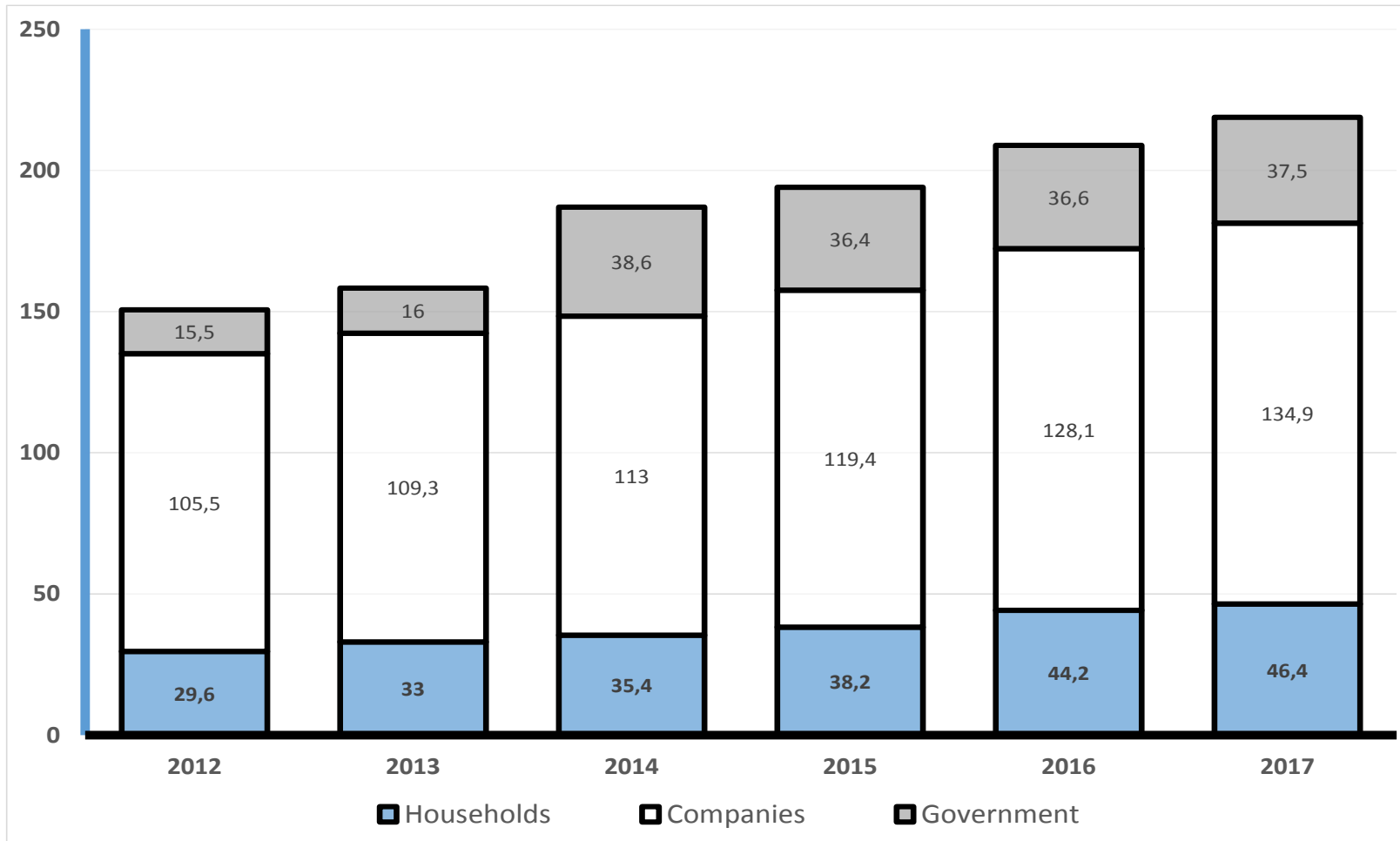
.. AND A DIFFERENT APPROACH TO “TIME”

Fifteen years old
chinese students score
535 in maths and they
are second in the world
after SINGAPORE
(Germany score 506;
USA 470)



VULNERABILITIES - THE COST OF GOING TOO FAST FOR A TOO LONG TIME...

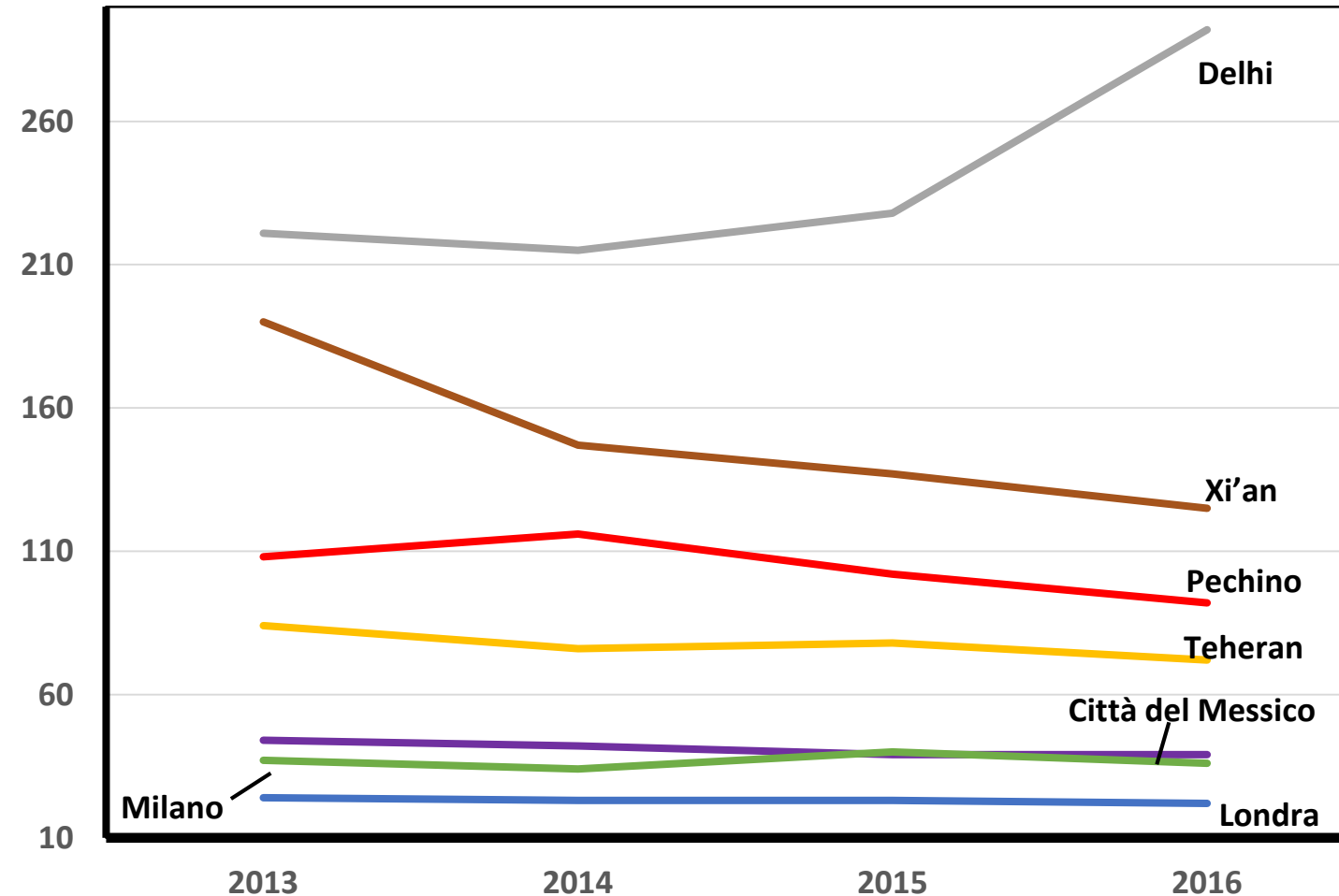
EVOLUTION DEBT OVER GDP (CHINA, 2012–2017)



DEBT OVER GDP FOR OECD
COUNTRIES:
264 (2007)
258 (2017)

.. THE ENVIRONMENT BOMB AND TURN PROBLEMS INTO OPPORTUNITIES

AIR QUALITY, AVERAGE PM10 AND PM2,5 PER M³



HANERGY, SHENZEN, THE DIGITAL ROAD, THE PROTOTYPE



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TEN IDEAS FOR THE 21 ST CENTURY BATTLE

1. DEVELOP INNOVATION AS PORTFOLIO OF KNOWLEDGE MANAGEMENT SYSTEMS LED EXPERIMENTATIONS
2. DESIGN CORPORATE VENTURE CAPITAL CAPABILITIES
3. SHORTEN GLOBAL VALUE CHAINS AROUND THE 3D PRINTED IDEA AS DISPLACER OF OLD
4. PROMOTE EUROPEAN DIGITAL PLATFORMS AND/ OR EU REGULATION OF THE NOT EU ONES AS PRIVATE – PUBLIC PARTNERSHIP
5. DEVELOP PARTNERSHIPS WITH PLACES TO HOST DISRUPTIVE TECHNOLOGIES (CITIES, SCHOOLS, HOSPITALS)
6. REDEFINE OWN INDUSTRY ON THE BASIS OF THE “RELATED VARIETY” CONCEPT
7. PARTNER WITH NOT BUSINESS KNOWLEDGE HOLDERS
8. REDEFINE CSR AND SUSTAINABILITY AS HOW TO USE CORE COMPETENCES TO DELIVER SOCIAL VALUE
9. NURTURE DIVERSITY AS DRIVER OF INNOVATION
10. ANTICIPATE CHANGE (NO “WAIT AND SEE”)



www.thinktank.vision

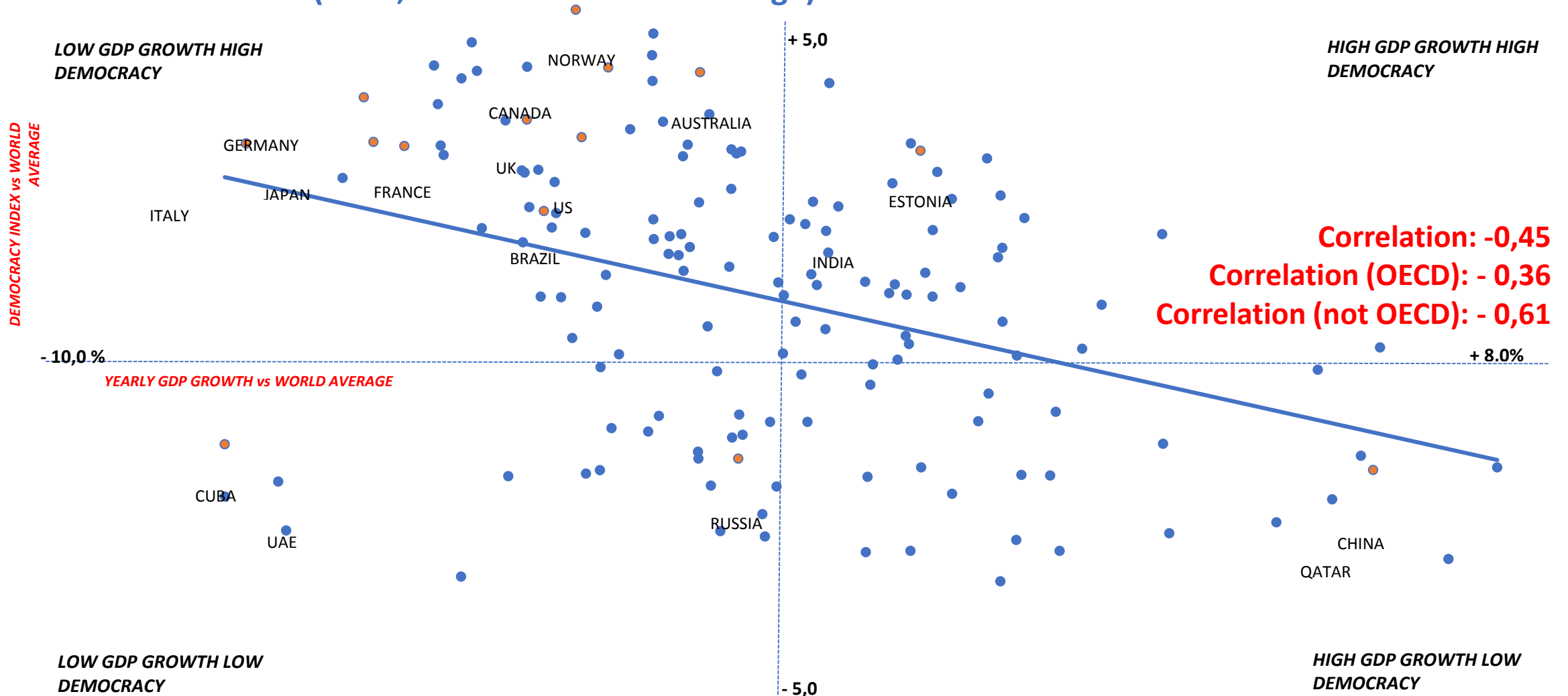
francesco.grillo@vision-forum.org



BACK UP

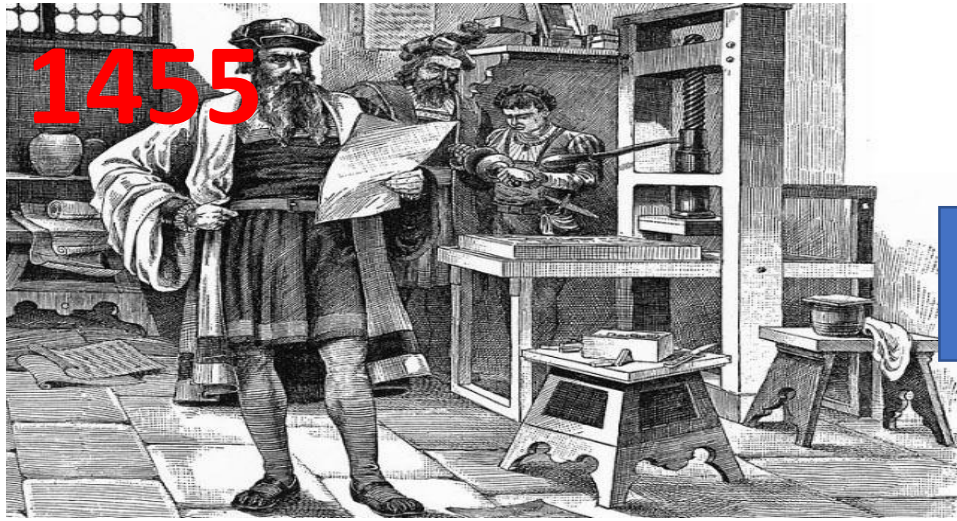
THE PUZZLE OF LIBERAL DEMOCRACY

GROWTH RATES (1996–2016; differences versus average) and DEMOCRACY (*THE ECONOMIST'S DEMOCRACY INDEX* (2015; differences versus average))



Fonte: "Democracy and Growth in the 21st Century" su dati Banca Mondiale e The Economist Intelligence Unit

INDUSTRIAL REVOLUTIONS COMPARED – INTERNET, GUTENBERG, THE EXPLOSION OF INFORMATION AND REALLOCATION OF GEO POLITICAL AND ECONOMIC POWER



KUBLAI, MARCO, AND THE NEW SILK ROAD: FROM DEAL MAKING TO ENGAGEMENT

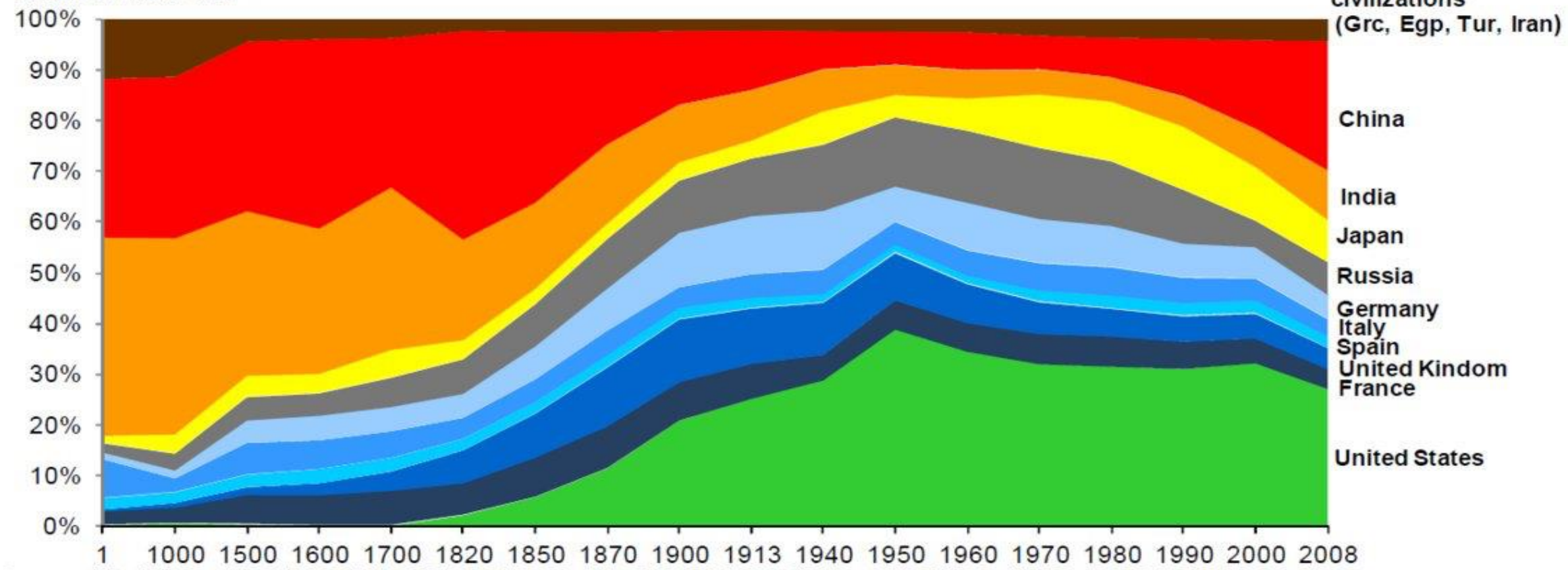


TO SUM UP.. MODERNITY AS BACK TO HISTORY

INDUSTRIAL REVOLUTIONS AND SHARE OF WORLD GDP OF MAJOR ECONOMIES

Economic history of China and other major powers

Share of world GDP



Source: "Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD", Angus Maddison, University of Groningen.

PREVIOUS
TECHNOLOGICAL
REVOLUTIONS

INTERNET
REVOLUTION

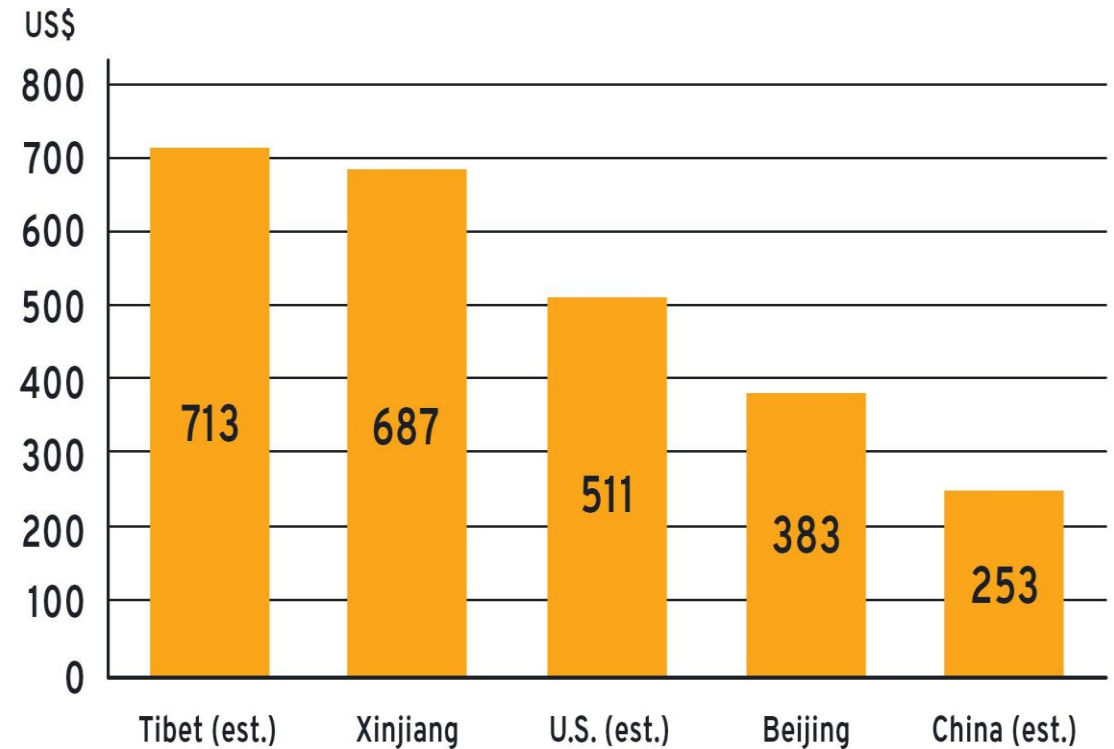


.. AS THE RESULT OF A CONTROL SYNDROME



inkstone

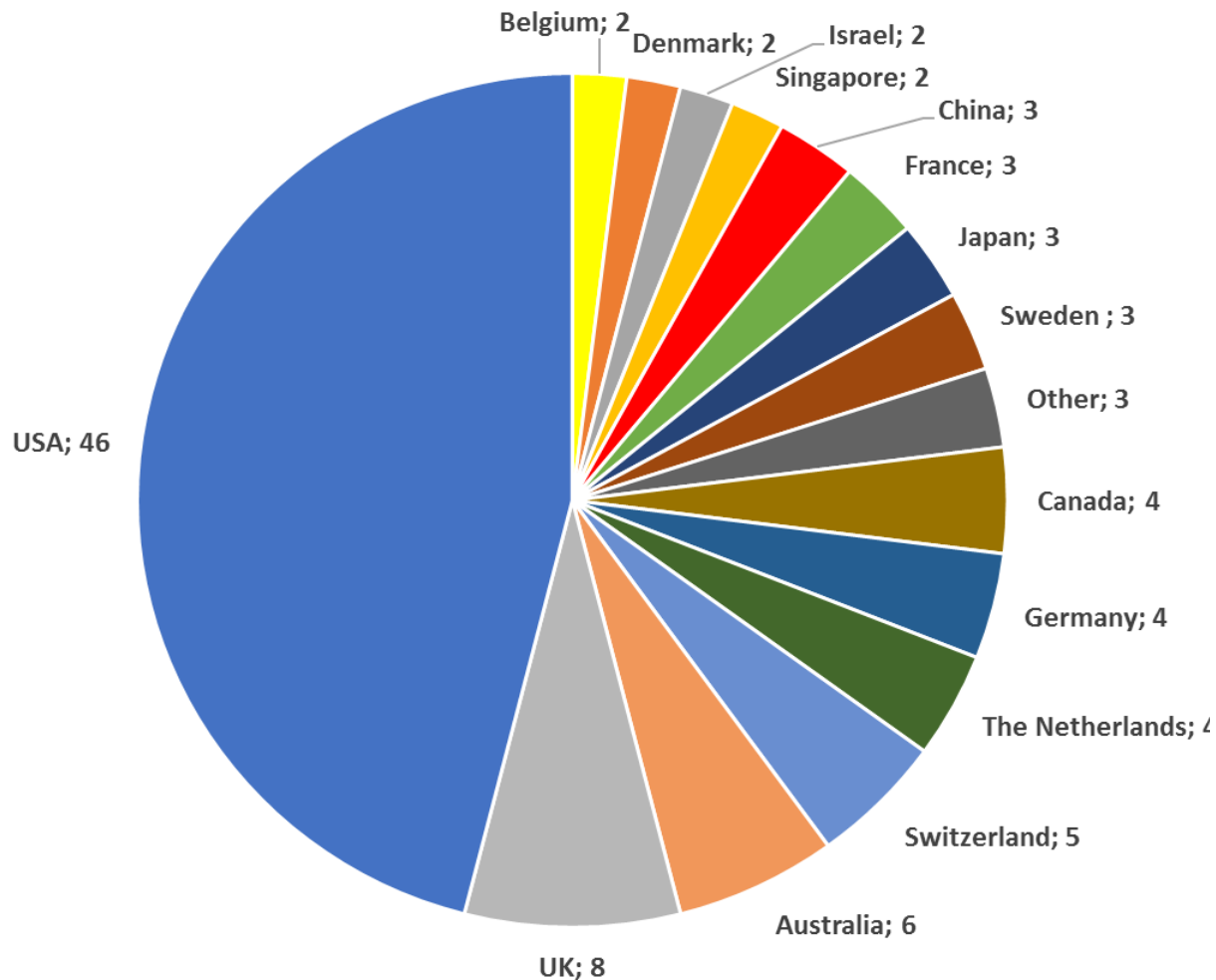
PPP-adjusted per capita domestic security spending in 2017



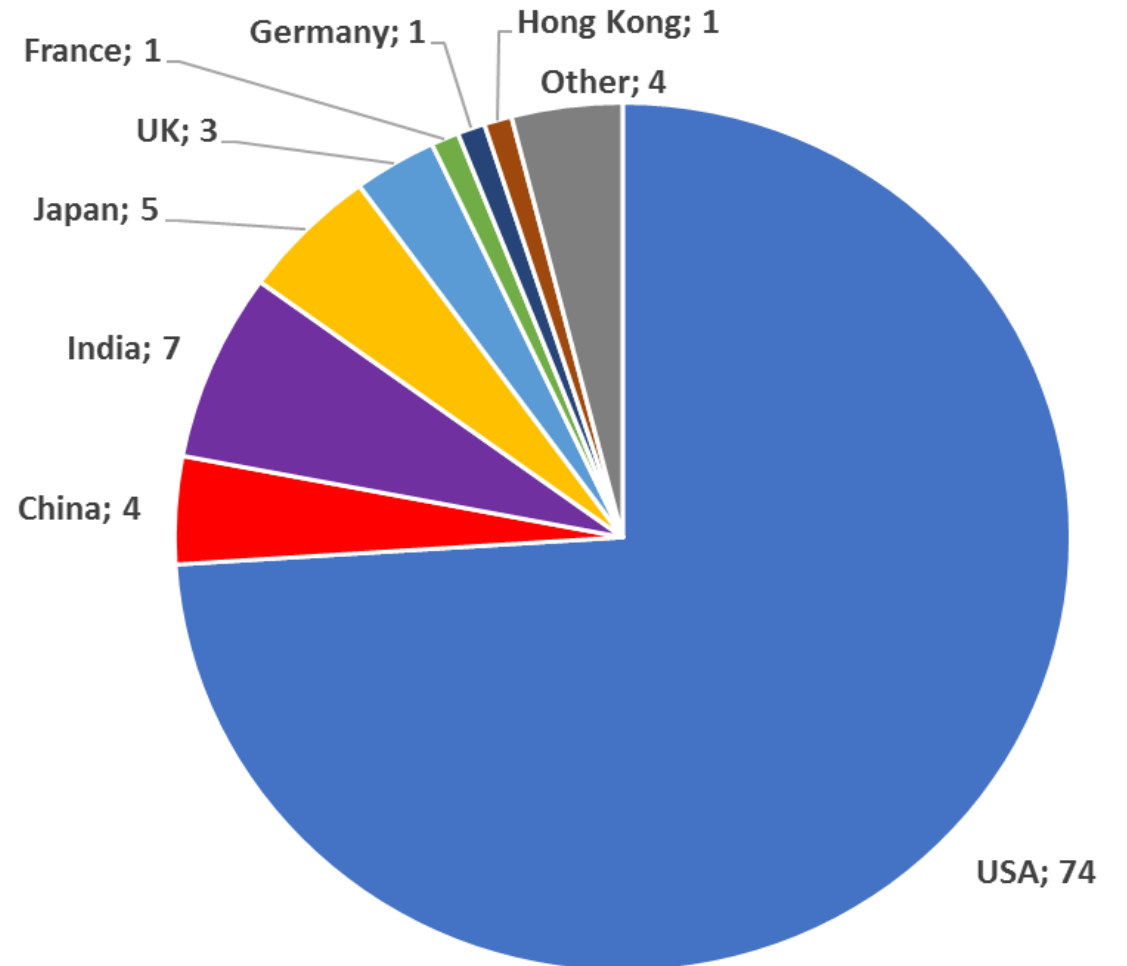
Source: Adrian Zenz, government data

LIMITS – THE GAP OF CULTURAL INFLUENCE AND AMERICAN EGEMONY ..

Academic Ranking of World Universities by country, 2019



Top 100 Films by studio country of origin, 2019



IT CAN NON BE JUST A «CATCH UP»..

REAL INCOME PER HABITANT, GROWTH RATES (IN USD 2011)

	G7	Asia	Eastern Europe	Africa	South America	Middle East
1989 - 2016	1,9%	5,3%	2,1%	2,5%	2,7%	2,2%
1900 - 1988	2,2%	0,8%	2,0%	1,6%	1,8%	2,2%
1850 - 1900	1,4%	0,3%	1,5%	0,6%	0,8%	0,5%
per capita income in 1850	1.960	909	1.398	1.199	841	1.192

FONTE: Maddison Project Database, versione 2018. Bolt, Jutta, Robert Inklaar, Herman de Jong and Jan Luiten van Zanden

11) THE ROADMAP: TURN THE 20TH CENTURY DREAM INTO A LAB OF A 21ST CENTURY DEMOCRACY

CONSOLIDATE THE UNIONS OF
EUROPEAN PEOPLE, CITIES AND STATES

EXPAND THE METHOD TO OTHER
POLICIES

GO BEYOND THE OVER-DEPENDENCE ON STATES

REDRAFT A NEW SOCIAL PACT WITH
EUROPEAN CITIZENS BASED ON RESULTS,
RIGHTS AND RESPONSIBILITIES

DO LESS, DO IT BETTER, AND
SOLVE PROBLEMS

REFOCUS EUROPE

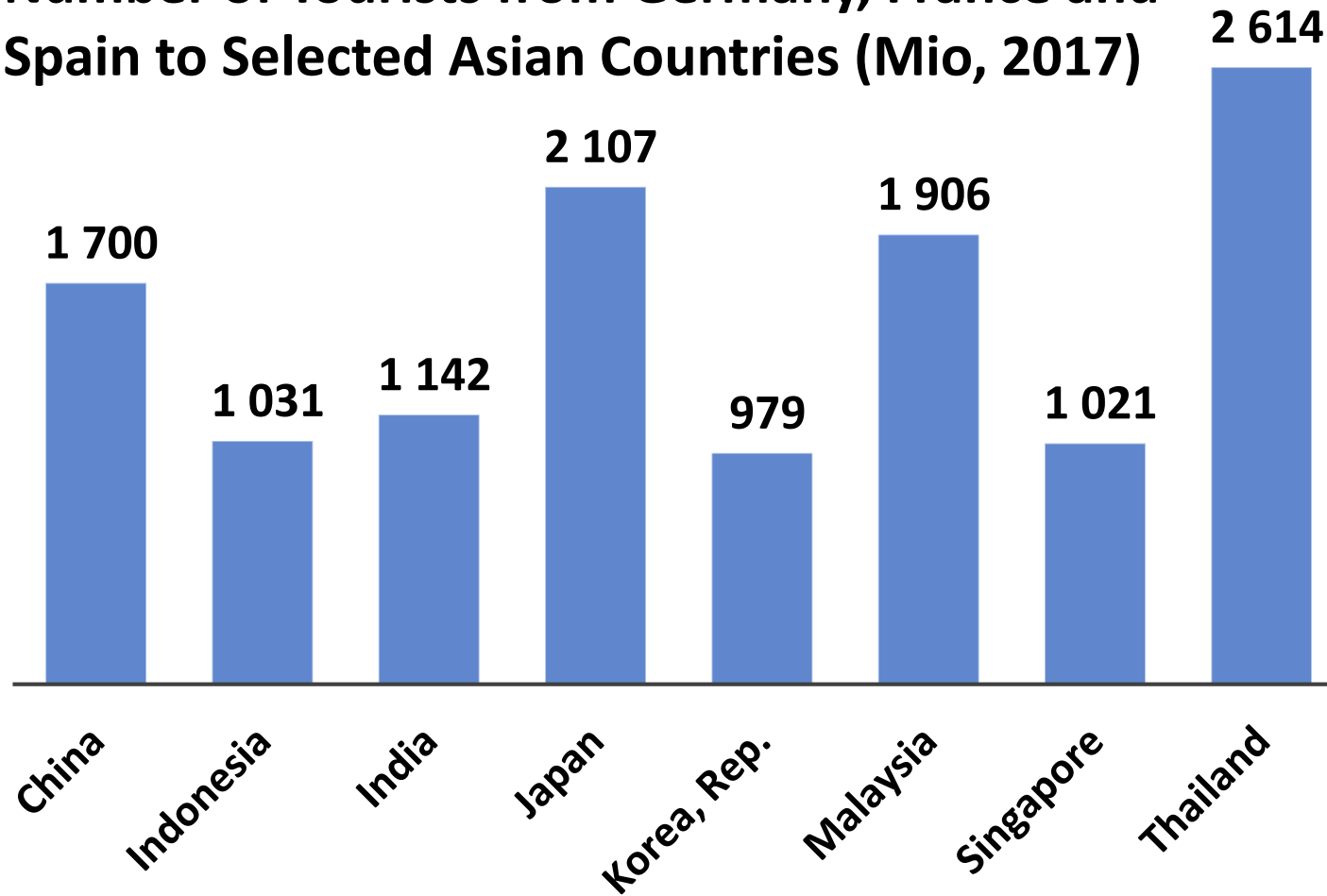
THE NEW FRONTIER: FROM INNOVATION TO A VISION OF THE FUTURE (WITH CHINESE CHARACTERISTICS)



THE SYMBOLIC GAP (2)

... WHICH HAS GOT IMPORTANT ECONOMIC IMPLICATIONS

Number of Tourists from Germany, France and Spain to Selected Asian Countries (Mio, 2017)



Forbes Top 100 Global Brands by country, 2019

