Gunnar Heinsohn

KEYNOTE

SECURITY IMPLICATIONS OF CHANGING DEMOGRAPHIC TRENDS

NATO

JOINT WARFARE CENTER (JWC)

15TH ANNIVERSARY

N-4068 Stavanger

Norway

23 October 2018; 10:50-11:35

Joint Warfare Centre's

15th Anniversary

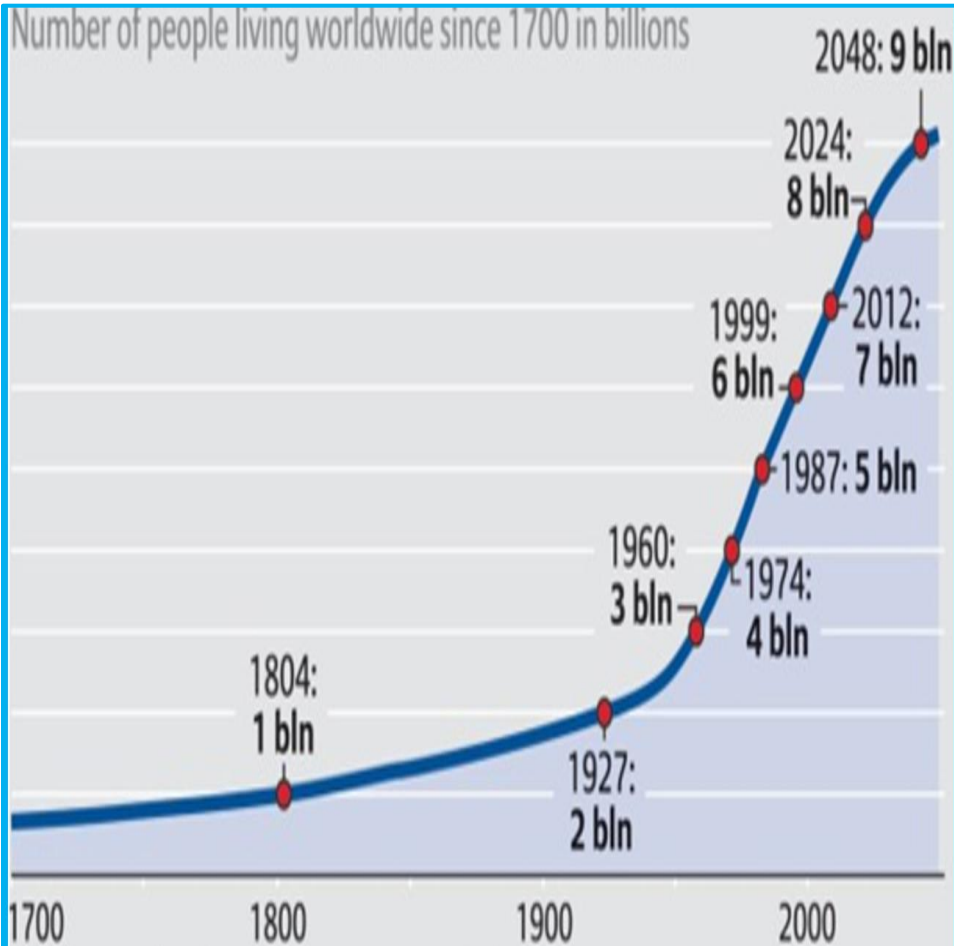# Distinguished Visitors Day Programme

22-23 October 2018

JWC 15th Anniversary DV Day Programme

	Monday 22 October 2018		
Time	Event	Location	Remarks
	Distinguished Visitors (DVs) arrive Stavanger International Airport (SVG)		Transport to hotel(s)
	COM JWC Hosted Icebreaker for principal guests	Victoria Hotel Stavanger	Dress code: Jacket, no tie

	Tuesday 23 October 2018	**(DV Day)**	
Time	Event	Location	Remarks
	Transport from Victoria Hotel to JWC Level 2 Entrance	Victoria Hotel	JWC Escort Officers will be meet guests in the Lobby and escort then to the buses
	DVs arrive JWC. Welcomed by COM JWC & JWC Leadership -Coffee in Level 2 Canteen for DVs and Invited Guests	Level 2 Entrance Level 2 Canteen	-Local dignitaries arrive JWC Main Gate – escorted to Level 2 Entrance
	JWC Personnel seated	HH Auditorium	
5	DVs seated	HH Auditorium	
5-0907	DV Day Programme introduction by Master of Ceremonies (MC)	HH Auditorium	Lt Col AJ Sullivan USA A
7-0910	JWC Video 1	HH Auditorium	
0-0915	COM JWC Welcome address	HH Auditorium	
5-0920	JWC Video 2	HH Auditorium	
0-0940	COM JWC speech JWC Video 3	HH Auditorium	
0-0950	Minister of Defence Norway speech Mr Frank Bakke-Jensen	HH Auditorium	
0-1000	CHOD Norway speech Adm Haakon Bruun-Hanssen	HH Auditorium	

1010-1020	Group photo by PAO	Level 2 Entrance	Weather dependent (outside or inside)
1020-1045	Coffee Break for DVs and Invited Guests	Level 2 Canteen	
1045-1135	Lecture by Prof. Dr. Gunnar Heinsohn	HH Auditorium	Subject: "Security implications of Demographic Trends"
1135-1140	COM JWC remarks	HH Auditorium	
1140-1145	JWC Facilities Tour briefing by MC	HH Auditorium	
1145-1155	Break		
1155-1255	Facilities Tour for Principals only Separate programme for support staff (in Brussels Auditorium)	F and D Block	
1300-1400	Standing lunch for DVs and invited guests	Level 2 Canteen	
1400-1405	All Guests seated in HH Auditorium. Includes all JWC personnel and families	HH Auditorium	
1405-1445	Musical concert by: From Poland, The Armed Forces Military Band of Bydgoszcz and the Pomeranian Philharmonic Orchestra's Cello Quartet From Norway the Band "Flunk"	HH Auditorium	
1445-1450	COM JWC Closing remarks	HH Auditorium	
1450-1500	Departures	Level 2 Entrance	Bus to Airport and bus to Hotels

NATO must defend ageing/shrinking populations with declining qualifications!

Number of people living worldwide since 1700 in billions

2048: 9 bln
2024: 8 bln
2012: 7 bln
1999: 6 bln
1987: 5 bln
1974: 4 bln
1960: 3 bln
1927: 2 bln
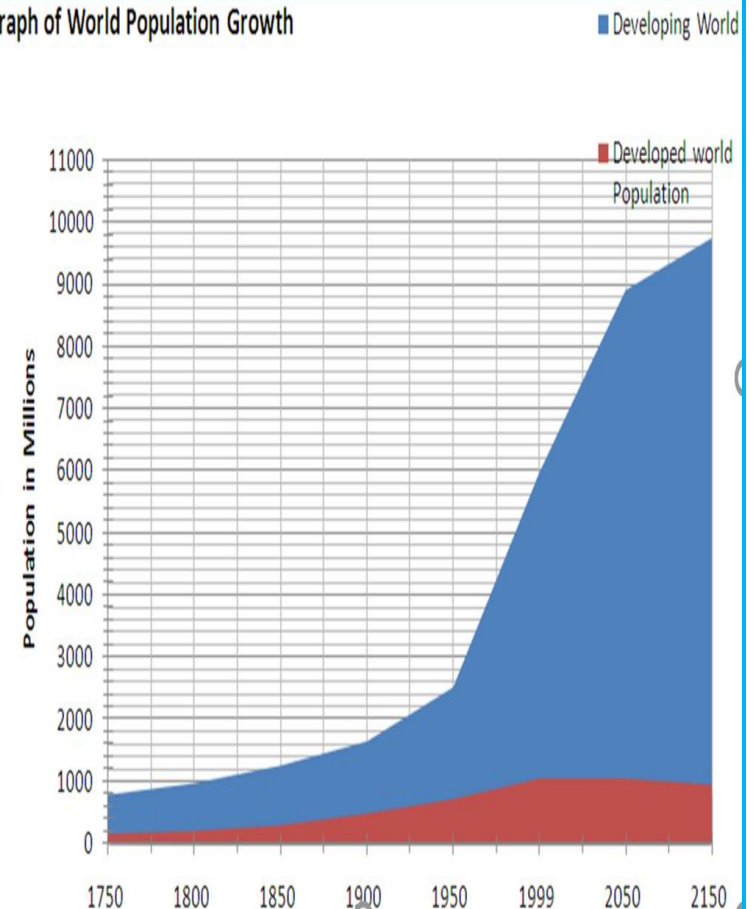1804: 1 bln

1700   1800   1900   2000

Source: United Nations World Population Prospects, Deutsche Stiftung Weltbevölkerung

For further information please visit: www.knowledge.allianz.com

BLUE WANTS TO EMIGRATE TO RED

Graph of World Population Growth

Developing World
Developed world
Population

Population in Millions

11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0

1750   1800   1850   1900   1950   1999   2050   2150

WE DON'T SHOOT, YOU MUST LET US ENTER!
The traditional fear of foreign troops with lethal arms gives way to the fear of much bigger armies approaching without skills!

LEFT: Arabs and Africans on Macedonia's border 2015
[https://www.cnbc.com/2015/09/07/migrant-crisis-splits-european-countries.html]

CENTRE: *Caravan* through Mexiko to US border 2018
[https://nation.com.pk/09-Apr-2018/migrant-caravan-members-protest-in-mexican-capital]

RIGHT: Gazan Arabs on Israel's border 2018
[http://www.jpost.com/Israel-News/Fridays-riot-perceptions-from-Gaza-and-the-UN-547556]

WHO WILL WIN IN THE GLOBAL COMPETITION?
TEN-YEAR-OLDS in smartest math-group (TIMSS 2015)

Singapore	**50.1 %**
Taiwan-China	**35.0 %**
Japan	**32.2 %**
Russia	**19.8 %**
United Kingdom	**16.8 %**
USA	**14.0 %**
Germany; Sweden	**5.3%**
Italy; NL; SLO **(combined**	**4.0%**
Spain; Croatia **283 million;**	**3.0 %**
France **i.e., 64 % of EU)**	**2.0 %**

DEMOGRAPHIC WAR INDEX 2017: RANKING BY COUNTRY.

A war index of between 2.5 and 8.0 (81 nations/territories with 1.7 billion inhabitants) indicates that 2,500-8,000 young men aged 15-19 are competing for the jobs and social positions of 1,000 retiring men aged 55-59. The higher the war index, the more likely it is that these young competitors will—if emigration is blocked—resort to crime, homicide, gang war, political coup, revolution, civil war, expulsion, genocide and war. Even an index below 2.5 may indicate volatility if combined with a stagnating or shrinking economy. If nations in the blue sectors [590-999 young following 1.000 old] consider war or intervention they act extremely careful because every fallen soldier — statistically his mother's only son or only child — will terminate his family line.

[Data for 2016: https://esa.un.org/unpd/wpp/DataQuery/]

Country	Idx	Country	Idx	Country	Idx	Country	Idx	Country	Idx	Country	Idx	Country	Idx	Country	Idx
Uganda	8.08	Kenya	5.14	Syria	4.02	Samoa	2.75	Antigua&B.	2.00	Fr. Polynesia	1.50	Aruba	1.00	Japan	0.82
Zambia	7.52	S.-Sudan	5.02	Niger	4.01	Maldives	2.67	Saint Lucia	2.00	Sri Lanka	1.46	Barbados	1.00	Portugal	0.82
Lesotho	7.35	Sao Tome	5.00	Jordan	3.95	Fre. Guiana	2.60	Turkey	2.00	Puerto Rico	1.44	Cuba	1.00	Singapore	0.82
Malawi	7.04	Sierra Leone	4.99	Gabon	3.91	Eq. Guinea	2.53	Algeria	1.98	Uruguay	1.44	Curacao	1.00	Croatia	0.81
Zimbabwe	6.81	Guatemala	4.98	Cabo Verde	3.86	Mexiko	2.52	Qatar	1.90	Tunisia	1.43	Iceland	1.00	Lithuania	0.80
Mali	6.61	Madagascar	4.84	Honduras	3.75	Grenada	2.50	Lebanon	1.88	N. Caledonia	1.43	Seychelles	1.00	Canada	0.79
Burkina F.	6.46	Benin	4.80	Cambodia	3.72	Bhutan	2.47	Israel	1.87	Kazakhstan	1.37	US Virgin	1.00	Slovakia	0.78
Chad	6.40	Namibia	4.75	Nepal	3.65	Libya	2.46	Sau Arabia	1.86	Réunion	1.36	China	0.99	Switzerland	0.77
Afghanistan	5.99	Liberia	4.74	Haiti	3.59	Egypt	2.45	Suriname	1.85	Azerbaijan	1.33	France	0.99	Greece	0.76
Senegal	5.87	Nigeria	4.74	Botswana	3.58	Ecuador	2.41	Colombia	1.84	Chile	1.32	Georgia	0.98	Ukraine	0.76
Angola	5.84	C. African R.	4.72	Micronesia	3.50	Guyana	2.40	Morocco	1.84	Albania	1.31	Thailand	0.98	Austria	0.75
Ethiopa	5.83	Sudan	4.65	Vanuatu	3.50	India	2.38	Brazil	1.81	N. Korea	1.27	United King.	0.96	Bosnia+Herz	0.75
Iraq	5.80	Rep. Congo	4.55	Pakistan	3.39	Peru	2.37	Argentina	1.79	Mauritius	1.20	USA	0.96	Martinique	0.75
Gambia	5.79	Guinea-Bis.	4.45	Bolivia	3.24	Dominican R.	2.35	Fiji	1.77	U. Arab Em.	1.17	Luxembourg	0.95	Poland	0.71
Mozambique	5.77	Guinea	4.42	Djibouti	3.21	Myanmar	2.26	Iran	1.75	Guadeloupe	1.14	Moldova	0.92	Chech R.	0.70
Somalia	5.68	Timor-Leste	4.40	Tajikistan	3.21	Kyrgyzstan	2.25	Oman	1.70	Montenegro	1.10	Taiwan	0.88	Italy	0.70
Swaziland	5.62	C. d'Ivoire	4.37	South Africa	3.19	Turkmenistan	2.25	Kuwait	1.69	New Zealand	1.10	Sweden	0.87	Spain	0.69
Rwanda	5.59	Mayotte	4.33	Belize	3.17	Uzbekistan	2.22	S. Vincent	1.67	Ireland	1.08	Armenia	0.86	Bulgaria	0.68
Palestine	5.46	Comoros	4.30	Nicaragua	3.12	Jamaica	2.19	Brunei	1.64	Serbia	1.08	Malta	0.86	Estonia	0.68
[Gaza >6.00]												Romania	0.86	Russia	0.67
Cameroon	5.42	Burundi	4.21	El Salvador	3.02	Kosovo	2.15	Guam	1.60	Cyprus	1.06	Netherlands	0.85	Belarus	0.66
Eritrea	5.41	Ghana	4.19	Kiribati	3.00	Mongolia	2.15	Costa Rica	1.59	Trinid.+Tob.	1.05	S.-Korea	0.85	Germany	0.65
Yemen	5.41	Mauritania	4.17	Tonga	3.00	Venezuela	2.15	W. Sahara	1.57	Australia	1.03	Finland	0.84	Macao	0.65
D.R. Congo	5.29	Papua N.G.	4.13	Bangla Desh	2.98	Panama	2.06	Vietnam	1.53	Norway	1.02	Hungary	0.84	Slovenia	0.63
Tanzania	5.22	Solomon Is.	4.13	Paraguay	2.87	Indonesia	2.05	Bahamas	1.50	Denmark	1.01	Channel Is.	0.83	Latvia	0.62
Togo	5.21	Laos	4.05	Philippines	2.84	Malaysia	2.04	Bahrein	1.50	Macedonia	1.01	Belgium	0.82	Hong Kong	0.59

A WAR-INDEX ABOVE 2.5-3 LEADS TO SIX TYPICAL EXITS:

(1) **EMIGRATION** with high potential for terror if ambition, because of low skills, is stalled in new country too **(non-violent colonization).**

(2) **Violent crime** (met by the authorities with lower requirements for death penalty and/or extralegal execution).

(3) **Rebellion or *putsch*** by young men stalled in their army careers with access to army equipment.

(4) **Civil war and/or revolution** in which the young decimate each other as freedom fighters and law defenders or – more lethal - as members of different minorities.

(5) **Genocide or expulsions of minorities** to take over the positions of the slaughtered or expelled.

(6) **Conquest** as precondition of **violent colonization** (frequently accompanied by genocide abroad).

DEMOGRAPHIC WAR INDEX 1950

The index is a measure for the ratio of 15-19 old males to 55-59 year old males.
Index 3 to 6 means that 3,000 to 6,000 young males follow 1,000 older males.

		Philippines	5.02	Bhutan	4.48	Algeria	4.07	Somalia	3.71	Sri Lanka	3.24	Belarus	2.76	Benin	2.24
Without		Barbados	5.00	Swazilanmd	4.48	El Salvador	4.01	Madagascar	3.70	Trini+Tobago	3.24	Bulgaria	2.75	Italy	2.19
mini-states		Fiji	5.00	Macedonia	4.44	Honduras	4.01	Peru	3.67	Cuba	3.23	Croatia	2.74	Finland	2.18
or		Taiwan	5.00	Réunion	4.44	Indonesia	4.00	Sierra Leone	3.66	Belize	3.21	Portugal	2.72	Uruguay	2.11
territories		Ghana	4.96	Burundi	4.42	N. Korea	3.99	Micronesia	3.65	Syria	3.19	Estonia	2.70	Fr. Guiana	2.09
		Eritrea	4.92	Haiti	4.38	Zimbabwe	3.99	Armenia	3.64	S. Korea	3.17	Cyprus	2.69	Iceland	2.03
Guam	11.60	Guatemala	4.92	Puerto Rico	4.36	Yemen	3.98	U. Arab Em.	3.64	Iraq	3.16	Lebanon	2.69	Netherlands	1.94
Niger	8.46	Mauritius	4.92	Kiribati	4.34	Gambia	3.98	Qatar	3.63	Moldova	3.14	Libya	2.63	Hungary	1.92
Hong Kong	7.92	Macao	4.89	Colombia	4.31	Guinea-Bis.	3.96	Kenya	3.62	Japan	3.13	China	2.59	Gabon	1.89
Singapore	6.65	Mauritania	4.87	Fr. Polynesia	4.31	Jamaica	3.93	Togo	3.62	Poland	3.07	Slovakia	2.57	Canada	1.84
Samoa	6.59	Venezuela	4.86	Brazil	4.28	Russia	3.93	Cameroon	3.61	Guinea	3.06	Kazakhstan	2.56	Ireland	1.84
Aruba	6.28	C. d'Ivoire	4.85	Nepal	4.26	Comoros	3.91	Pakistan	3.61	N. Caledonia	3.04	Uzbekistan	2.55	France	1.73
Turkey	5.93	Bahrein	4.79	Albania	4.23	S. Sudan	3.91	South Africa	3.56	Ecuador	3.03	Spain	2.53	New Zealand	1.70
Kuwait	5.78	DR Congo	4.79	Morocco	4.22	Malaysia	3.90	Saudi Arabia	3.52	Israel	3.03	Ukraine	2.53	Luxembourg	1.63
Cabo Verde	5.51	Rwanda	4.79	Senegal	4.19	Bangladesh	3.84	Montenegro	3.49	Greece	3.02	Equ. Guinea	2.49	Germany	1.62
Djibouti	5.51	Azerbaijan	4.75	Sudan	4.19	Nigeria	3.84	Myanmar	3.43	Guadeloupe	3.00	Sao Tome	2.49	Czechia	1.56
Paraguay	5.50	Thailand	4.75	Lesotho	4.18	Namibia	3.80	Tunisia	3.42	C. African R.	2.96	Latvia	2.48	Switzerland	1.50
Timor Leste	5.49	Dominican R.	4.72	Costa Rica	4.15	Bahamas	3.79	Guyana	3.38	Brunei	2.95	Slovenia	2.48	USA	1.50
Zambia	5.26	Papua N.G	4.61	Angola	4.13	Burkina Faso	3.79	Afghanistan	3.34	Solomon Is.	2.95	Georgia	2.42	Denmark	1.45
Tanzania	5.23	S. Vincent	4.61	Laos	4.12	India	3.79	Suriname	3.34	Palestine	2.94	Kyrgyzstan	2.39	Australia	1.42
Bosnia&H.	5.19	Antigua&Bar.	4.60	Liberia	4.11	Grenada	3.78	Iran	3.33	Jordan	2.92	Malta	2.33	Belgium	1.37
Nicaragua	5.17	Saint Lucia	4.58	Mozambique	4.11	Mali	3.78	Serbia	3.33	Viet Nam	2.91	Argentinia	2.31	Austria	1.34
Uganda	5.17	Malawi	4.55	Mexico	4.10	Rep. Congo	3.77	Tajikistan	3.32	Turkmenistan	2.90	Lithuania	2.31	Norway	1.33
Vanuatu	5.17	Cambodia	4.52	Oman	4.10	Egypt	3.74	Chad	3.29	Chile	2.82	Benin	2.24	UK	1.24
Ethiopia	5.11	Botswana	4.49	Maldives	4.08	Panama	3.73	Bolivia	3.28	Romania	2.79	Seychelles	2.24	Sweden	1.17

Friedrich NIETZSCHE (1844-1900)
**Europe's most famous philosopher**
Die fröhliche Wissenschaft
[The Gay Science], 1882.
WORLD POPULATION: 1.4 BILLION

"**EXPLOSIVE YOUNG MEN.**
What attracts young men is the sight of the burning match—not the cause itself. The more ingenious seducers operate by holding out the prospect of an explosion, and do not urge their cause by means of reasons; these powder-barrels are not won over by means of reasons !"
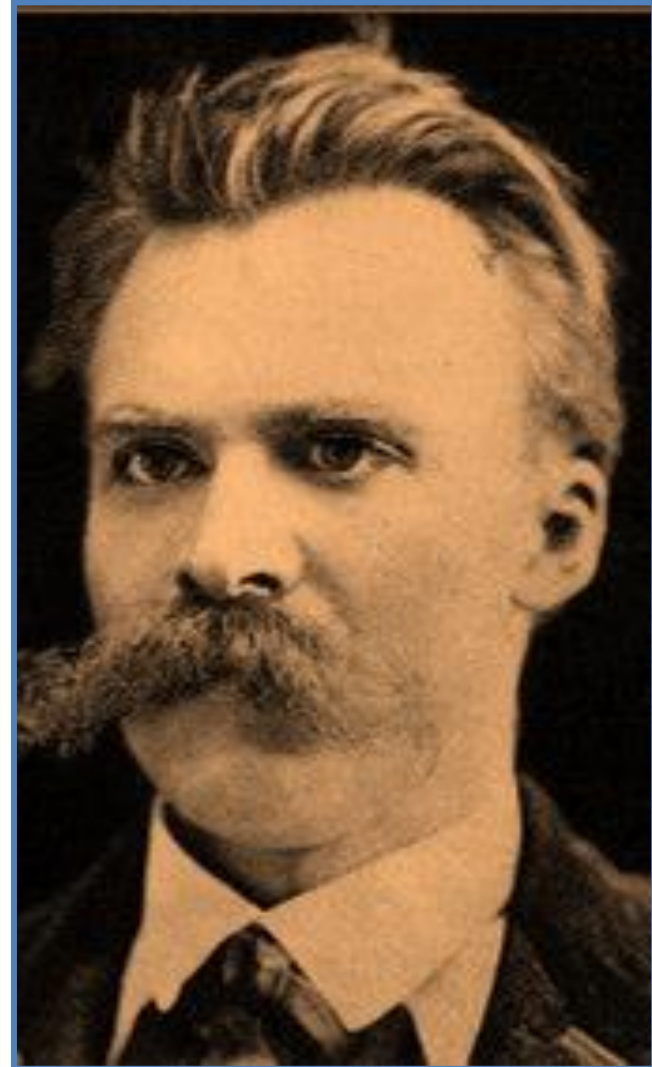
Colmar von der GOLTZ (1843-1916)
Prussian Field Marshal;
Europe's most prominent army instructor.
Das Volk in Waffen
[The People in Arms], 1883.

"Only the young let go of life easily. They enter battle with joy and unconcern--the prerequisites of this bloody toil.

The strength of a people lies in its youth."

Europe's **Population Catastrophe** after the *Black Death (1348)* as the trigger of Europe's **Population Explosion**

- 1348   **80 million**

- 1350   **50 million**

Killing effect of 200 Hiroshima bombs (Japan had 80 mill. inhabitants in 1945)

Pope Innocent VIII's *Witch Bull* of 1484 decrees death penalty for "many persons of both sexes / who by accursed charms and crafts, enormities and horrid offenses, slay infants yet in the mother's womb /; they hinder / women from conceiving".

Marital procreation became the only legal and morally acceptable sexual outlet for Europeans from 1484 to the 20th century.

1000-1500: 2-3 children in a woman's lifetime in Europe
1500-1916: 5-7 children in a woman's lifetime in Europe
2015: 1.5 in a woman's lifetime in Europe

In spite of permanent war, plague and emigration losses, Europe's population jumped from 50 million in 1485 to 500 million in 1916.

"Make love, not babies!" became slogan (and practice) only after 1965.

Death penalty on birth control

\+

Every sexual satisfaction beyond
marital procreation is a mortal sin

\+

Fear of syphilis

_____

= High fertility rate

World Population Growth Through History
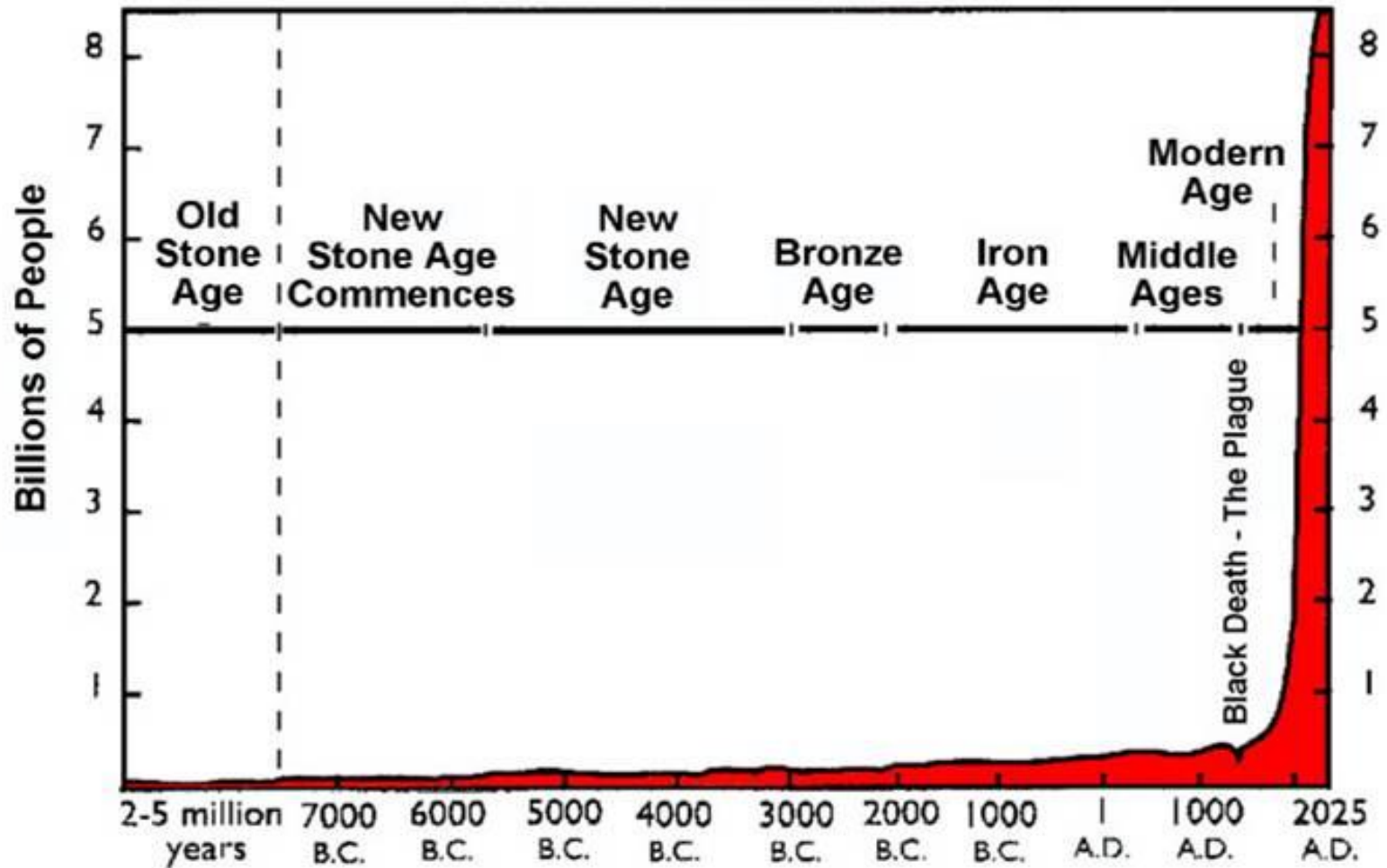
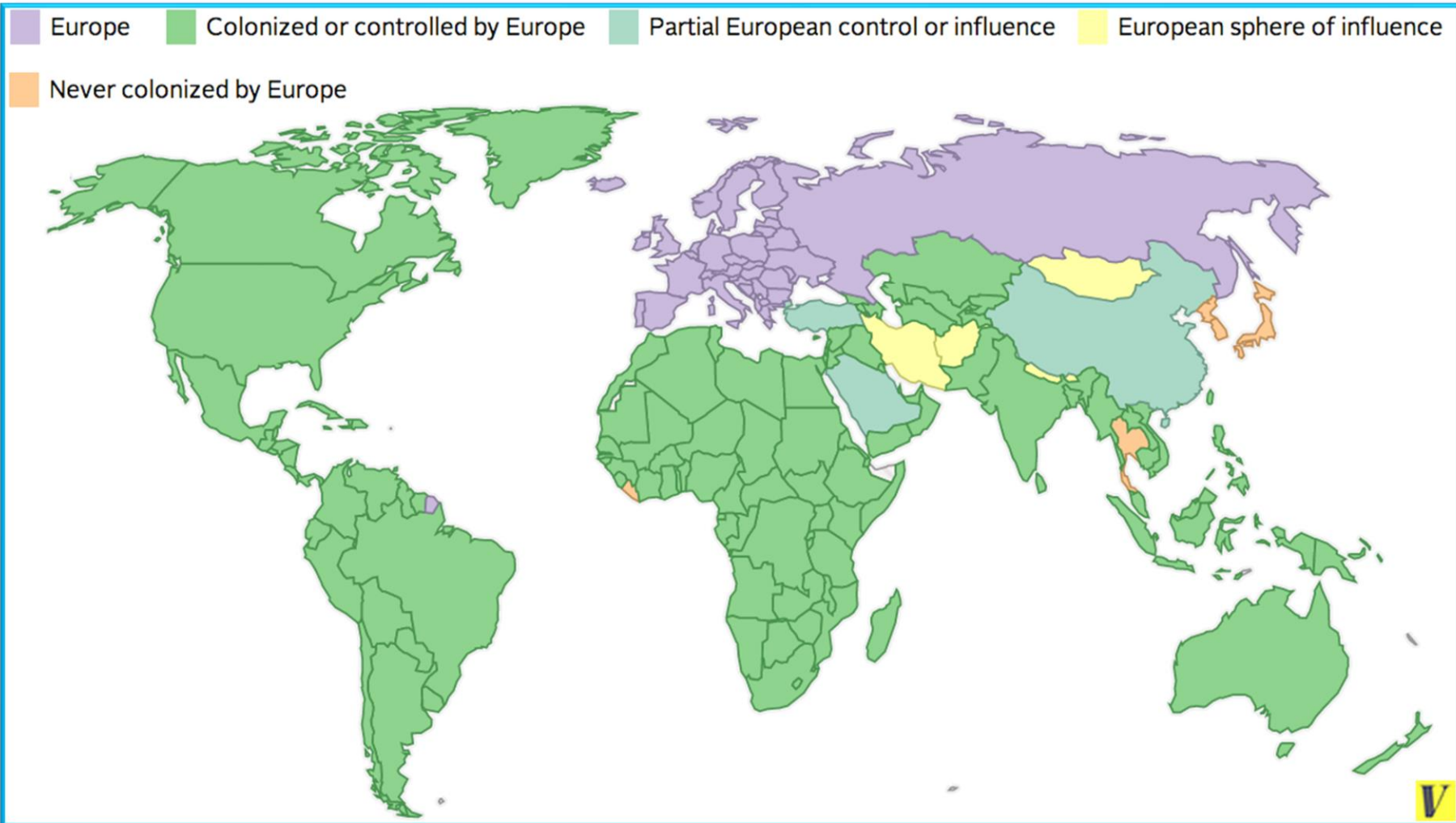From "World Population: Toward the Next Century," copyright 1994 by the Population Reference Bureau

Out of 1,000 fighting age males (15-29 years) worldwide reside in (all figures rounded):

	Europe	USAnada	Oceania	Lat.-Am.	Asia	Africa	ISLAM	UK alone
1492	110	?	?	?	700	115	?	5
1750	190	1	3	15	660	130		10
1914	275	73	5	47	525	75	95	35
2005	89*	39	4	90	618	160	280	8
2020	70	44	5	87	612	182	300	5

WORLD CONQUEST BY SOME 250.000 EUROPEAN WARRIORS AND 20 MILLION SETTLERS BETWEEN 1500 AND 1800.

(Europe's population 1485: 50 mill. > 1916: 500 mill. [27% globally;2018 9.8%])

[http://www.vox.com/2014/6/24/5835320/map-in-the-whole-world-only-these-five-countries-escaped-european]

Spanish imperial dimensions since 1492 (anachronistic)

(wikipedia.org/wiki/Image:Spanish_Overseas_Empire_and_Spanish_Hapsburg_Realms.png#file)

Spanish population

| 1493: | 7 million |
| 1820: | 14 million |

(www.populstat.info/)

Portuguese imperial dimensions since Ceuta 1415 (anachronistic)

Portuguese population:

1527: 1.1 million

1800: 3 million (www.populstat.info)

Dutch imperial dimensions since the 1605 (capture of Portuguese Amboina)

(anachronistic; wikipedia.org/wiki/Image:Dutch_Empire35.PNG)

Dutch population
1700: **1.8** million
1880: **4.0** million (www.populstat.info)
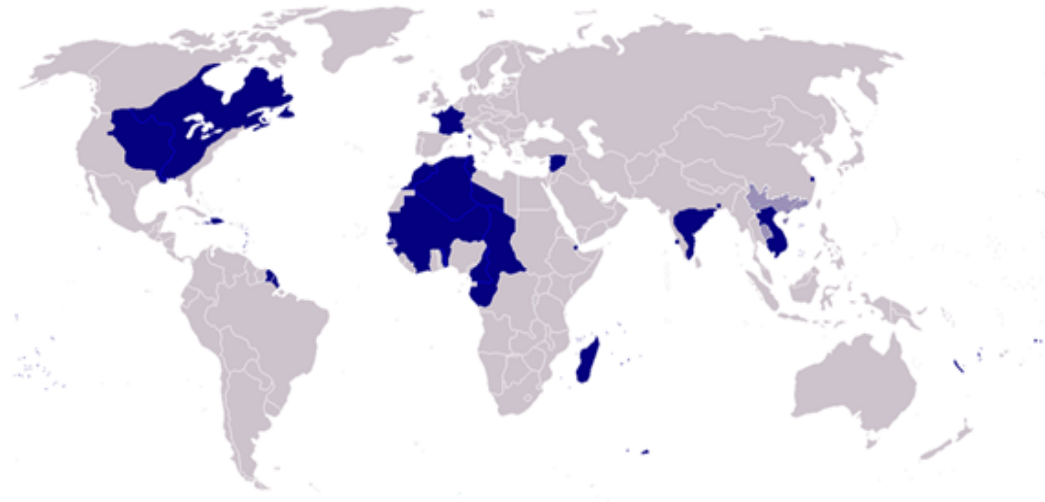
French imperial dimensions since the **1605** (foundation of Port Royal in Nova Scotia)

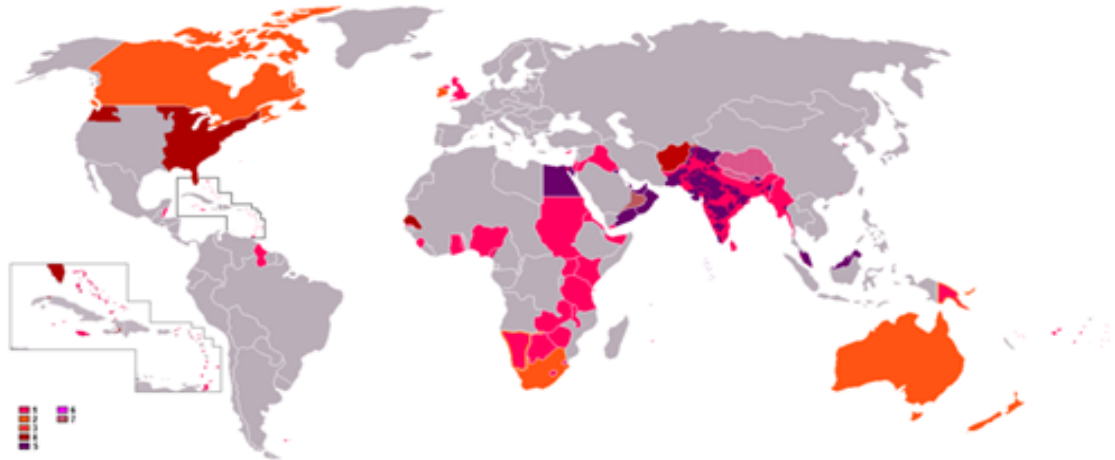(anachronistic; wikipedia.org/wiki/Image:France_colonial_Empire10.png)

French population

1345: **21** million

1400: **17** million

1500: **20** million

1789: **28** million (**Revolution**)(en.wikipedia.org/wiki/Demographics_of_France)

British imperial dimensions since 1607 (Jamestown)
(anachronistic; wikipedia.org/wiki/Image:British_Empire_Anachronous_8.png)

Population

1541: **2.7** million

1601: **4.1** million

1800: **10** million   Germany: **22** million

　　　420% increase　　　　　　　　305% increase

1914: **42** million   Germany: **67** million

http://en.wikipedia.org/wiki/Demography_of_England

The Expansion of Russia, 1500–1800

1462	Acquisitions to 1682
Acquisitions to 1505	Acquisitions to 1725
Acquisitions to 1584	Acquisitions to 1796

Russian imperial dimensions since 1462

[https://www.quora.com/How-was-Russia-able-to-get-capture-such-a-vast-land-area]

Population: 1500 ca.   6 mill.

1550 ca. 11 mill.

1650 ca. 15 mill. (1500-1850: http://www.tacitus.nu/historical-atlas/population/russia.htm)

1750 ca. 23 mill.

1850 ca. 65 mill.

1897   68 mill. (first census; http://www.populstat.info/)

1915   92 mill.

Demographically Asymmetric Conflict

FIGHTING TO THE DEATH
is a well researched asymmetric threat.

Yet, it is different from

FIGHTING TO THE DEATH OF DISPOSABLE SONS THE ENEMY SIMPLY DOES NOT HAVE.

THIS CAPACITY TO ABSORB LOSSES

(PLUS INTEREST DRIVEN **OWNERSHIP** ECONOMY)

WAS **EUROPE'S ADVANTAGE 1490-1916!**

WHEN EUROPE'S DEMOGRAPHY WAS SECOND TO NONE!
From 15th-20th century, even Europe's most powerful failed on something today's teenagers pratice routinely: BIRTH CONTROL.

LOUIS XIV of France (1638-1715) fathered 17 children.

Prussia's FREDERICK THE GREAT (1712-1786) had 13 siblings.

Habsburg Empress MARIA-THERESIA (1717-1780) had 16 children.

NAPOLEON (1769-1821) had 12 siblings. He quipped:
"A warm summer night in Paris will give me a new army!"

Thomas JEFFERSON (1743-1826) had 9 siblings, fathered 12 children.
Queen VICTORIA (1819-1901) had to go through 9 deliveries in 18 years.
Karl MARX (1818-1883) was 1 of 10 children.

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

Hassan NASRALLAH (*1960), leader of Hezbollah, is 1 of 10 children.

Ismail HANIYAH (*1963), leader of Hamas in Gaza, has 13 children.

Angela MERKEL (*1954): 0 children; Hillary CLINTON (*1947): 1 child

EUROPEAN mega-birth-rates lasted some 430 years (1485-1915) whereas MUSLIM mega-birth-rates (outside Subsahara-Africa) will have run their course in c. 130 years (1900-2030).

Europeans increased tenfold from 50 to 500 million between 1485 and 1915 (27 % globally).

Muslims increased twelvefold from 150 million to 1.8 billion between 1900 and 2018 (24 % globally).

ARAB PROCREATION behind "Arab Spring"

- 1948   70 million
- 2018   400 million

DECOLONIZATION ENDS IN THE 1970s
DEMOGRAPHIC WAR INDEX 1970

The index is a measure for the ratio of 15-19 old males to 55-59 year old males.
Index 3 to 6 means that 3,000 to 6,000 young males follow 1,000 older males.

Without		Cambodia	5.00	Taiwan	4.50	Oman	4.24	Sao Tome	3.86	Fr. Polynesia	3.46	Georgia	2.74	Romania	1.97
mini-states		Fiji	4.98	Yemen	4.49	Ecuador	4.23	Tunisia	3.84	Mali	3.45	N. Caledonia	2.71	Finland	1.97
or		Zimbabwe	4.97	Azerbaijan	4.48	Afghanistan	4.21	Comoros	3.83	Aruba	3.43	Belarus	2.69	Netherlands	1.89
territories		Macao	4.94	Mauritania	4.48	Lesotho	4.21	Brunei	3.80	Trini+Tobago	3.43	Cuba	2.64	Australia	1.86
		Mexico	4.94	Armenia	4.47	Brazil	4.20	Montenegro	3.78	Syria	3.19	Russia	2.64	Estonia	1.81
Botswana	7.46	Micronesia	4.93	Bosnia&H.	4.47	Togo	4.19	Chad	3.76	Seychelles	3.40	Serbia	2.59	Spain	1.79
Rwanda	7.11	Uganda	4.93	Ghana	4.47	Peru	4.18	Burkina Faso	3.75	Turkey	3.36	Iceland	2.57	Ireland	1.77
U. Arab Em.	7.09	Paraguay	4.88	Suriname	4.47	Turkmestian	4.17	Egypt	3.75	Albania	3.35	Malta	2.54	Portugal	1.70
Qatar	6.41	Colombia	4.86	Tajikistan	4.46	Laos	4.13	Iraq	3.73	Benin	3.32	Fr. Guiana	2.52	Uruguay	1.69
Kuwait	6.19	Swaziland	4.86	Réunion	4.43	Panama	4.13	Chile	3.71	Bangladesh	3.28	Maldives	2.51	Latvia	1.67
Niger	6.05	Congo DR	4.84	Kenya	4.41	Bhutan	4.12	Singapore	3.71	Eq. Guinea	3.26	Poland	2.51	France	1.60
Nicaragua	6.04	Honduras	4.84	Timor Leste	4.39	Namibia	4.10	Rep. Congo	3.68	Guinea Bis.	3.23	Cyprus	2.42	Hungary	1.54
Samoa	5.92	Angola	4.82	S. Vincent	4.37	S. Korea	4.10	Lebanon	3.68	Bahamas	3.21	Moldova	2.36	Greece	1.53
Palestine	5.69	El Salvador	4.78	W. Sahara	4.37	Belize	4.05	Liberia	3.68	Macedonia	3.21	Israel	2.35	Bulgaria	1.46
Kiribati	5.58	Venezuela	4.68	Iran	4.36	Nigeria	4.03	Myanmar	3.66	C. African R.	3.17	Lithuania	2.35	Switzerland	1.45
Mauritius	5.42	Zambia	4.67	Senegal	4.35	Saudi Arabia	4.03	India	3.65	Vietnam	3.17	Japan	2.30	Czechia	1.44
Morocco	5.42	Eritrea	4.65	Bolivia	4.32	Kazakhstan	4.03	Guinea	3.64	Sierra Leone	3.12	Canada	2.27	Germany	1.39
Tonga	5.32	Burundi	4.64	Cabo Verde	4.32	C. d'Ivoire	3.94	South Africa	3.58	Hong Kong	2.98	Ukraine	2.26	Norway	1.37
Syria	5.28	Dominican R.	4.64	Ethiopia	4.32	Antigua&Bar	3.93	Cameroon	3.58	Puerto Rico	2.91	New Zealand	2.10	Denmark	1.37
Bahrain	5.22	Sudan	4.64	Guyana	4.32	Guadeloupe	3.91	Madagascar	3.58	Pakistan	2.89	Slovenia	2.10	Belgium	1.35
Malawi	5.19	Vanuatu	4.64	Nepal	4.32	Somalia	3.90	Haiti	3.55	Barbados	2.87	Gabon	2.09	Italy	1.34
Philippines	5.16	Papua N.G.	4.61	Grenada	4.30	Costa Rica	3.89	S. Lucia	3.55	N. Korea	2.80	Croatia	2.08	Austria	1.32
Guatemala	5.14	Djibouti	4.57	Mozambique	4.30	Guam	3.89	Indonesia	3.53	Gambia	2.79	Slovakia	2.07	Luxembourg	1.23
Tanzania	5.02	Solomon Is.	4.53	Thailand	4.27	South Sudan	3.89	Sri Lanka	3.50	Mongolia	2.78	Argentina	2.04	UK	1.18
Algeria	5.01	Uzbekistan	4.51	Malaysia	4.24	Libya	3.87	China	3.47	Jamaica	2.75	USA	1.99	Sweden	1.12

DECOLONIZATION 1970.
War Index [males 15-19 : males 55-59]
of colonial powers and colonies

Country	UNITED KINGDOM	Kenya	Malaysia	Zimbabwe
War Index	1.18	4.41	4.27	4.97
Country	FRANCE	Algeria	Cambodia	Niger
War Index	1.60	5.01	5.00	6.05
Country	PORTUGAL	Angola	Mozambique	Timor
War Index	1.70	4.82	4.30	4.39

Demographic War Index
(ratio of males 15-19 to 55-59)
of selected nations between 1950 and 2030
(red indicates top rank)

War Index	USA	Germany	UK	France	Italy	Poland	Turkey	China	Russia	Iran	Iraq	Gaza	Yemen	Afghan	Nigeria
1950	1.50	1.62	1.24	1.73	2.19	3.07	5.93	2.59	3.93	3.33	3.16	2.94	3.98	3.34	3.84
1970	1.99	1.39	1.18	1.60	1.34	2.51	3.36	3.47	2.65	4.36	3.73	6.30	4.49	4.21	4.03
2017	0.96	0.65	0.96	0.99	0.70	0.71	2.00	0.99	0.67	1.75	5.80	6.10	5.41	5.99	4.74
2030	1.09	0.75	1.04	0.99	0.59	0.84	1.35	0.76	1.19	1.39	3.57	4.20	4.38	4.16	4.49

Fertility rate 1960-2017 (births per woman)

[https://data.worldbank.org/indicator/SP.DYN.TFRT.IN]

Boys 0-14 years 1960-2018

[https://data.worldbank.org/indicator/SP.POP.0014.MA.IN]

World (2018) 1.011 Billion
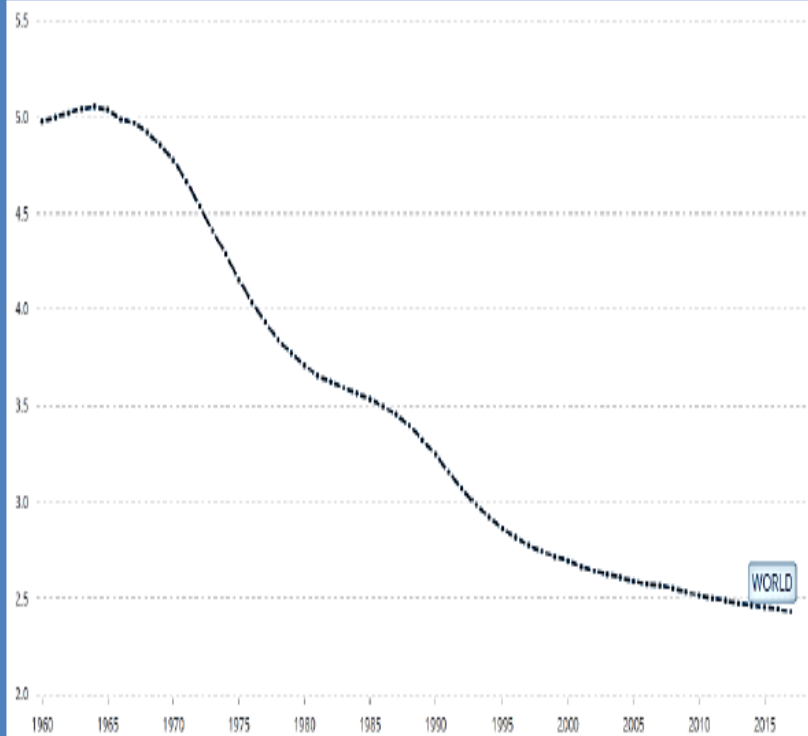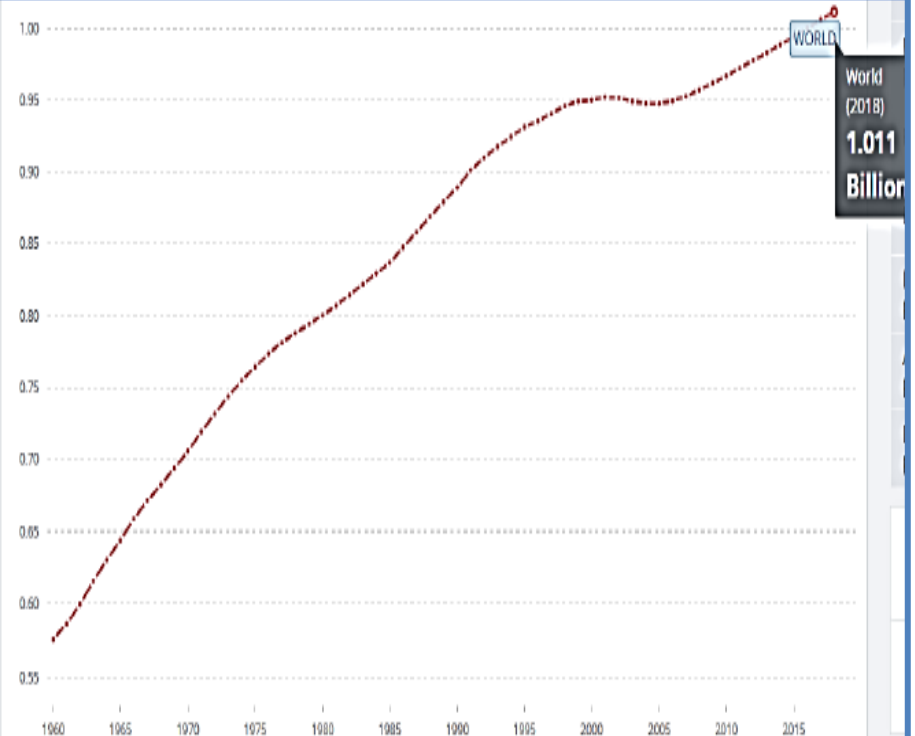
VIET NAM'S war demography 1945-2035
HO CHI MINH (1890-1969), in 1946, warns FRANCE:
"You will kill ten of us, we will kill one of you, but in the end, you will tire of it first!" [https://prezi.com/twdi9xaxr1rt/prophets-during-the-vietnam-war/]

(TF=Total fertility; i.e. children in a woman's lifetime; estimates for 2020-2030)

[Data from https://esa.un.org/unpd/wpp/DataQuery/; https://en.wikipedia.org/wiki/Vietnam_War_casualties; all figures rounded.]

Year	Total Population (million)	WAR INDEX (ratio of 15-19 to 55-59-year old males).	Fighting age males (15-29 year old; mill.)	Per capita income (current US-$)
1945	21.8	??? {TF ???}	???	???
1950	24.8	2.97 {TF 5.40}	3.37 mill.	???
1946-1954	French Vietnam War: 120,000 Viet Minh casualties; 200,000 civilians killed (total 320,000).			
1960	32.7	1.93 {TF 6.42}	3.55 mill.	???
1970	43.4	3.17 {TF 6.33}	4.68 mill.	???
1955-1975	AmericanVietnam War: Vietnamese total dead: 966,000 (minimum). [3.48 mill. 1955>6.21 mill. 1975]			
1980	54.4	4.03 {TF 4.60}	7.77 mill.	200
2000	80.3	4.97 {TF 1.92}	11.61 mill.	433
2015	93.6	1.53 {TF 1.95}	12.46 mill.	2107
2025	107.8	1.36 {TF 1.92}	10.59 mill.	
2035	109.0	1.22 {TF 1.91}	11.58 mill.	

Afghanistan's war demography 1960-2030

(TF=Total fertility; i.e. children in a woman's lifetime; estimates for 2020-2030)

[Data from https://esa.un.org/unpd/wpp/DataQuery/;
https://web.archive.org/web/20060718225045/http://www.vfw.org/resources/levelxmagazine/0203 Soviet-Afghan%20War.pdf;
https://www.statista.com/statistics/262894/western-coalition-soldiers-killed-in-afghanistan/; all figures rounded.]

Year	Total Popula-tion (million)	WAR INDEX (ratio of 15-19 to 55-59-year old males).		Fighting age males (15-29 year old; mill.)
1960	9.0	3.92	{TF 7.45}	1.26 mill.
1970	11.1	4.22	{TF 7.45}	1.47 mill.
1980	13.2	4.67	{TF 7.45}	1.76 mill.
1979-89	1.5 million dead in a combination of civil wars and war against USSR (13.000 KIA)			
1990	12.2	6.53	{TF 7.47}	1.65 mill.
2000	20.0	5.59	{TF 7.65}	2.73 mill.
2010	28.8	5.43	{TF 6.37}	3.91 mill.
2015	33.7	6.00	{TF 5.26}	4.97 mill.
2001-2017	1.5 million dead in a combination of civil wars and war against ISAF (US+allies; 3.530 KIA)			
2020	38.0	5.74	{TF 4.41}	5.88 mill.
2025	42.4	5.23	{TF 3.71}	6.78 mill.
2030	46.7	4.24	{TF 3.19}	7.34 mill.

"This strategy of taking out [Caliphate] terrorists / is one that we have <mark>successfully pursued in YEMEN</mark> and Somalia" (President Obama, 10 September 2014;

https://www.whitehouse.gov/the-press-office/2014/09/10/statement-president-isil-1].

Fighting Age Males Aged 20-29 years

YEMEN 5.41 War Index (2017) 10 wars since 1967: 200,000 killed	RATIO (rounded)	USA 0.96 War Index
1980	0.51 mill.	1:41	20.75 mill.
2000	1.32 mill.	1:16	20.73 mill.
2018	2.87 mill.	1:8	23.40 mill.
2025	3.04 mill.	1:7.5	22.92 mill.

IRAQ'S war demography 1960-2030

(TF=Total fertility; i.e. children in a woman's lifetime; estimates for 2020-2030)

[Data from:
https://esa.un.org/unpd/wpp/DataQuery/; https://www.hrw.org/reports/1993/iraqanfal/; https://en.wikipedia.org/wiki/List_of_wars_involving_Iraq; all figures rounded.]

Year	Total Population (million)	WAR INDEX (ratio of 15-19 to 55-59-year old males).	Fighting age males (15-29 year old; mill.)
1960	7.3	2.84 {TF 6.60}	0.88 mill.
1970	9.9	3.73 {TF 7.15}	1.26 mill.
1980	13.7	4.44 {TF 6.35}	1.79 mill.
1980-88	350,000 dead in Iraq-Iran war. 50.000 Iraqi Kurds killed/gassed in Anfal Campaign '88		
1990	17.5	5.52 {TF 5.65} Gulf-War	2.41 mill.
2000	23.6	5.34 {TF 4.66}	3.51 mill.
Dec. 2006	Baker-Hamilton [44 experts, no demographer: SURGE!]:"The United States govern-ment still does not understand very well either the insurgency in Iraq or the role of the militias."		
2010	30.8	5.48 {TF 4.55}	4.38 mill.
2015	36.1	5.80 {TF 4.27} ISIS-War	5.11 mill.
1990-2017	Gulf war (90/91), Iraq War (2003-2011), ISIS-War (2014-17): 250,000 dead		
2020	41.5	5.00 {TF 4.01}	5.78 mill.
2025	47.2	3.84 {TF 3.79}	6.45 mill.
2030	53.3	3.57 {TF 3.58}	7.42 mill.

IRAQ 1950-2015 *versus* USA 1800-1865

WAS SLAVERY THE WAR'S CAUSE OR JUST A CAUSE FOR CONFLICT?

BOYCOTT OF SOUTHERN COTTON MARKETS WAS AN OPTION.

Why stingy with $$ (to pay off slave owners) but generous with the life of young men?

USA 1800-1865 (War index ? To ?)			IRAQ 1950-2015 (War index 8 to 6)		
1800	5.3 mill.		1950	5.0 mill.	
1810	7.0 mill.		1960	7.3 mill.	
1855	27.7 mill.		2005	28.2 mill.	
1861	32.0 mill.		2011	30.4 mill.	
625,000 killed in civil war			800,000 killed in wars since 1961		
1865	35.2 mill.		2015	36.1 mill.	

The Union's martyr, JOHN BROWN (1800-1859), had 11 sons out of 20 children. 7 sons reached adulthood. 6 of them joined their father in the guerilla war against slave owners:

„GLORY, GLORY, HALLELUJA …"

FRANCE, GERMANY, AND US [1500 troops in Sahel/Subsahara] in MALI-NIGER-WAR SINCE 2017 (figures rounded)

Fighting age males aged 20-29 (mill.) [https://esa.un.org/unpd/wpp/DataQuery/]

Year	USA War Index 0.96	MALI War Index 6.61	NIGER War Index >7 4.01 of list due to faulty reporting to UN	GERMANY War Index 0.65	FRANCE War Index 0.99
	MALES 20-29 YRS. (MILL.)	MALES 20-29 YRS. (MILL.)	MALES 20-29 YRS. (MILL.)	MALES 20-29YRS (MILL.)	MALES 20-29 YRS. (MILL.)
1970	15.35 (48xNiger)	0.47	0.32	5.36 (17xNiger)	3.67
1990	21.05	0.58	0.56	6.85	4.37
2010	21.57	1.12	1.04	4.96	4.04
2015	23.17 (17xNiger)	1.30	1.36	5.02 (4xNiger)	4.12
2030	22.99 War Index 1.09	2.10 War Index 5.31	2.92 War Index 6.10	4.03 War Index 0.75	4.21 War Index 0.99
2050	24.28 (4xNiger)	4.10	6.04	4.15 (0.7xNiger)	4.37
Change	+63%	+872 %	+1887%	-23 %	+19 %

NIGERIA'S war demography 1960-2030

(TF=Total fertility; i.e. children in a woman's lifetime; estimates for 2020-2030)

[Data from https://esa.un.org/unpd/wpp/DataQuery/; all figures rounded.]

Year	Total Population (million)	WAR INDEX (ratio of 15-19 to 55-59-year old males).	Fighting age males (15-29 year old; mill.)
1960	45.1	4.28 {TF 6.35}	6.12 mill.
1970	56.0	4.03 {TF 6.61}	7.38 mill.
1967-70	Biafra-Secession war: 70,000 killed		
1980	73.5	4.10 {TF 6.76}	9.49 mill.
1990	95.3	4.41 {TF 6.37}	12.4 mill.
2000	122.4	4.60 {TF 6.05}	17.1 mill.
2010	158.6	4.73 {TF 5.74}	21.6 mill.
2015	181.2	4.74 {TF 5.42}	24.3 mill.
2009-2017	Boko Haram [= *books are sin*] Insurgency:52,000 killed.		
2020	206.2	4.78 {TF 5.08}	28.0 mill.
2025	233.7	4.77 {TF 4.74}	32.6 mill.
2030	264.1	4.49 {TF 4.41}	37.9 mill. [USA 33.5 mill.]

ARE WARS AND MIGRATIONS IN THE SAHEL ZONE DUE TO CLIMATE CHANGE?

Climate Models	Climate Measurements	Demographic factors
Droughts degrade agricultural land.	Droughts occurred regularly since 12,000 years. Last peak was in the 1980s, not the 2010s [https://www.gfdl.noaa.gov/sahel-drought/].	Population exploded from 20 to 100 million since 1950. Shall be 200 million in 2050.
Desert moves south and eliminates agricultural land.	The "desert was not actually moving south; instead, overuse was denuding the land" [https://www.smithsonianmag.com/science-nature/great-green-wall-stop-desertification-not-so-much-180960171/]	Ever more superfluous sons of herdsmen and farmers compete for the same limited land area. Its overuse delays violence.
People are losing land to the desert. That's why they fight against each other.	Desert does not increase. Land is overused.	Population explosion drives war index from 3 to 6 and higher. Capacity to absorb losses favors military solutions for redistribution of land from the weaker to the stronger.
The loss of land causes migration and emigration.	No land is lost.	High war index causes violence, migration and emigration.

Russia's recent wars and the opponents' capacity to absorb losses.

1979-1989 LOSS	**USSR**	**300 million** **Median age: 36**	**20:1**	**Afghanistan**	**15 million** **Median age: 17**
1994-1996 LOSS	**Russia**	**149 million** **Median age: 37**	**149:1**	**Chechnya**	**1 million** **Median age: 19**
1999-2009 DRAW	**Russia**	**149 million** **Median age: 39**	**120:1**	**Chechnya**	**1,2 million** **Median age: 22**
8-12 August 2008 VICTORY	**Russia**	**145 million** **Median age: 39**	**32:1**	**Georgia**	**4,5 million** **Median age: 39**
3/2014 CRIMEA VICTORY	**Russia**	**142 million** **Median age: 39**	**3:1**	**UKRAINE**	**44 million** **Median age: 41**

2017: 53 «DYING» NATIONS (> 0.5 mill. inhabitants)
{TOTAL FERTILITY RATE [=CHILDREN IN A WOMAN'S LIFETIME] BELOW 1.8}

France. 2.07 UK 1.89 USA 1.87	Georgia 1.76	Armenia 1.64	Macedon. 1.60	Albania 1.51	Bulgaria 1.46	Japan 1.41	S.-Korea 1.25
Belgium 1.78	Finland 1.75	Puerto-Ri. 1.64	Lithuania 1.59	Latvia 1.51	Czechia 1.45	Slovakia 1.40	Hong Kong 1.19
Netherlds. 1.78	Mauritius 1.75	Luxemb. 1.61	Moldova 1.56	Thailand 1.51	Germany 1.44	Croatia 1.39	Taiwan 1.12
Uzbekistan 1.78	Denmark 1.73	Russia 1.61	Malta 1.55	Spain 1.49	Hungary 1.44	Slovenia 1.35	Macau 0.94
Australia 1.77	Lebanon 1.73	Canada 1.60	Switzerl. 1.55	Belarus 1.48	Italy 1.43	Poland 1.34	Singapore 0.82
Bahrein 1.77	Cuba 1.71	China 1.60	Ukraine 1.54	Austria 1.47	Serbia 1.43	Romania 1.34	
Brazil 1.76	Trinid.+T. 1.71	Moldavia 1.60	Portugal 1.53	Cyprus 1.47	Greece 1.42	Bosn-Herz. 1.28	https://www.cia.gov /library/publications /the-world-factbook/rankorder/ 2127rank.html

GERMANY **TOTAL POPULATION: 81 million**

on welfare: 8 million

Immigrants + offspring: 19 million

Active Population aged 20-65 years
from 2016 and 2060 without further immigration

- **2016   49 mill.**
- **2060   28 mill.**

- *Sachverständigenrat deutscher Stiftungen für Integration und Migration: Jahresgutachten 2011 http://www.svr-migration.de/content/wp-content/uploads/2011/04/jg_2011.pdf*

Hopeless without skilled immigration!

Population of predominantly low-skilled areas (1950; 2018; 2050)
GREEN: Desire to emigrate in million (using Gallup's 2017 percentages)

[https://news.gallup.com/poll/245255/750-million-worldwide-migrate.aspx; https://blogs.harvard.edu/mesh/2008/03/mena_population/; http://www.worldometers.info/world-population/latin-america-and-the-caribbean-population/; /south-eastern-asia-population/, http://www.worldometers.info/world-population/southern-asia-population/]

Area	Population 1950	Population 2018 Desire to emigrate [% of 2017]	Population 2050 Desire to emigrate [% of 2017]	% of adults desiring to emigrate in 2017 (calculated for total population=
Sub Saharan Africa	186 million	1,050 million 347 million	2,123 million 700 million	33 %
Middle East + North Africa (MENA==Arabs + Israel, Iran))	104 million	490 million 118 million	692 million 166 million	24 %
Latin America /Caribbean	169 million	652 million 176 million	780 million 211 million	27 %
Southeast Asia	165 million	660 million 46 million	797 million 64 million	7 %
South Asia	493 million	1,897 million 151 million	2,382 million 190 million	8 %
Sum	1,117 million	4,773 million 938 million	6,774 million 1,340 million	

FRANCE/GERMANY *VERSUS* AFRICA

Population Development

	FRANCE + GERMANY	rounded	AFRICA
1914	98 million	**1:1**	115 million
1950	110 million	**1:2**	230 million
2018	148 million (Median age 43)	**1:9**	1,290 million (Median age 20)
2050 •	142 million (Median age 47)	**1:17**	2,400 million (Median Age 26)

Germany's immigration fiasco: School performance

Score	Indigenous offspring (65% of total)	Immigrants' offspring (35%). Score of those born and raised tuition-free in Germany.
Very good (1) INNOVATORS	6.3 %	1.3 %
Good (2) DOING WELL	15.8 %	6.2 %
Mediocre (3+4) GETTING ALONG	47.9 %	41.6 %
Failure (5-7) WELFARE	29.9 %	50.9 %

TIMSS (*Trends in International Mathematics and Science Study*)
Exemplary decline of Germany's 10 year old between 2007 and 2015

[http://www.iea.nl.our-studies]

Rank	1995	2003	2007	2011	2015
1	Singapore	Singapore	Hong Kong	Singapore	Singapore
2	South-Korea	Hong Kong	Singapore	South-Korea	Hong Kong
3	Japan	Japan	Taiwan	Hongkong	South-Korea
4	Hong Kong	Taiwan	Japan	Taiwan	Taiwan
5	Netherlands	Flanders	Kasakhstan	Japan	Japan
...	...	...	...	...	...
	Without Germany				
		Without Germany			
			12: Germany		
				16: Germany	
					24: Germany

GLOBAL SHARE OF CHILDREN UNDER 5 YEARS: 1950
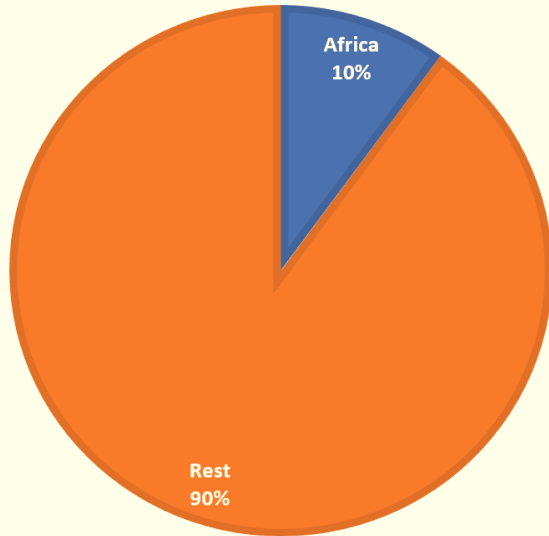
Africa 10%
Rest 90%

GLOBAL SHARE OF CHILDREN UNDER 5 YEARS: 2050
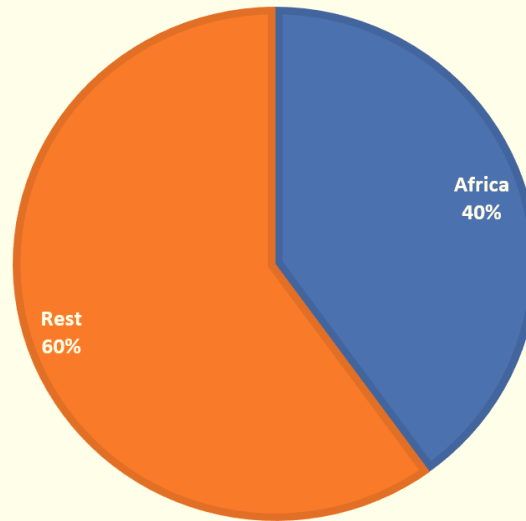
Africa 40%
Rest 60%

GLOBAL SHARE OF CHILDREN UNDER 5 YEARS: 2100
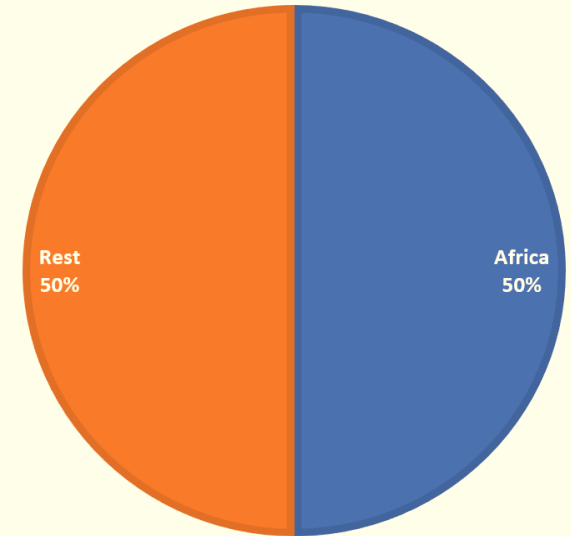
Africa 50%
Rest 50%

https://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf; https://www.unicef.org/media/media_74754.html

Give help to Africa if Africa shall not come to you! BUT HOW?
AFRICA'S CHILDREN 0-18 IN 2015 AND 2050

[http://www.thelancet.com/action/showFullTableImage?tableId=tbl4&pii=S0140673607600324; table 4;
http://www.unicef.org/publications/files/UNICEF_Africa_Generation_2030_en_11Aug.pdf]

	2015	2050
AFRICA	1.2 bill. inhabs. [40%<1,25$/day] 540 mill. <18 (24.3% of world *versus* 9% in 1950) {325 million in poverty} [2030: 750 million under 18]	2.4 bill. inhabs. 1,000 mill.<18 (37% of world; 40% of newborn] {600 million in poverty}
Europe	139 mill. <18 1:4 (Europe:Africa)	125 mill. <18 1:8 (Europe:Africa)
North-Am.	83 mill. <18	96 mill. <18
Oceania	11 mill. <18	14 mill. <18
W E S T COMBINED	233 mill. <18	240 mill. <18

HOW MANY ARE ACCEPTED IN ==EAST ASIA==?

- **2017 JAPAN takes 20 asylum seekers.**

- [https://www.japantimes.co.jp/news/2018/05/21/reference/japans-refugee-screening-system-sets-high-bar/#.W2g2JigzZPY]

- **SOUTH-KOREA takes, from 1994 to 2016, 588 asylum seekers, 27 annually.**

- [https://www.koreatimes.co.kr/www/news/opinon/2016/09/162_207906.html]

- **CHINA, in 2015, held 583 asylum seekers in a population of 1.382 billion**

- [„The upper Han", *The Economist*, 19.-29. November 2016, 20-22/22].

Cognitive Ability (==CA==):

in selected countries with high immigration

COUNTRY	INDIGENOUS IQ	IMMIGRANT IQ
Singapore	**105**	**106**
Finland	**104**	**95**
Hong Kong	**103**	**102**
Canada	**102**	**100**
Netherlands	**102**	**96**
Switzerland	**102**	**95**
United Kingdom	**100**	**97**
Sweden	**100**	**94**
Belgium	**100**	**92**
Germany	**100**	**92**
Australia **(toughest western border controls)**	**99**	**100**
USA	**99**	**95**
France	**98**	**92**

POPULATION: CHINA *VERSUS* COMPETITORS

[http://www.worldometers.info/world-population/population-by-country/]

IN BRACKETS: Uncorrected *COGNITIVE ABILITY (CA)*

[**Rindermann, H.** (2018). *Cognitive capitalism: Human capital and the wellbeing of nations*. Cambridge: Cambridge University Press; https://www.tu-chemnitz.de/hsw/psychologie/professuren/entwpsy/team/rindermann/pdfs/RindermannCogCapAppendix.pdf.]

Demographically		CHINA (PR)	(103)
is 4	x	USA	(99)
• 10	x	Russia	(98)
• 11	x	Japan	(104)
• 17	x	Germany	(99)
• 28	x	South Korea	(106)
• 37	x	Poland	(97)
• 38	x	Canada	(101)
• 59	x	Taiwan	(103)
• 170	x	Switzerland	(100)
• 191	x	Hong Kong	(105)
• 244	x	Singapore	(106)
Is nearly	2 x	all of the rest combined	

WOLRD ECONOMIC FORUM 2017:
"China will grow old before it gets rich!" Really?

[https://www.weforum.org/agenda/2017/10/china-will-grow-old-before-it-gets-rich/]

Countries with median age above 35 years in 2017 (without mini-states)

[https://www.cia.gov/library/publications/the-world-factbook/rankorder/2177rank.html]

Monaco 53.1	Lithuania 43.7	Finland 42.5	Korea-S. 41.8	Taiwan 40.7	USA 38.1	Iceland 36.5
Japan 47.3	Latvia 43.6	Switzerland 42.4	Cuba 41.5	Ukraine 40.6	Macedonia 37.9	Trinidad+Tob. 36.0
Germany 47.1	Croatia 43.0	Hungary 42.3	Belgium 41.4	United Kingdom 40.5	N. Zealand 37.9	Armenia 35.1
Italy 45.5	Bulgaria 42.7	Canada 42.2	France 41.2	Belarus 40.0	Thailand 37.7	Uruguay 35.0
Greece 44.5	Estonia 42.7	Denmark 42.2	Sweden 41.2	Russia 39.6	CHINA (PR) 37.4	
Slovenia 44.6	Spain 42.7	Portugal 42.2	Romania 41.1	Norway 39.2	Cyprus 36.8	Singapore 34.6
Hong Kong 44.4	Netherlands 42.6	Czechia 42.1	Montenegro 40.7	Australia 38.7	Ireland 36.8	
Austria 44.0	Serbia 42.6	Bosnia+H. 42.1	Poland 40.7	Georgia 38.1	Moldova 36.7	

BRAINPOWER==POTENTIAL INNOVATORS

25-29-year-olds from selected countries in 2015 (million)
(applying TIMSS 2015 scores of 10-year-olds [total numbers different] that enter the labour market around 2030).

COUNTRY	25-29-year-olds (million)	Share of math top scorers (TIMSS 2015)	Math top scorers (million)
China	130	28%	36.00
USA	22	14%	3.10
Russia	13	20%	2.60
Japan	9	32%	2.90
Germany	5	5%	0.25
France	5	2%	0.10
UK	4.4	17%	0.75
Korea-S.	3.3	41%	1.35
Italy	3.1	4%	0.12
Canada	2.6	6%	0.16
Spain	2.5	3%	0.08
Taiwan	2.0	35%	0.70
Australia	1.7	9%	0.15
Switzerland	0.6	22% (PISA-interpol.)	0.13

UNICORNS by country 2018 (startups with at least $ 1 billion market price.
[The Economist (https://pl.pinterest.com/productfitbiz/upstream/?lp=true); https://news.crunchbase.com/news/vcs-are-on-track-to-make-2018-a-record-year-for-unicorns/]
Electric plug-in cars sold January-June 2018: China: 394,000. Rest: 389,000.
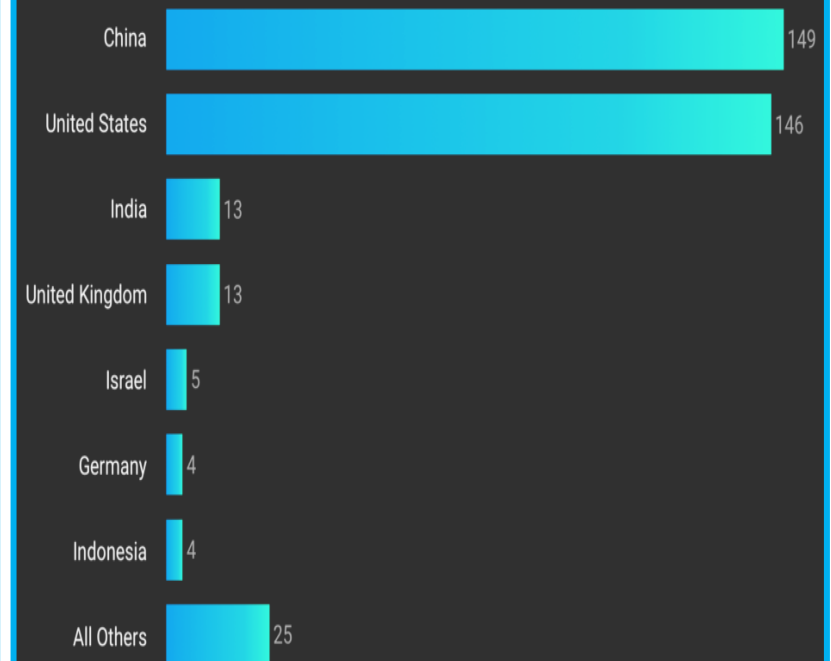[http://www.ev-volumes.com/country/total-world-plug-in-vehicle-volumes/]

Location of privately held startup companies valued at over $1bn, %
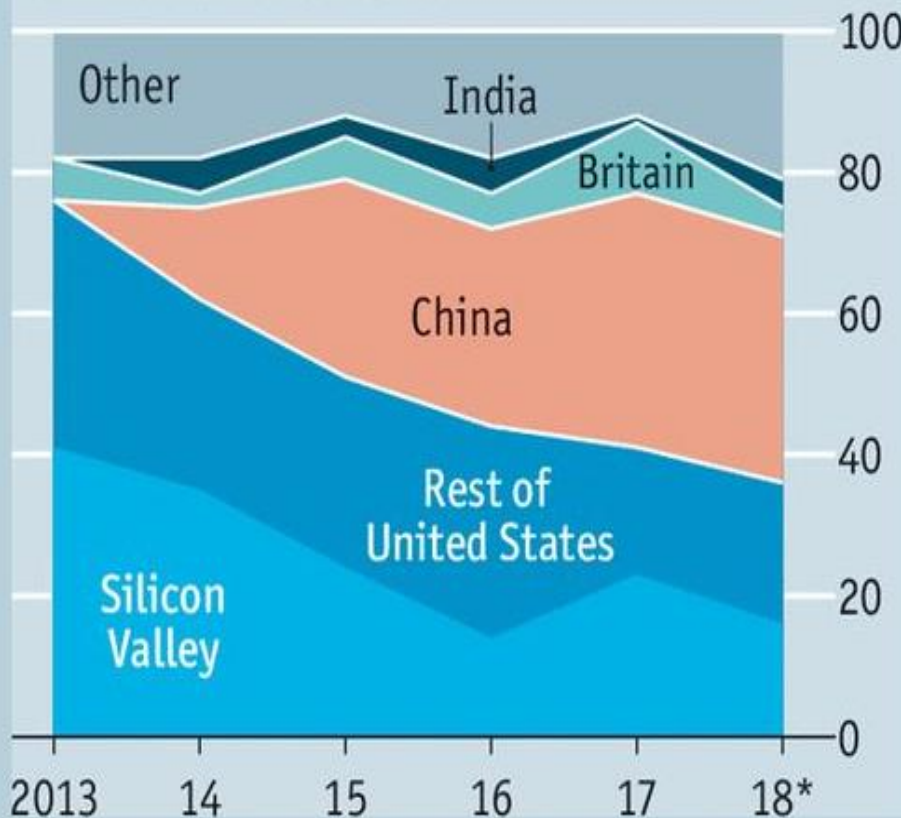
Total Count Of Unicorns By Country

Count of privately-held companies valued at $1 billion or more, post-money, in the most recent priced funding round included. Based on reported data in Crunchbase.

Country	Count
China	149
United States	146
India	13
United Kingdom	13
Israel	5
Germany	4
Indonesia	4
All Others	25

crunchbase news

There is concern in the US that Chinese immigrants pose a security risk because they can reveal industrial secrets to China. The risk exists. But a greater risk for the US (Cognitive Ability [CA] 99) would be the lack of Chinese immigrants and the settlement of these talents (Cognitive Ability [CA] 103) in competing nations.

The security risk can be controlled, but the loss of competence is irreversible!

AUSTRALIA	CANADA	UNITED STATES
[https://en.wikipedia.org/wiki/Chinese_Australians; https://www.tu-chemnitz.de/hsw/psychologie/professuren/entwpsy/team/rindermann/pdfs/RindermannCogCapAppendix.pdf]	[https://en.wikipedia.org/wiki/Chinese_Canadians; https://www.tu-chemnitz.de/hsw/psychologie/professuren/entwpsy/team/rindermann/pdfs/RindermannCogCapAppendix.pdf]	[https://en.wikipedia.org/wiki/Chinese_Americans; https://www.tu-chemnitz.de/hsw/psychologie/professuren/entwpsy/team/rindermann/pdfs/RindermannCogCapAppendix.pdf]
National IQ 99 Migrant IQ 100	National IQ 102 Migrant IQ 100	National IQ 99 Migrant IQ 95
1.22 mill. Chinese	1.77 mill. Chinese	4.9 mill. Chinese
5.6 % of population (2016)	5.1 % of population (2016)	1.5 % of population (2016)

Ethnic Chinese immigrants as share of total population.
Germany as benchmark (factor 1)

[https://en.wikipedia.org/wiki/Overseas_Chinese]

"Now is the time for America to engineer a massive raid on the brain power abroad and capture the world's scientists, tech-savvy talent, engineers, and mathematicians"

Jeffrey E. Garten

(*1946. Dean *Emeritus* at the *Yale School of Management*)(*Foreign Policy*, 5 October 2015;

Germany	UK	USA	New Zealand	Canada	Australia
1	x 2.5	x 6	x 16	x 20	x 22
30,000 AI workers in total in Germany		67,000 Chinese AI workers in USA [*The Economist*, 15th-21st September 2018, p. 71.]			

BLOCK	A EAST ASIA (1 nuclear power) [Chinese {CN, HK, MO, SG, TW, Diaspora}, Japan, S-Korea, Vietnam]	B EUROPEANIZED (5 nucl. pow.) [Europe, Russia, USA. AUS/NZ, CDN, CH, Israel etc.: Competence Fortresses]	C REST (2 nuclear powers)
Population	1.75 billion (23%) Low fertility, high median age, homogenous; low level of crime/terror	1.15 billion (15%) Low fertility, high median age, multicultural; higher level of crime/terror	4.7 billion (62%) High fertility, low median age, diverse; highest level of crime/terror
Borders	Borders open only for talent Talent-exchange between A + B Competence Fortresses	Borders partially open (EU, USA) Talent-emigration from unprotected B-nations to Competence Fortresses	Porous borders 1-2 billion low-skilled ready to settle in unprotected B-nations
Property structures	Medium strength property guarantees	Strictest property guarantees	Weak property guarantees
Competence	Best pupils (PISA/TIMSS) 47,4% of PCT-patents 2016;	Mediocre pupils (PISA/TIMSS) 50,9% of PCT-patents 2016;	Worst pupils (PISA/TIMSS) 1,7% of PCT-patents 2016;
WAR-INDEX	WAR-INDEX around 1 or lower	WAR-INDEX around 1 or lower	WAR-INDEX ABOVE 2.5
GDP	30% globally (PPP-$-US)	39% globally (PPP-$-US)	31% globally (PPP-$-US)
Production	44% cars 53% semi-conductors 68% robots (installed in 2018) >90% ships, phones, tv-s, cameras, computers 100% Electric vehicle batteries 46% credit by fintech (China)	38% cars 47% semi-conductors 28% robots (installed in 2018) >90% of passenger planes 13% credit by fintech (USA)	18% cars 0% semi-conductors 4% robots (installed in 2018) 20% credit by fintech (India)
FORBES 500	190 (38%; 2017)	287 (57,4%; 2017)	23 (4,6%; 2017)

Gunnar Heinsohn

FORTRESSES OF COMPETENCE

24 mill. Australians protect 25,000 km of shoreline?
Will 500 mill. Europeans protect 3,685 km from Gibraltar to Latakia (Syria)?

EXAMPLES

- **Australia**
- **China**
- **Taiwan**
- **Finland**
- **Hongkong**
- **Canada**
- **Korea-S.**
- **Japan**
- **New Zeal.**
- **Norway**
- **Switzerl.**
- **Singapore**

>All are in need of immigration because of low birth rates.

>All aim at optimal ratios between takers and makers to not discourage the latter.

>70% of income after tax versus 50% in EU.

>Immigrants are not selected for peculiar skills but for competence enabling them to acquire future skills. One can learn from top down but not from bottom up.

>Companys' demands for welders, fruit-pickers etc. play a secondary role because a permanent over-supply of general competence is seen as the most important condition to remain competitive.

>No tolerance for anti-Semitism

To evade overwhelming numbers of desparate low-skilled strangers concerned citizens may try to turn competitive regions of their nations into fortresses of competence. If separatism fails they may emigrate to one of the existing fortresses of competence.

THE FUTURE:

Fewer nations but more people afflicted by high war index

2017	**81** nations/territories with war index between **2.5 and 8** **1.7 billion** inhabitants
2030	**66** nations with war index between **2.5 and 6** **2.2 billion** inhabitants **Most conflicts will be internecine wars in weak states without navies, air forces or IBMs to project power overseas.**

DEMOGRAPHIC WAR INDEX 2030: RANKING BY COUNTRY.

A war index of between 2.5 and 6.38 (66 nations/territories with 2.2 billion inhabitants) indicates that 2,500-6,380 young men aged 15-19 are competing for the jobs and social positions of 1,000 retiring men aged 55-59. The higher the war index, the more likely it is that these young competitors will—if emigration is blocked—resort to crime, homicide, gang war, political coup, revolution, civil war, expulsion, genocide and war. Even an index below 2.5 may indicate volatility if combined with a stagnating or shrinking economy. If nations in the blue sectors [590-999 young following 1.000 old] consider war or intervention they act extremely careful because every fallen soldier — statistically his mother's only son or only child — will terminate his family line.

[Data for 2030: https://esa.un.org/unpd/wpp/DataQuery/]

Country		Country		Country		Country		Country		Country		Country		Country	
Swaziland	6.38	Guinea	4.27	Mayotte	3.00	Mongolia	2.04	Libya	1.45	S. Lucia	1.17	Barbados	1.00	Croatia	0.77
Mozambique	6.31	S.-Sudan	4.19	Samoa	3.00	Nicaragua	2.03	Myanmar	1.45	Uruguay	1.17	Brunei	1.00	China	0.76
Niger	6.10	C. d'Ivoire	4.17	Tonga	3.00	Algeria	2.01	Bhutan	1.43	Bahamas	1.15	Chile	1.00	Qatar	0.76
Micronesia	6.00	Sierra Leone	4.17	Laos	2.99	Turkmenistan	1.96	Malaysia	1.42	Saudi Arabia	1.14	Curacao	1.00	Slovakia	0.76
Chad	5.98	Afghanistan	4.16	Solomon I.	2.93	Fiji	1.95	Guam	1.40	Guadeloupe	1.14	Montenegro	1.00	Germany	0.75
Gambia	5.97	Togo	4.10	Kyrgystan	2.87	Maldives	1.90	Iran	1.39	Lebanon	1.13	France	0.99	Austria	0.74
Burundi	5.81	Kenya	4.01	Pakistan	2.85	Dominican R.	1.89	Kuwait	1.36	W. Sahara	1.13	Ukraine	0.99	Thailand	0.72
Uganda	5.75	Congo R	3.93	Vanuatu	2.83	Fr. Guiana	1.89	Turkey	1.35	Finland	1.11	Canada	0.97	Hungary	0.71
Angola	5.69	Guinea Biss.	3.91	Egypt	2.81	Morocco	1.88	Viet Nam	1.34	Martinique	1.11	Belgium	0.94	Malta	0.71
Somalia	5.51	Benin	3.90	Haiti	2.80	El Salvador	1.84	Antigua+B	1.33	New Zealand	1.11	Lithuania	0.94	Bulgaria	0.70
Mali	5.31	Liberia	3.88	Papua NG	2.69	Ecuador	1.79	Colombia	1.33	Oman	1.11	Norway	0.92	Greece	0.69
Malawi	5.27	Ethiopia	3.82	Syria	2.66	Azerbaijan	1.78	Saint Vincent	1.33	Fr. Polynesia	1.10	Mauritius	0.90	Romania	0.68
Lesotho	5.12	Comoros	3.80	Botswana	2.53	Israel	1.76	Seychelles	1.33	Mauritius	1.20	Cyprus	0.88	Channel Is.	0.67
Burkina F.	5.11	Madagascar	3.80	Cambodia	2.50	India	1.73	US Virgin	1.33	U. Arab Em.	1.17	Denmark	0.86	Bosnia+Herz.	0.66
Zimbabwe	5.11	C. African R.	3.70	Djibouti	2.45	Venezuela	1.73	Jamaica	1.31	Guadeloupe	1.14	Luxembourg	0.86	Chech R.	0.66
Senegal	5.06	Palestine	3.67	South Africa	2.31	Bangladesh	1.72	Sri Lanka	1.29	Montenegro	1.10	Macao	0.86	Singapore	0.65
DR Congo	5.05	Iraq	3.57	Bolivia	2.27	Grenada	1.67	Costa Rica	1.25			N-Korea	0.86	Portugal	0.62
Zambia	5.04	Ghana	3.55	Philippines	2.27	Peru	1.66	Albania	1.24	Australia	1.09	Estonia	0.84	Taiwan	0.62
Eritrea	4.90	Kiribati	3.50	Paraguay	2.26	Guyana	1.60	N. Caledonia	1.22	USA	1.09	Hong Kong	0.84	Italy	0.59
Tanzania	4.83	Namibia	3.50	Cabo Verde	2.25	Argentina	1.53	Brazil	1.20	Puerto Rico	1.07	Latvia	0.84	S-Korea	0.59
Rwanda	4.77	Sudan	3.50	Nepal	2.23	Armenia	1.51	Georgia	1.20	Bahrein	1.06	Macedonia	0.84	Japan	0.58
Sao Tome+P.	4.67	Guatemala	3.31	Belize	2.22	Indonesia	1.51	Iceland	1.20	Sweden	1.06	Netherlands	0.84	Spain	0.58
Timor Leste	4.50	Mauritania	3.31	Uzbekistan	2.19	Suriname	1.50	Trinidad&To.	1.20	United Kingd.	1.04	Poland	0.84	Un. Arab Em.	0.55
Nigeria	4.49	Equ. Guinea	3.26	Kazakhstan	2.18	Mexico	1.49	Réunion	1.19	Moldova	1.03	Serbia	0.80		
Cameroon	4.47	Tajikistan	3.22	Jordan	2.17	Panama	1.48	Russia	1.19	Ireland	1.02	Slovenia	0.78	Sub-Sahara	4.43
Yemen	4.38	Gabon	3.03	Honduras	2.16	Tunisia	1.48	Belarus	1.18	Aruba	1.00	Switzerland	0.78	South. Europe	0.63

STRATEGY

Think twice about intervention where the war index exceeds 3!

- **Stay away as long as battling young males have reached a balance between ambitions and positions.**

- **The warriors you prefer to defend may just present nicer justifications for their gruesome demographic correction.**

POLITICAL OUTLOOK

**Options for Europe

after a meltdown

of the

European Union**

DESIRE TO EMIGRATE

SUB SAHARAN AFRICA	ARAB WORLD
"Half or more would move to another country" (2017) [http://www.pewglobal.org/2018/03/22/at-least-a-million-sub-saharan-africans-moved-to-europe-since-2010/ph-03-22-18_africa-final-01/; https://www.populationpyramid.net/sub-saharan-africa/2018/] Average cognitive ability (CA): 70 (H. Rindermann, *Cognitive Capitalism*, Cambrigde U P 2018, 433.)	**"23 percent"** want to move to another country (2009). [www.gallup.com/poll/124028/700-million-worldwide-desire-migrate-permanently.aspx; http://mirror.unhabitat.org/downloads/docs/SOAC-PR1.pdf] Average cognitive ability (CA): 83 (H. Rindermann, *Cognitive Capitalism*, Cambrigde U P 2018, 433.)
Population 2020: 1.1 billion (**550 million want to move**)	Population 2020: 432 million (**100 million want to move**)
Population 2050: 2.1 billion (**1,050 million want to move**)	Population 2050: 650 million (**150 million want to move**)

- **Low-skilled migrant masses fire 3 political movements.**

(1) The largest movement wants to make national borders insurmountable for low-skilled. Its members are fought as **POPULISTS**.

(2) Another movement wants to fence off globally still competitive sub-regions in order to protect them against terrorism and loss of competence. Its members are fought as **SEPARATISTS** who plan to secede from their nations and/or supra-national entities such as the European Union.

(3) The most inconspicuous is the **TALENT FLIGHT** due to immigration. The best and brightest lose courage and flee **to fortresses of competence that keep their own talent, attract foreign talent and fend off low-skilled.**

A **NORTHERN ALLIANCE** -- **sharing costs for defense and global military interventions** -- would be a FORTRESS OF COMPETENCE able to compete with the US, Canada, Australia, Switzerland, and, even, East Asia.

Neither anti-democratic EU collectivism nor traditional nation-states: a NORTHERN ALLIANCE?

Country	Population (million)	Surface area (km^2)	GDP 2017 (billion US-$)
Iceland	0.4	103,000	24
Denmark, Faroe, Greenland	5.8	2,210,000	325
Scotland	5.3	78,400	200
Norway	5.4	324,000	399
England, Wales, Northern Ireland	57.9	165,200	2422
Sweden	10.0	450,000	538
Finland	5.5	338,000	252
Estonia	1.3	45,000	26
Total	91.6 mil. (16th globally)	3,783,600 km^2 (7th globally)	4186 bill. $ (4th globally)

Territory of a NORTHERN ALLIANCE (with potential later candidates: Flanders, Netherlands, Hamburg, Schleswig-Holstein)

Almost everyone in a *NORTHERN ALLIANCE* would speak English as a first or as a compulsory second language. The nations know each other from European and Atlantic organizations. Since 2011 they've been discussing joint projects in the *NORTHERN FUTURE FORUM*. Why should the creation and implementation of a *NORTHERN ALLIANCE* not make it on its agenda, too?

ALPINE FEDERATION

- **450,000 square kilometers**

Baden-Württemberg, Bavaria, Switzerland, Austria,
Northern Italy, Slovenia
70 million inhabitants
Number 5 in the Global Economy

- Of Germany's 30 most advanced economic regions, 24 are located in Bavaria and Baden-Württemberg

- In a 2011 poll, 48 percent of Baden-Württemberg opted for a union with Switzerland . It was 66 percent for citizens younger than 35 years.

Gunnar HEINSOHN (*1943)

- **Gunnar HEINSOHN** (*1943; Prof. Dr. phil. Dr. rer. pol.; Dipl. Soz. (gheins@uni-bremen.de; emeritus of social sciences [University of Bremen/Germany; more than 1,000 publications]. In a recent encyclopaedia covering the most inspiring 650 works in the history of economics by altogether 460 authors since antiquity, Heinsohn is represented with four studies (cf. D. Herz, V. Weinberger, eds., *Lexikon ökonomischer Werke*, 2006, pp. 186–190. The money explanation of *Eigentum, Zins und Geld* [Property, Interest, and Money, 1996] was, in 2000, juxtaposed with the money views of Aristotle, Adam Smith, Bernard Laum, and John Maynard Keynes in the "Theory Room" of the *Geldmuseum der Deutschen Bundesbank*. Since 2013 an updated version of *Eigentumsökonomik* (2007; with Otto Steiger) is available at Routledge (London & New York) as *Ownership Economics: On the Foundations of Interest, Money, Markets, Business Cycles and Economic Development* (edited and translated by Frank Decker).

- Heinsohn has served, from 1993-2009, as founder and speaker of the *Raphael-Lemkin-Institut für Xenophobie- und Genozidforschung* (University of Bremen), Europe's first academic body devoted to comparative genocide research. He has authored the first encyclopaedia of genocide (*Lexikon der Völkermorde*; 1998; 1999, 2nd ed.), as well as an outline for an international body to monitor genocidal emergencies globally (*Völkermordfrühwarnung / Genocide Watch*, 2000 [1998]).

- His study "Sons and World Power: Terror in the Rise and Fall of Nations" (*Söhne und Weltmacht*, 2003; new edition 2019) illuminates the role of youth bulges in mega-killings of past, present, and future. It has, i.a., predicted the "Arab Spring" (beginning in 2010). In 2011, he has developed the first war index.

- Heinsohn taught Ownership Economics at *Malik Management Zentrum* (MZSG; St. Gallen/CH) as well as Institut für Finanzdienstleistungen (IfZ; Zug; Switzlerland. He taught, from 2011 to 2020, military demography at *NATO Defense College* (NDC; Rome).

- [updated October 2020]