Worldview :
Past, Now, and Future

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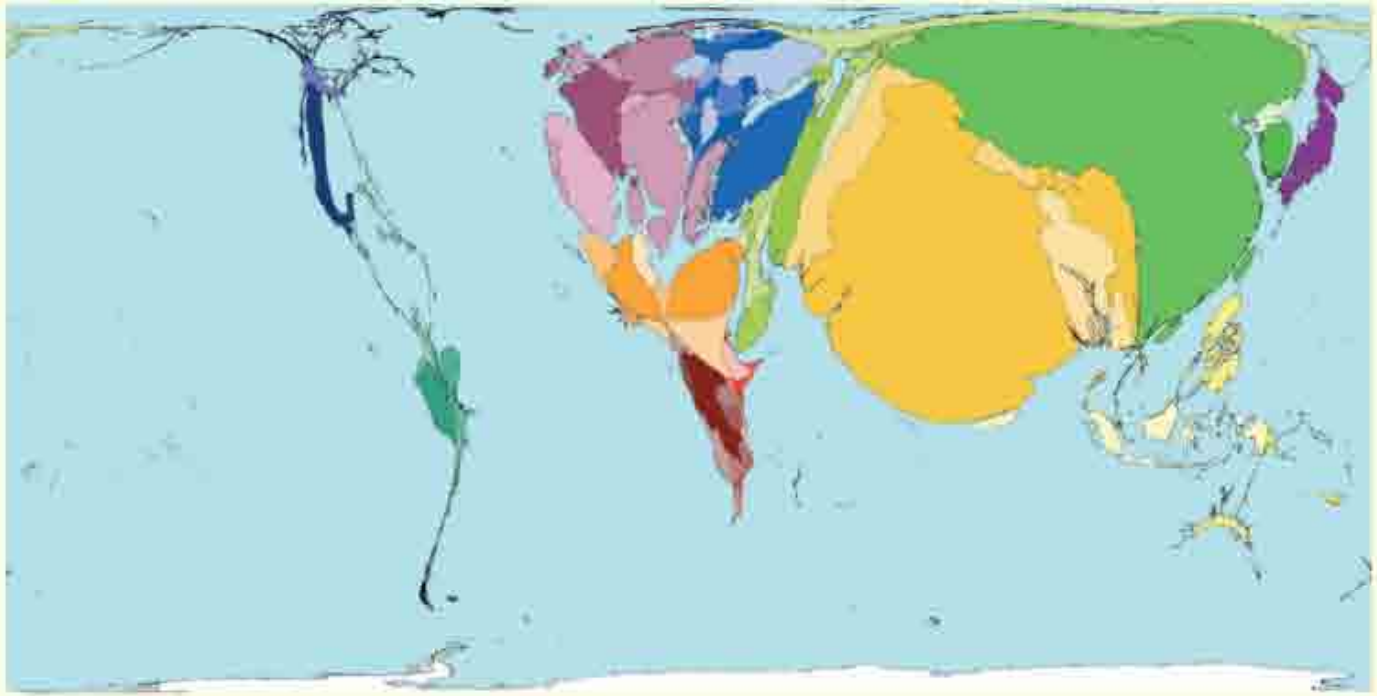
Worldmap Review

- Population
- Income
- Wealth
- Pollution
- Resources
- Movement
- Services
- Manufacturers
- Production and Work
- Food
- Goods
- Fuel
- Violence
- Religious

Population Year 1



The population two thousand years ago is estimated to have been 231 million. At this time North and South America were sparsely populated, as was Asia Pacific. The estimated population of New Zealand was zero. Southern Asia, Northern Africa, China and Southern Europe (parts of the same land mass) had relatively high populations. Colder Northern latitudes tended to have lower populations.

The territories that now encompass the Ganges, Tigris, Yangtze, Nile and Po rivers were the most populous.

This map shows the distribution of the world population in 1AD.

Land area

Technical notes

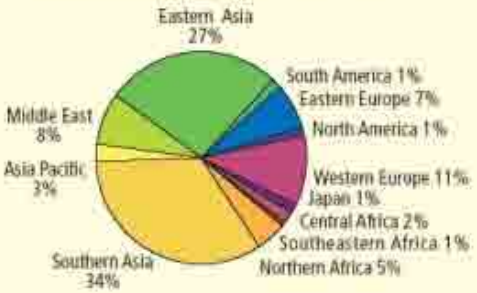
- Data source: Angus Maddison, 2003.
- The contemporary political boundaries shown differ from those in year 1.
- See website for further information.

TWENTY HIGHEST POPULATIONS IN YEAR 1

Rank	Territory	Value	Rank	Territory	Value
1	India	62	10	Islamic Republic of Iran	4
2	China	60	12	Ukraine	4
3	Bangladesh	8	13	Germany	3
4	Russian Federation	7	13	Japan	3
5	Italy	7	15	Indonesia	3
6	Pakistan	7	16	Philippines	2
7	Turkey	6	17	Mexico	2
8	France	5	18	Democratic Republic of Congo	2
9	Spain	5	19	Sudan	2
10	Egypt	4	19	Algeria	2

population in millions

POPULATION DISTRIBUTION YEAR 1

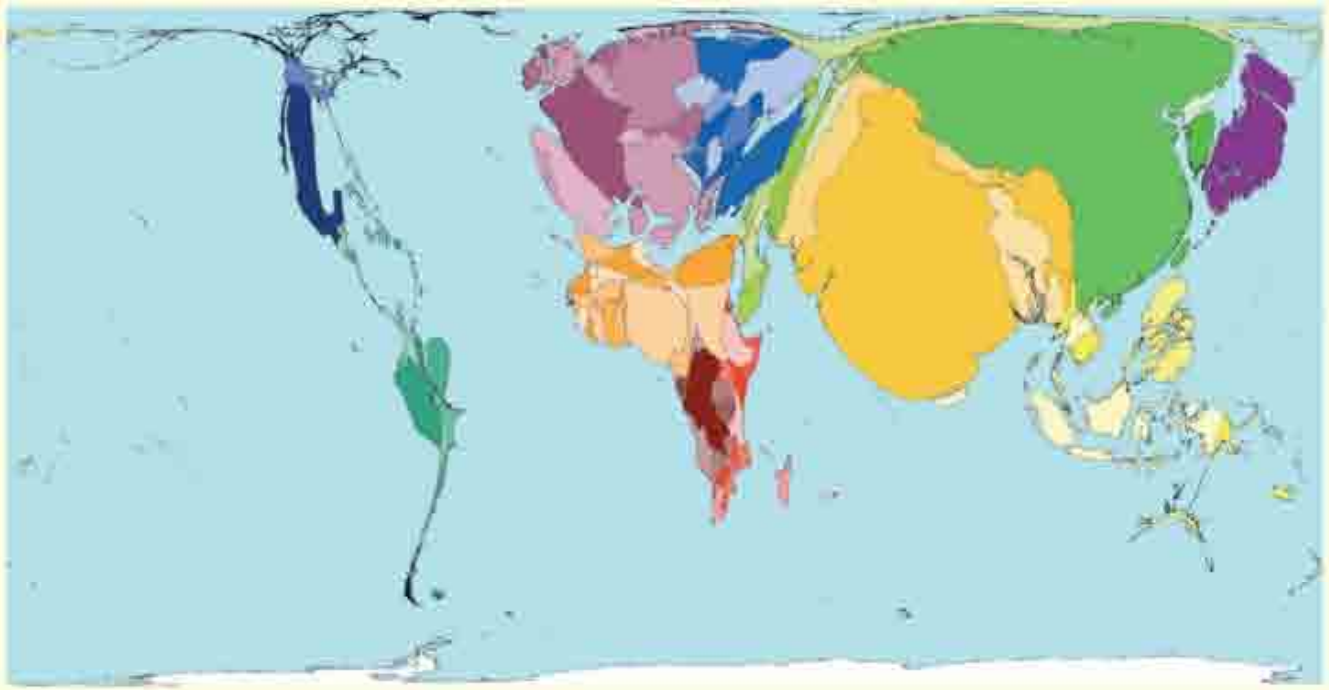


"1 AD Gregorian calendar, 3761 Hebrew calendar, 7.17.18.13.3 Mayan calendar, 544 Buddhist calendar"

Anna Barford, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Population Year 1500



At the time of Spanish conquest in South America, and when Christopher Columbus was exploring Central and South America, the combined population of Mexico and Peru was greater than the total of all other American countries.

The regions with the largest populations remained Southern Asia and Eastern Asia. Together these contained more than half of the world's population.

Worldwide population distribution in 1500 was roughly similar to that in year 1, despite the numbers almost doubling over this period.

This map shows the distribution of the world's population in year 1500.

Land area

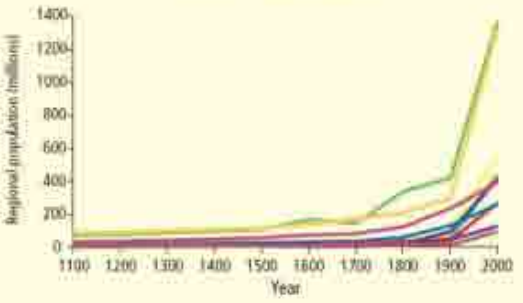
Technical notes
- Data source: Angus Maddison, 2003
- The contemporary political boundaries shown differ from those in 1500.
- See website for further information.

TWENTY HIGHEST POPULATIONS IN YEAR 1500

Rank	Territory	Value	Rank	Territory	Value
1	China	103	11	Nigeria	8
2	India	90	12	Philippines	8
3	Japan	19	13	Mexico	7
4	France	15	14	Spain	7
5	Germany	12	15	Ukraine	7
6	Bangladesh	11	16	Turkey	6
7	Russian Federation	11	17	Democratic Republic of Congo	5
8	Indonesia	11	18	Sudan	4
9	Italy	11	18	Egypt	4
10	Pakistan	10	18	Islamic Republic of Iran	4

population in millions

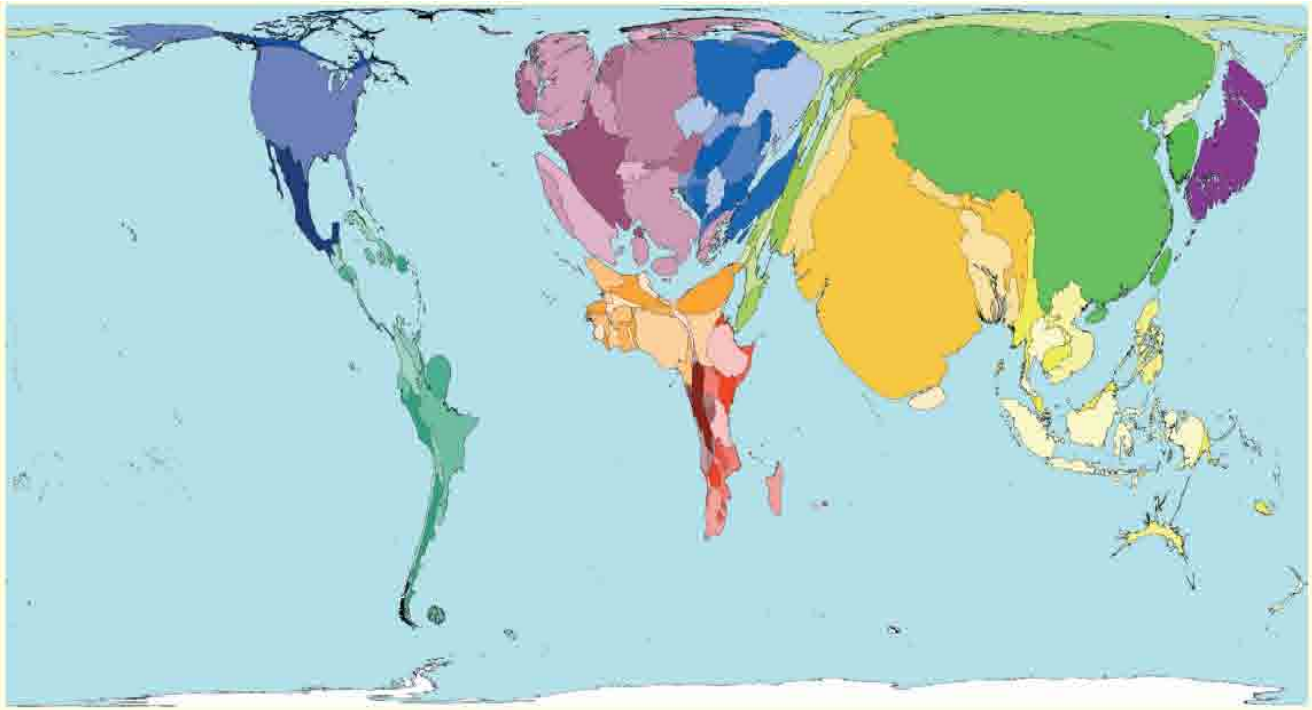
WORLD POPULATION



"The [Mexican] population was decimated … Spanish colonizers treated the native population brutally and the European diseases which they brought … were fatal to indigenous people." British Broadcasting Corporation, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Population Year 1900



The world population tripled between 1500 and 1900, to an estimated 1564 million. In that period, the populations of the United Kingdom and the United States increased more than ten-fold, the population of the Netherlands increased five-fold. For most of this time the Netherlands were known as the United Provinces, whilst neither the United Kingdom, nor the United States, had been formed.

In 1900 much of the world was under imperial rule. New territorial boundaries were being defined and contested. Today's borders of Africa, shown in this map, were mostly drawn at the Treaty of Versaille in 1919.

This map shows the distribution of the world's population in 1900.

Land area

Technical notes

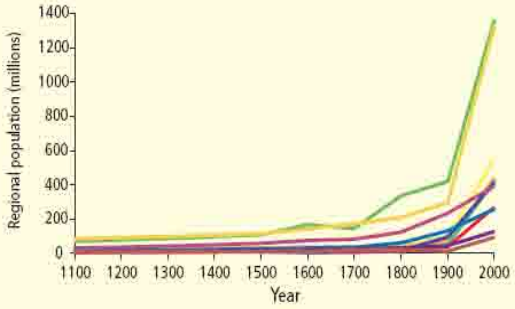
- Data source: Angus Maddison, 2003
- The contemporary political boundaries shown differ from those in 1900.
- See website for further information

TWENTY HIGHEST POPULATIONS IN 1900

Rank	Territory	Value	Rank	Territory	Value
1	China	400	11	Ukraine	28
2	India	234	12	Bangladesh	28
3	United States	76	13	Poland	25
4	Germany	54	14	Pakistan	24
5	Russian Federation	50	15	Spain	19
6	Japan	44	16	Brazil	18
7	Indonesia	43	17	Viet Nam	16
8	France	41	18	Nigeria	16
9	United Kingdom	37	19	Turkey	14
10	Italy	34	20	Mexico	14

population in millions

WORLD POPULATION

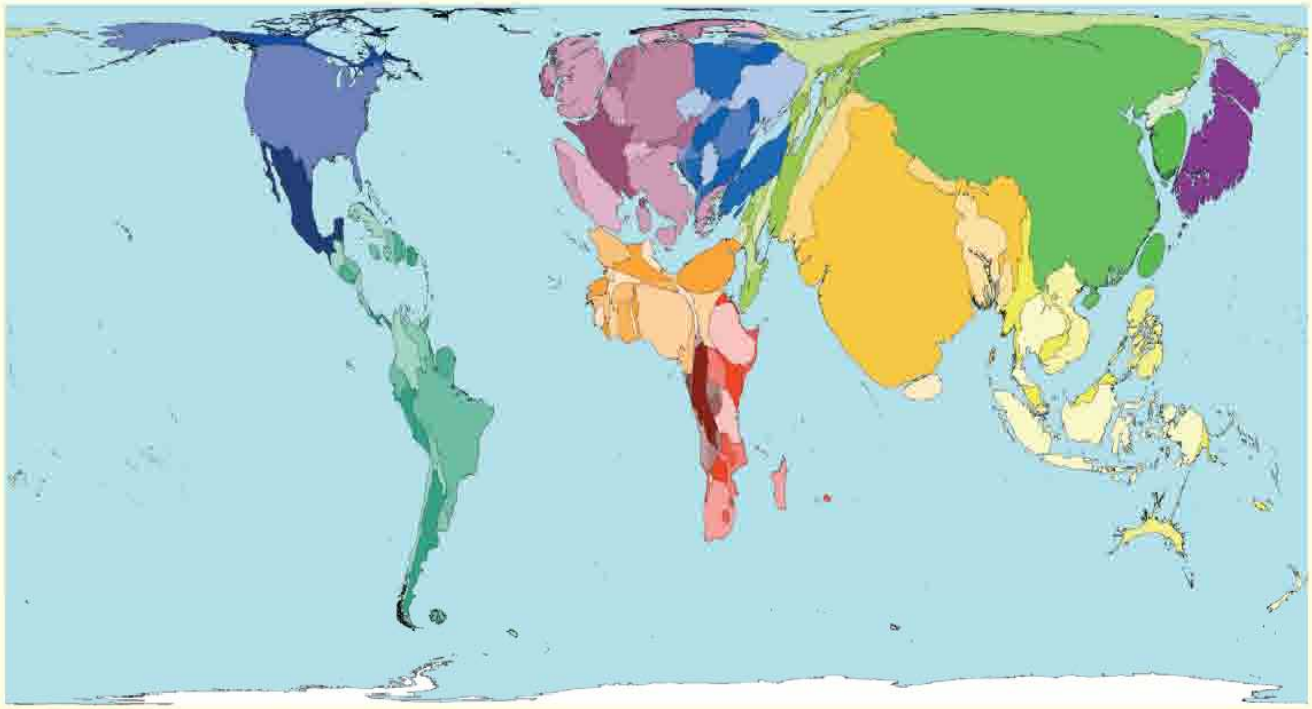


"It has been stated that, as men progress, they shall be able to travel in airships and reach any part of the world in a few hours."

Mahatma Ghandi, 1909

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

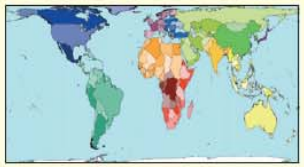
Population Year 1960



The world population in 1960 was 3039 million. As is the case today, the populations of China and India are (independently) more than twice as big as that of the next largest territory.

South America has increased its proportion of the world's population living there since 1900. The Western European proportion of the world population began to decline in 1900 when it was 15%, to 11% in 1960 and then 6% in 2000.

This map shows the 1960 distribution of the world's population.



Land area

Technical notes

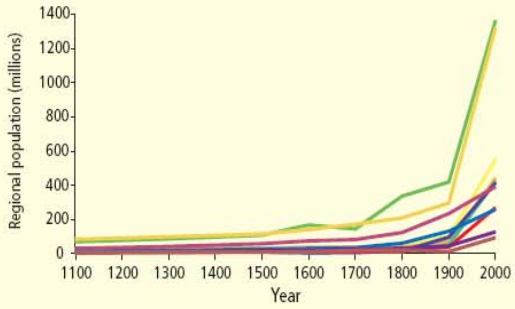
- Data source: Angus Maddison, 2003
- The contemporary political boundaries shown differ from those in 1960.
- See website for further information.

TWENTY HIGHEST POPULATIONS IN 1960

Rank	Territory	Value	Rank	Territory	Value
1	China	667	11	Pakistan	50
2	India	434	12	Italy	50
3	United States	181	13	France	46
4	Russian Federation	120	14	Ukraine	43
5	Indonesia	95	15	Nigeria	40
6	Japan	94	16	Mexico	38
7	Germany	72	17	Viet Nam	32
8	Brazil	72	18	Spain	31
9	Bangladesh	55	19	Poland	30
10	United Kingdom	52	20	Philippines	29

population in millions

WORLD POPULATION

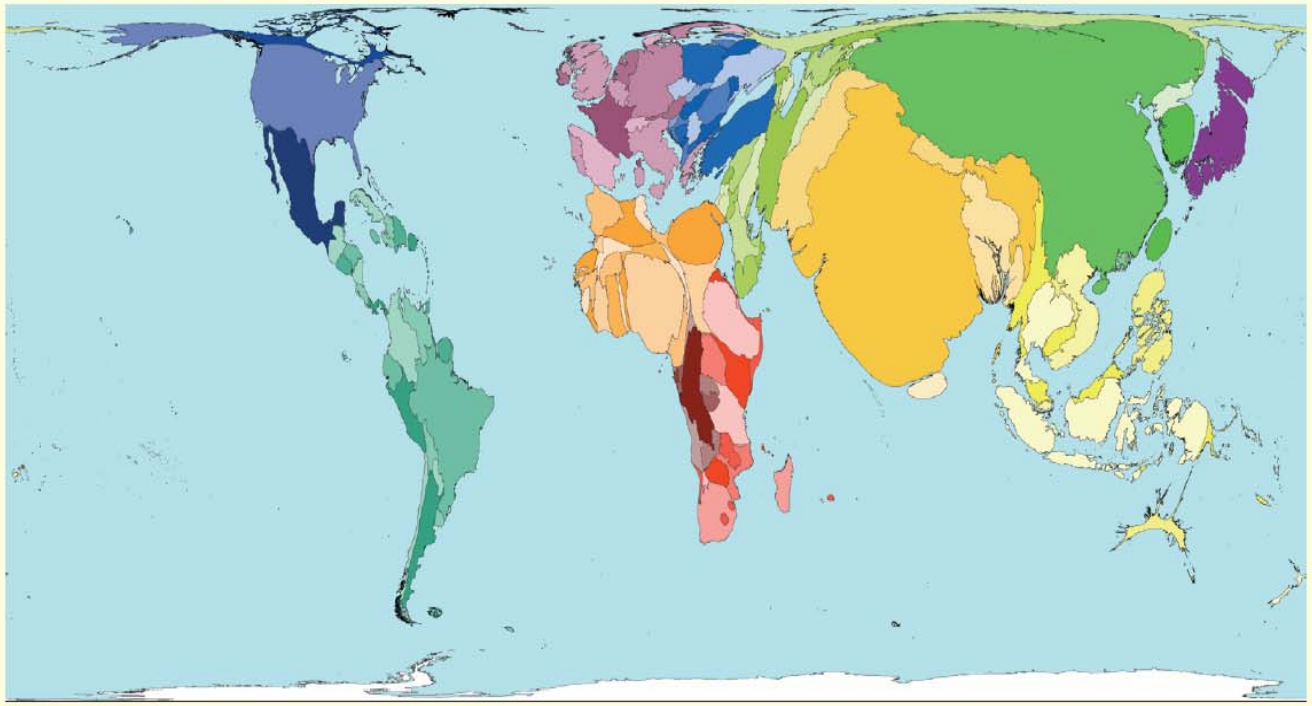


"May the day come soon, when the people of the world will rouse themselves, and together effectively stamp out any threat to peace in whatever quarter of the world it may be found."

Albert Lutuli, 1961

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Population Year 2000

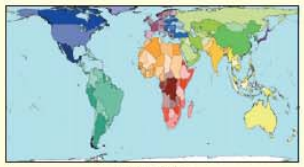


In Spring 2000 world population estimates reached 6 billion; that is 6 thousand million. The distribution of the earth's population is shown in this map.

India, China and Japan appear large on the map because they have large populations. Panama, Namibia and Guinea-Bissau have small populations so are barely visible on the map.

Population is very weakly related to land area. However, Sudan, which is geographically the largest country in Africa, has a smaller population than Nigeria, Egypt, Ethiopia, Democratic Republic of Congo, South Africa or Tanzania.

The size of each territory shows the relative propotion of the world's population living there.



Land area

Technical notes

- Data source: United Nations Development Programme, 2004, Human Development Report.
- Population data is from 2002
- The population not included is estimated as 2 to 3 million (see Appendix map 2).
- See website for further information.

MOST AND FEWEST PEOPLE

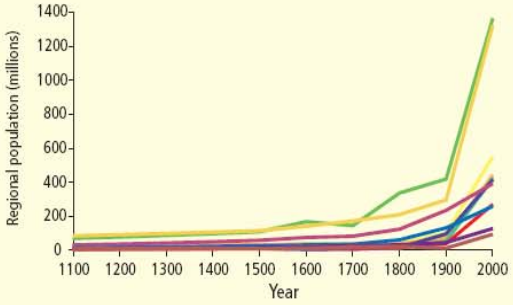
Rank	Territory	Value
1	China	1295
2	India	1050
3	United States	291
4	Indonesia	217
5	Brazil	176
6	Pakistan	150
7	Russian Federation	144
8	Bangladesh	144
9	Japan	128
10	Nigeria	121

millions

Rank	Territory	Value
191	Saint Kitts & Nevis	42
192	Monaco	34
193	Liechtenstein	33
194	San Marino	27
195	Palau	20
196	Cook Islands	18
197	Nauru	13
198	Tuvalu	10
199	Niue	2
200	Holy See	1

thousands

WORLD POPULATION BY REGION



"Out of every 100 persons added to the population in the coming decade, 97 will live in developing countries."

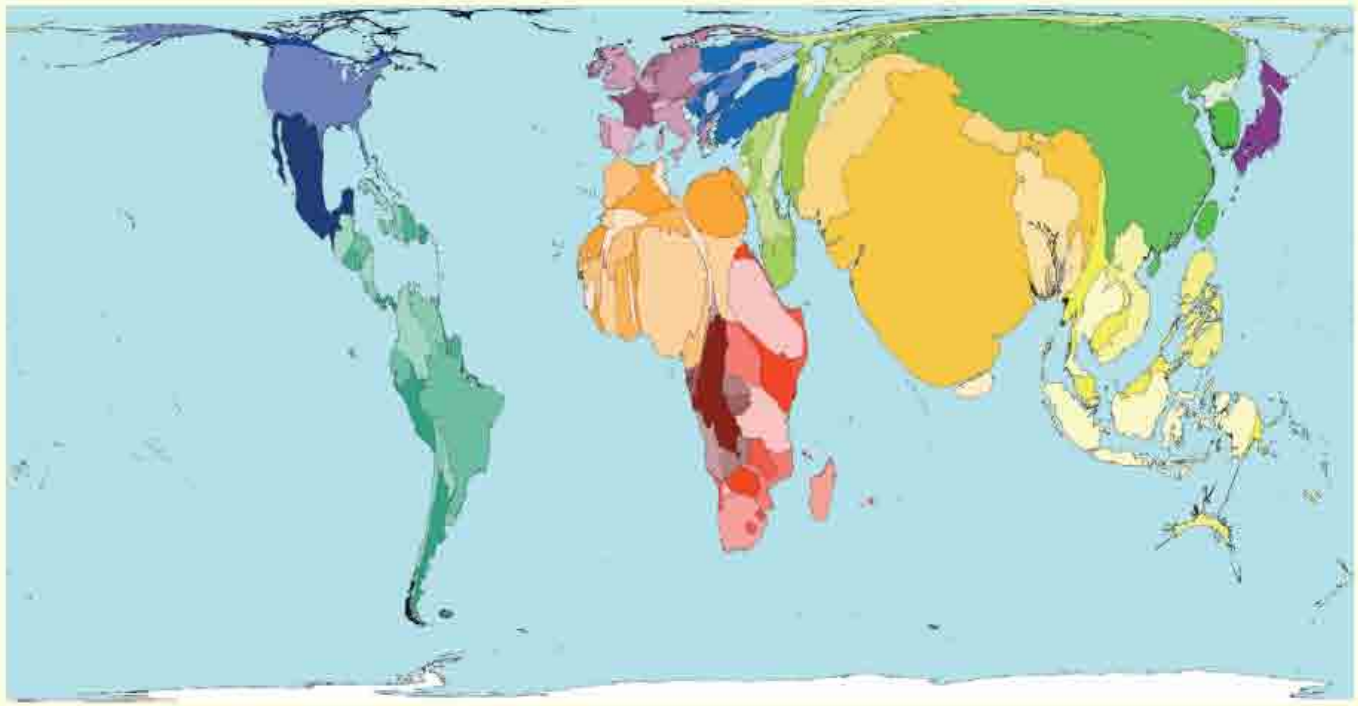
Hania Zlotnik, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Country and Population @2009

- Total countries: 223
  - <5M population: 117
  - >10M population: 83
  - >20M population: 56
  - >50M population: 24
  - >100M population: 11
- Country population ranking: 
List_of_countries_by_population.htm
http://en.wikipedia.org/wiki/List_of_countries_by_population

Total Children Year 2004



Worldwide, children make up a third of the population. In 2004 there were 1826 million children aged under 15. Only children under 15 are shown in this map and graph. Africa has the highest percentage of children. In Uganda and Niger half the population is under 15 years old. In Italy, Spain and Japan only 14% of the population is made up of children aged under 15.

This map shows the distribution of children between territories.

Land area

Technical notes

- Data source: United Nations Development Programme, 2004, World Development Report.
- The definition of children varies; the United Nations Fund for Children (UNICEF) classifies people under 18 as children, the United Nations Development Programme defines those under 15 as children.
- See website for further information.

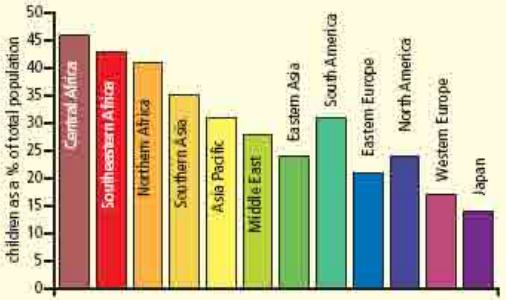
HIGHEST AND LOWEST PERCENTAGE OF POPULATION UNDER 15 YEARS OLD

Rank	Territory	Value
1	Uganda	50
2	Niger	50
3	Mali	49
4	Burkina Faso	49
5	Yemen	49
6	Angola	48
7	Guinea-Bissau	47
8	Burundi	47
9	Democratic Republic of Congo	47
9	Congo	47

Rank	Territory	Value
190	Switzerland	16
192	Czech Republic	16
192	Hong Kong (China)	16
194	Germany	15
195	Slovenia	15
196	Bulgaria	15
197	Greece	15
198	Japan	14
198	Spain	14
200	Italy	14

% of children in total population

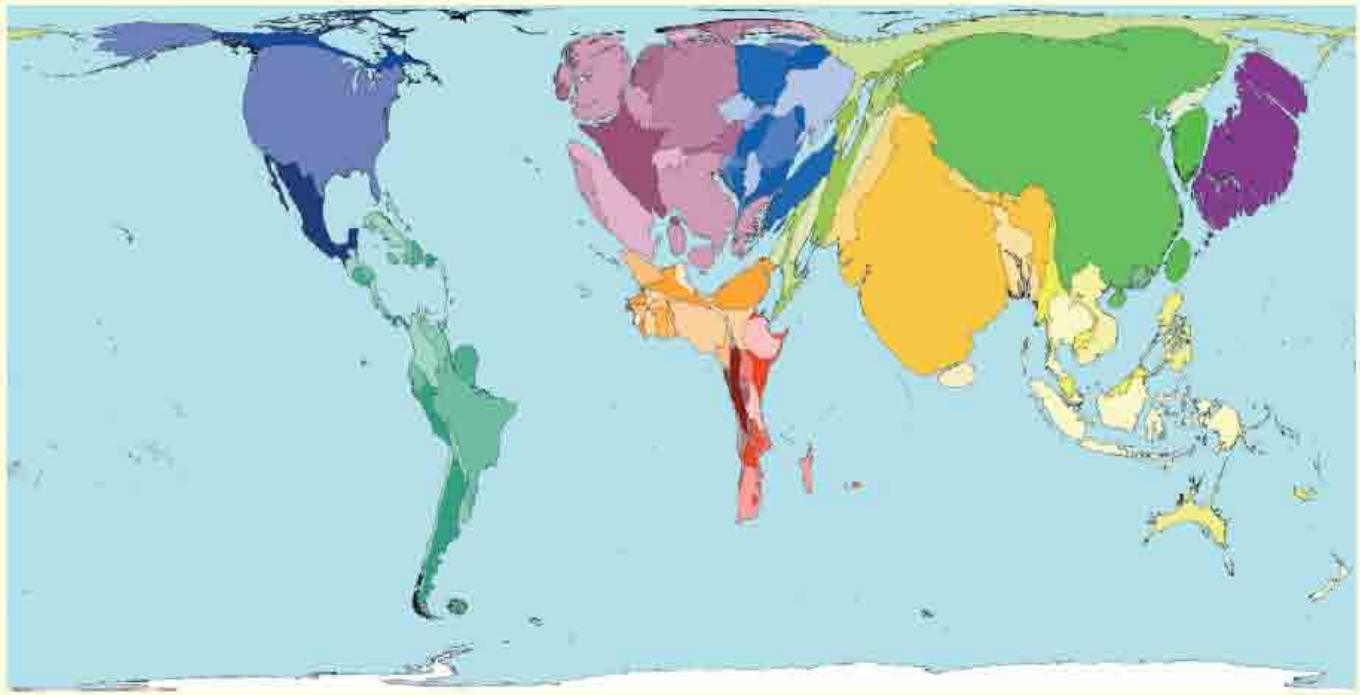
PERCENTAGE OF POPULATION UNDER 15



"…most of us never really grow up or mature all that much – we simply grow taller." Leo Calvin Rosten, undated

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Total Elderly Year 2004



In 2002 7% of the world population was over 65 years old. Only 1% of the population of the United Arab Emirates was over 65 years old. China has the largest elderly population (92 million) but this is only 7% of the Chinese population.

Growing proportions of elderly people are partly a result of people living longer and, often, of fewer births reducing the size of the younger population.

Africa is home to only 6% of the world's population aged over 65, but 13% of the total global population.

This map shows the worldwide distribution of people over 65 years old.

Land area

Technical notes

- Data source: United Nations Development Programme, 2004, World Development Report
- Elderly data are from 2002.
- People over 65 are classified as elderly here
- See website for further information

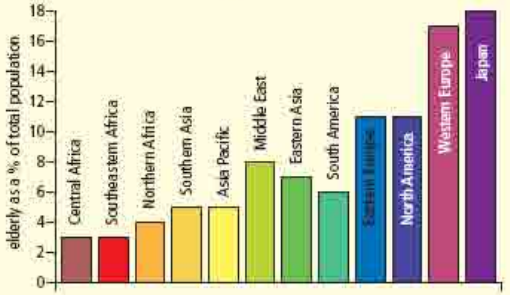
HIGHEST AND LOWEST PROPORTION OF THE POPULATION OVER 65 YEARS OLD

Rank	Territory	Value
1	Italy	19
2	Japan	18
2	Greece	18
4	Sweden	17
5	Belgium	17
6	Germany	17
7	Spain	17
8	San Marino	17
8	Monaco	17
8	Liechtenstein	17

Rank	Territory	Value
189	Papua New Guinea	2
189	Comoros	2
193	United Republic Tanzania	2
193	Yemen	2
195	Eritrea	2
195	Oman	2
197	Niger	2
198	Qatar	2
199	Kuwait	1
200	United Arab Emirates	1

elderly as a % of total population

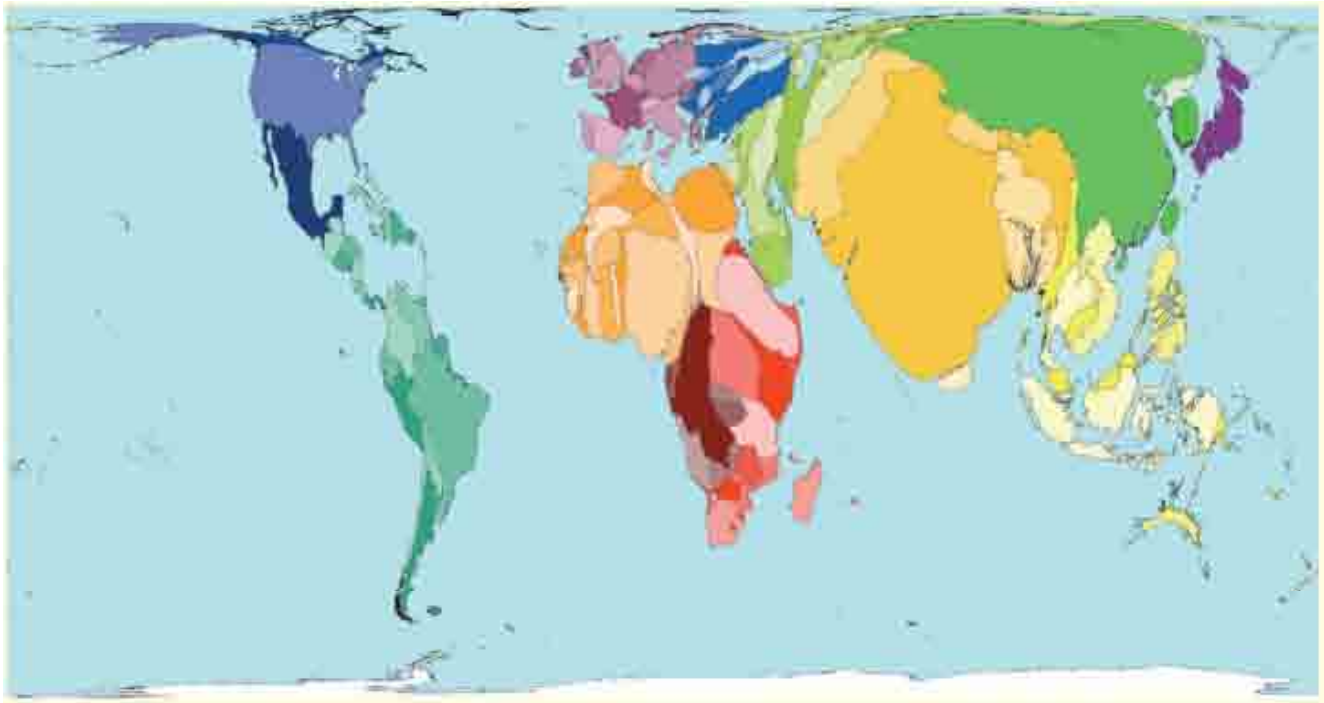
PERCENTAGE OF POPULATION OVER 65



"We live in an era of unprecedented, rapid and inexorable global ageing." HelpAge International, 2002

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Population Year 2050 or earlier



By 2050 it is estimated that the earth's human population will be 9.07 billion. 62% of the people will live in Africa, Southern Asia and Eastern Asia – numerically this is the same as if all the world's current population lived just in these regions. In addition another 3000000000 will be spread across the rest of the world.

All numbers shown here are estimates – estimates are rarely perfect.

This map shows the predicted distribution for the estimated world population in 2050.

Land area

Technical notes

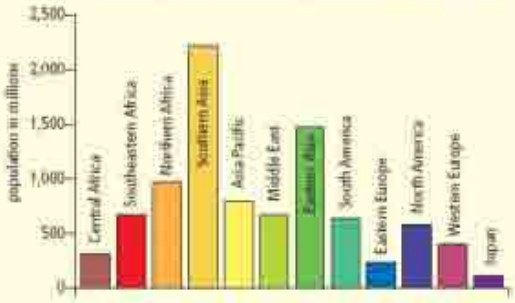
- Data source: United Nations, 2004, World Population Projections
- The predicted population mapped here is based on a medium population variant.
- See website for further information.

TWENTY HIGHEST PREDICTED POPULATIONS IN 2050

Rank	Territory	Value	Rank	Territory	Value
1	India	1593	11	Mexico	131
2	China	1372	12	Philippines	127
3	United States	395	13	Uganda	123
4	Pakistan	305	14	Egypt	126
5	Indonesia	285	15	Viet Nam	117
6	Nigeria	258	16	Japan	112
7	Brazil	253	17	Russian Federation	112
8	Bangladesh	243	18	Islamic Republic of Iran	102
9	Democratic Republic of Congo	177	19	Turkey	101
10	Ethiopia	170	20	Afghanistan	97

population in millions

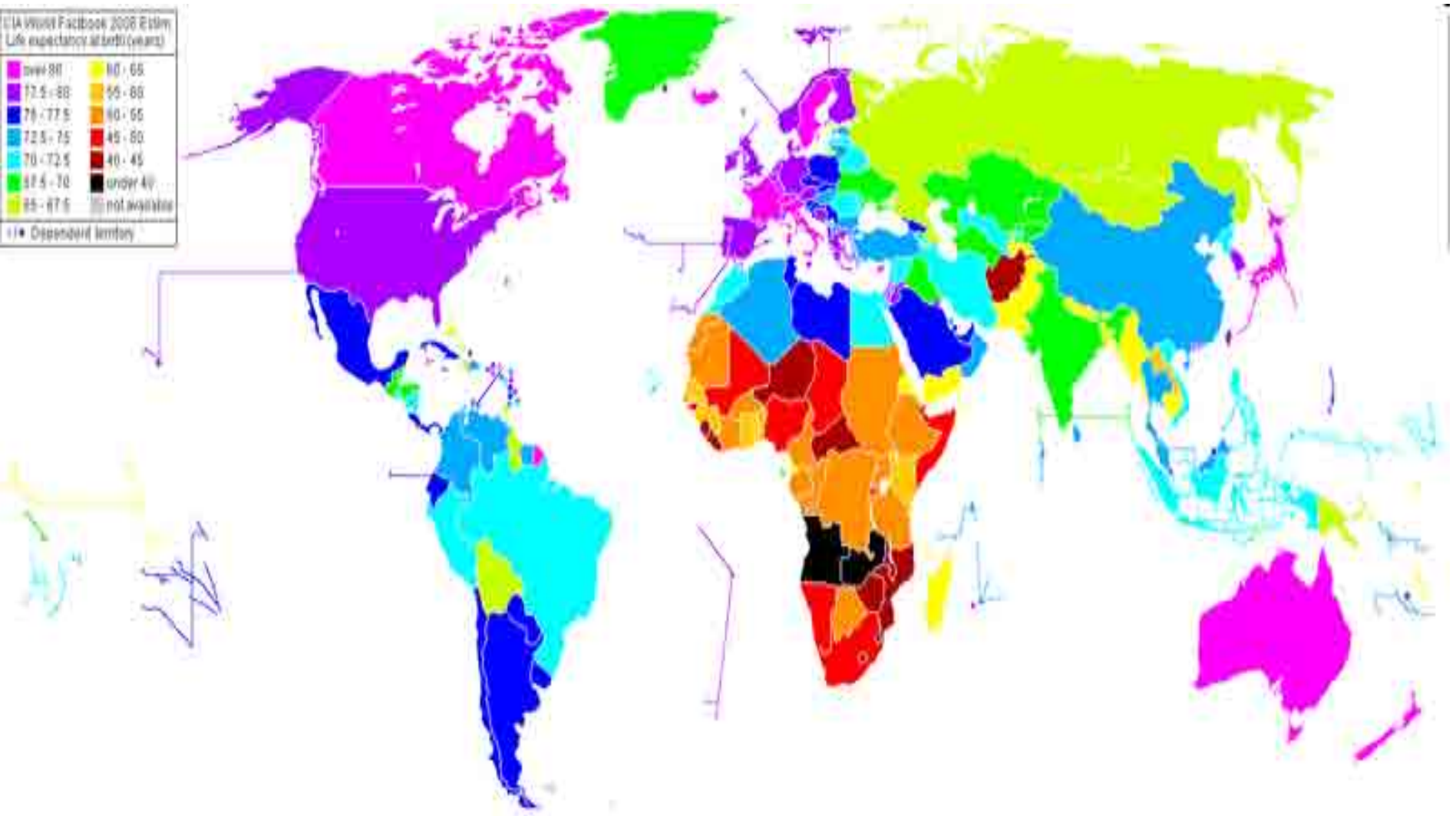
POPULATION DISTRIBUTION YEAR 2050



"The choices that today's generation of young people aged 15-24 years make about the size and spacing of their families will determine whether Planet Earth will have 8, 9 or 11 billion people in the year 2050." United Nations Population Fund, 1999

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Life Expectancy@2008



Life Expectancy: country ranking@2008

1	Macau	84.36	26	Greece	79.66	51	Taiwan	77.96
2	Andorra	82.51	27	Austria	79.50	52	Kuwait	77.71
3	Japan	82.12	28	Faroe Islands	79.44	53	Costa Rica	77.58
4	Singapore	81.98	29	Malta	79.44	54	Cyprus	77.49
5	Hong Kong	81.86	30	Netherlands	79.40	55	Cuba	77.45
6	Australia	81.63	31	Luxembourg	79.33	56	Chile	77.34
7	Canada	81.23	32	Germany	79.26	57	Libya	77.29
8	France	80.98	33	Belgium	79.22	58	British Virgin Islands	77.26
9	Sweden	80.86	34	Saint Pierre and Miquelon		59	Panama	77.25
10	Switzerland	80.85	35	Virgin Islands	79.05	60	Slovenia	76.92
11	San Marino	80.81	36	United Kingdom	79.01	61	Czech Republic	76.81
12	Israel	80.73	37	Finland	78.97	62	Georgia	76.72
13	Iceland	80.67	38	Isle of Man	78.82	63	French Polynesia	76.71
14	Anguilla	80.65	39	Gibraltar	78.79	64	Northern Mariana Islands	76.70
15	Cayman Islands	80.44	40	Korea, South	78.72	65	Netherlands Antilles	76.65
16	Bermuda	80.43	41	European Union	78.67	66	Argentina	76.56
17	New Zealand	80.36	42	Puerto Rico	78.52	67	Saint Lucia	76.45
18	Italy	80.20	43	Bosnia and Herzegovina	78	68	Uruguay	76.35
19	Monaco	80.09	44	Saint Helena, Ascension, and		69	Saudi Arabia	76.30
20	Liechtenstein	80.06	45	Denmark	78.30	70	United Arab Emirates	76.11
21	Spain	80.05	46	Ireland	78.24	71	Mexico	76.06
22	Guernsey	80.00	47	Portugal	78.21	72	Tunisia	75.78
23	Norway	79.95	48	Wallis and Futuna	78.20	73	Paraguay	75.77
24	Jordan	79.85	49	United States	78.11	74	Brunei	75.74
25	Jersey	79.75	50	Albania	77.96	75	Poland	75.63

Courtesy of CIA of U.S.

Every Lifespan at Birth over Time

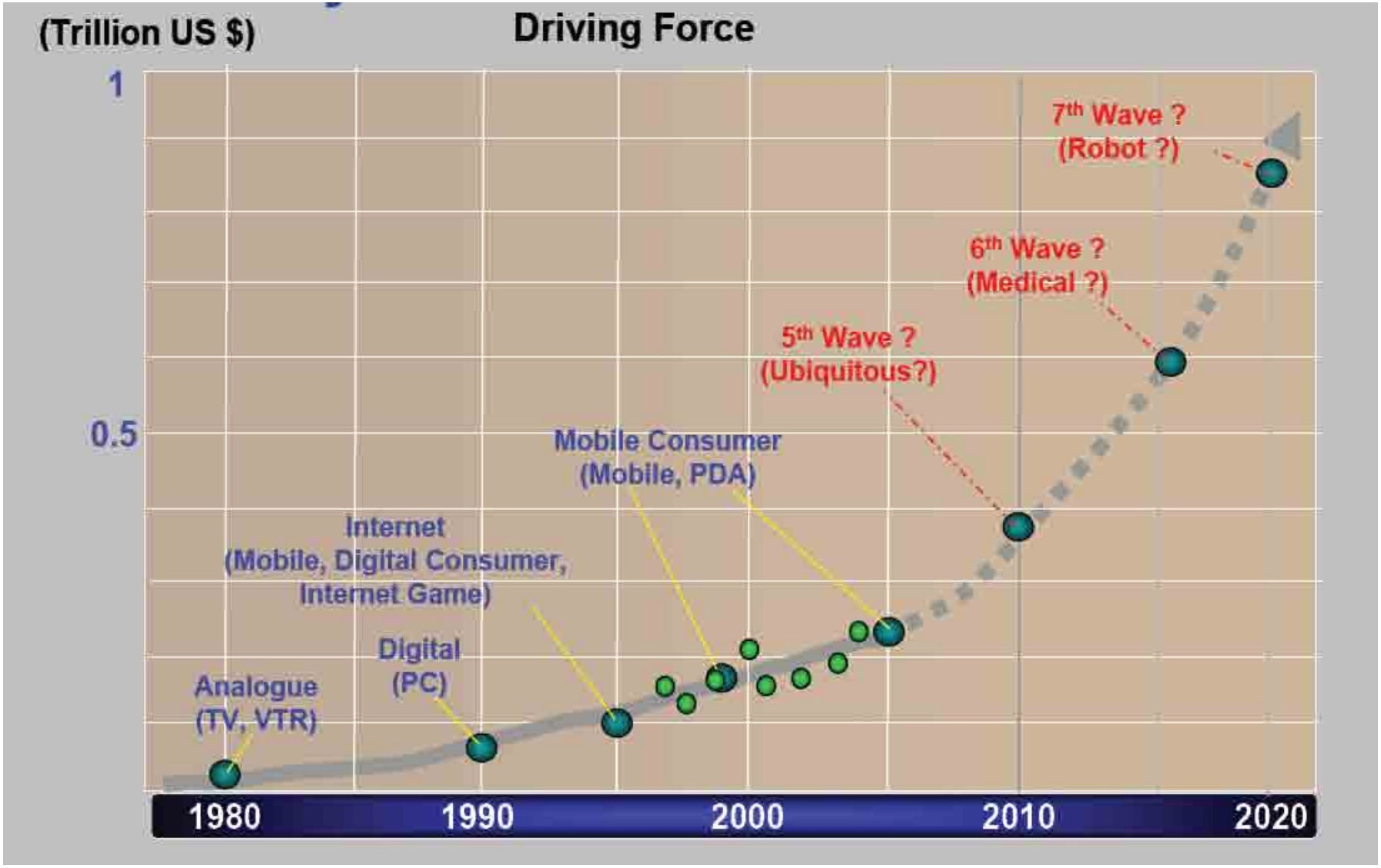
- Upper Paleolithic (late stone age, 40,000-10,000 ago): (33) and at age 15: (39) to age (54)
- Neolithic (late stone age, 10,000BC-4500BC): (20)
- Bronze Age (3300BC-1200BC): (18)
- Bronze Age, Sweden (2000BC-500BC): (40-60)
- Classical Greece (600BC-400BC): (28)
- Classical Rome (700BC-27BC): (28)
- Pre-Columbian North America (0AD-1504AD): (25-30)
- Medieval Islamic Caliphate (Islamic Golden Age 850AD-1350AD): (50-80) The average lifespans of the elite class were 59–84.3 years in the Middle East and 69–75 in Islamic Spain. However these are likely to refer to modal age at death rather than life expectancy.
- Medieval Britain (800AD-1547AD): (20-30)
- Early 20th Century : (30-45)
- Current world average 67.2 (2010 est.)

Courtesy of Wikipedia

Population Summary

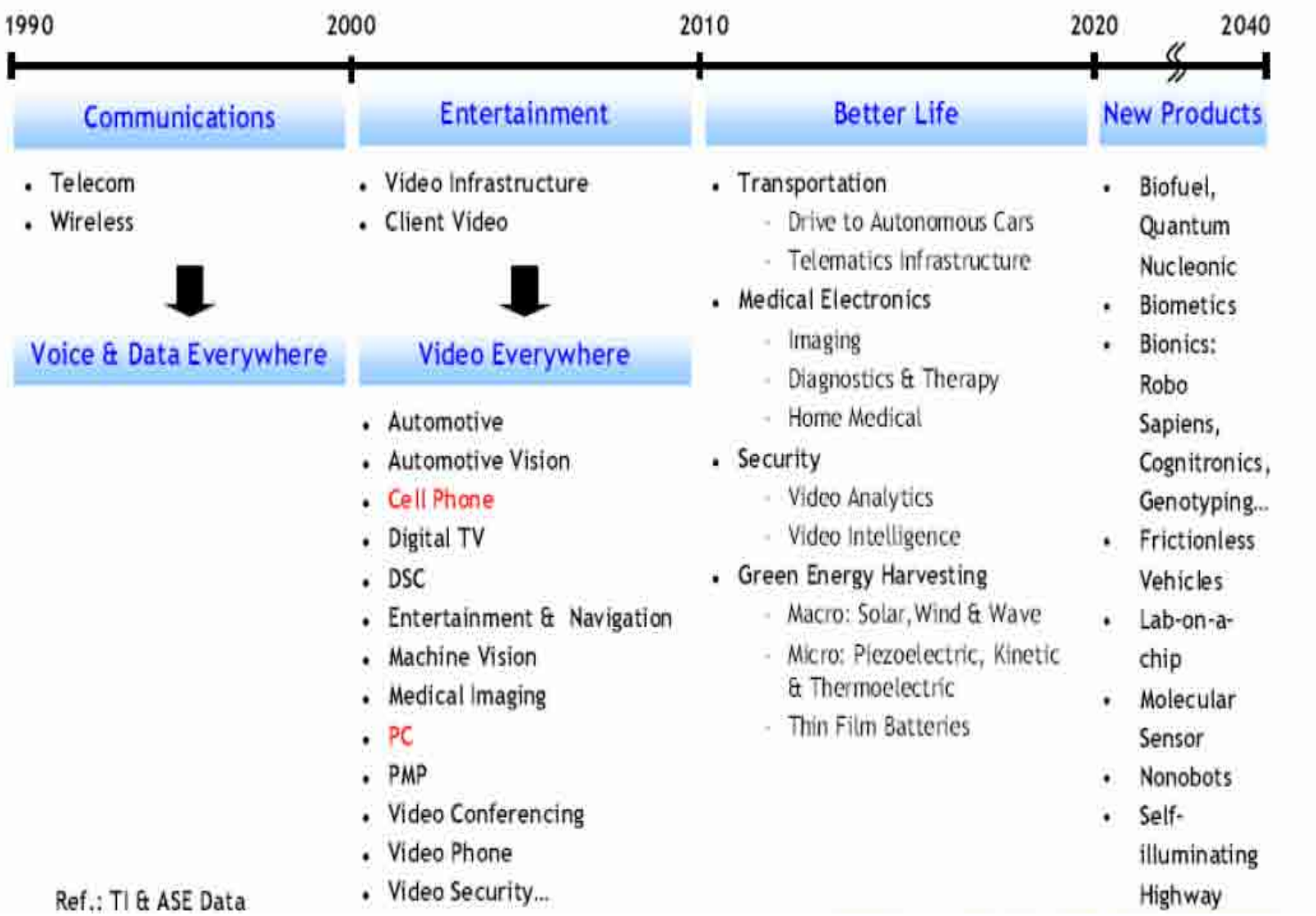
- Population eventually becomes strong power index for nations!
- Health-care system is becoming dominant political, economical, and business issues worldwide.

IT Industry Trend



Courtesy of Samsung 2007

Driving Forces



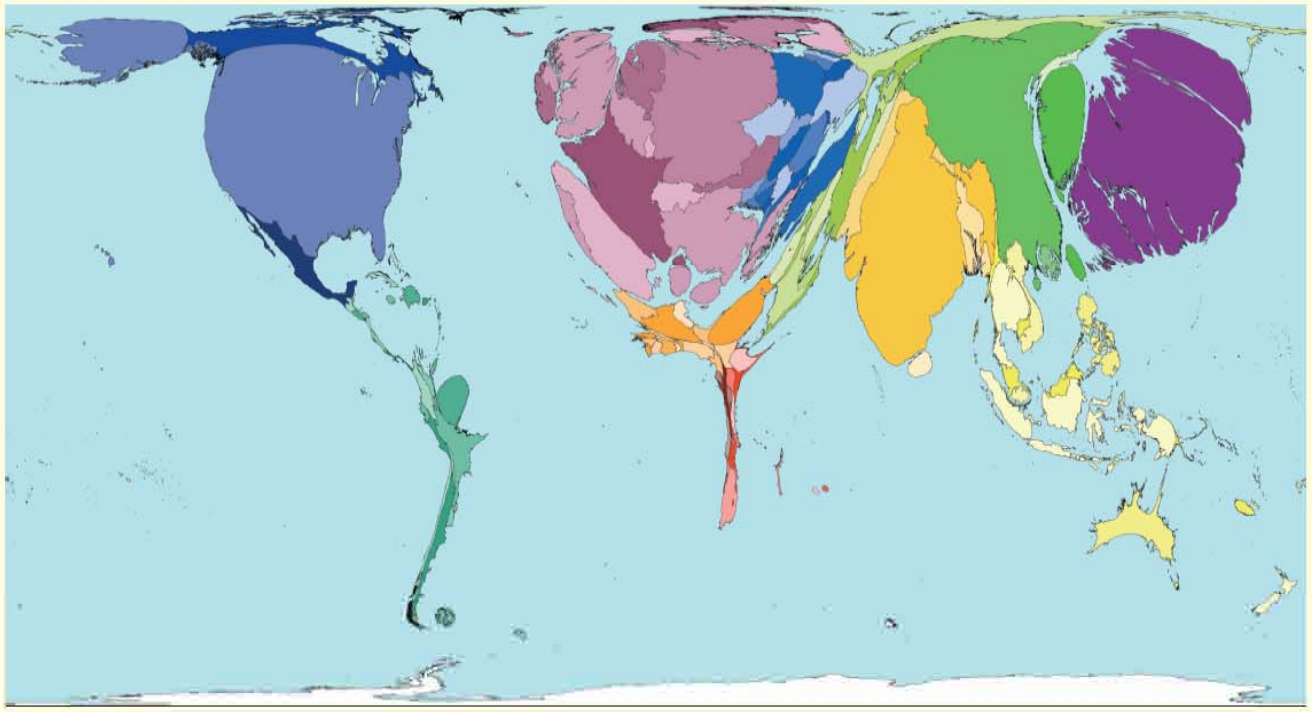
Courtesy of ASE 2008

Qs & As

- How to handle aging society accompanied with birth control or low birth rate societies
- How to manage population explode as a result of longer life-expectancy and medium birth rate control

Income

Poorest Tenth



The map shows the earnings of the poorest tenth of the population living in each territory. Japan is disproportionately large because Japan is the territory where the poorest have the highest average incomes. The larger the territory appears relative to its population, the better off its poor are in a global context.

India is large because a tenth of the population (105 million) earning a little each, earn a lot together.

In territories with the lowest per person earnings amongst the poorest tenth, measured in purchasing power, the poor earn less than 1% of the earnings of the richest groups of poor people.

Territory size shows the earnings of the poorest tenth of the population living there, as a proportion of the earnings of the poorest tenth living in all territories.

Land area

Technical notes

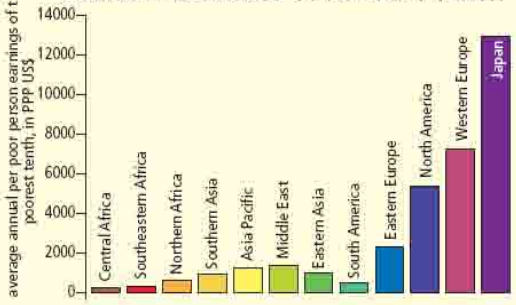
- Data are from the United Nations Development Programme's Human Development Report, 2004
- Income is measured in Purchasing Power Parity (PPP) US$. This is used because a dollar can buy more in Namibia than in Japan, due to different exchange rates. PPP is value of income where it is earnt, measured in US$ equivalent.
- See website for further information.

HIGHEST AND LOWEST ANNUAL EARNINGS OF THE POOREST TENTH OF POPULATION

Rank	Territory	Value	Rank	Territory	Value
1	Luxembourg	23800	191	Madagascar	137
2	Norway	14395	192	Haiti	123
3	Japan	12894	193	Eritrea	122
4	Finland	10469	194	Lesotho	119
5	Ireland	10231	195	Burundi	116
6	Sweden	9404	196	Malawi	99
7	Austria	9001	197	Zambia	88
8	Germany	8683	198	Central African Republic	83
9	Netherlands	8172	199	Niger	63
10	Belgium	8021	200	Sierra Leone	28

earnings by the poorest tenth of the population in US$ purchasing power parity per poor person

AVERAGE EARNINGS OF POOREST TENTH

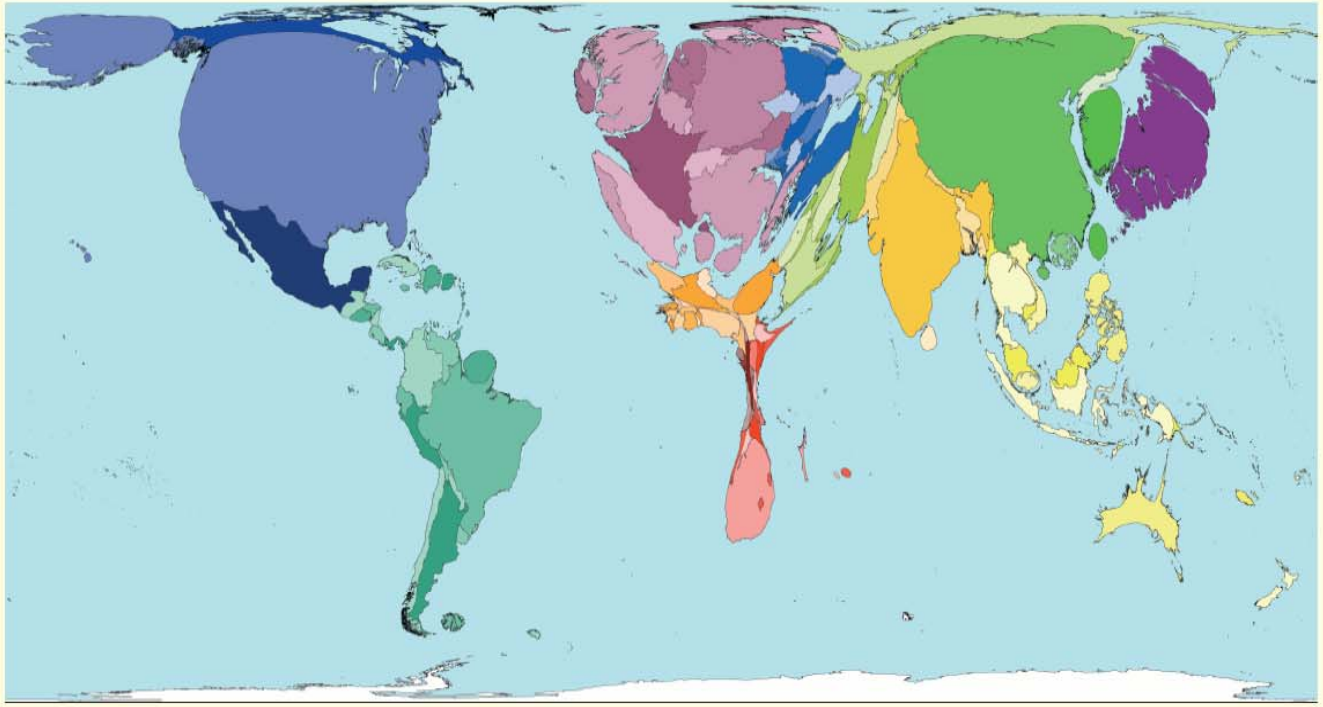


"Japan … has simultaneously attained one of the lowest levels of income inequalities and the longest life expectancy seen worldwide."

Tomoki Nakaya, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Richest Tenth

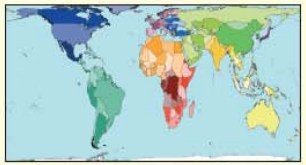


The lowest earnings per person of the richest tenth of population are in the United Republic of Tanzania. It is 1% of the earnings per person of the richest tenth in Luxembourg, the other extreme.

The United States has the highest total earnings of the richest tenth, followed by China, followed by India. The richest tenth in the United States earn 1.5 times more than their equivalent in China, and more than 4 times more than their equivalent anywhere else.

The richest tenth of population living in South Africa earn almost 3 times more than the richest tenth of the population of any other territory in Africa.

Territory size shows the earnings of the richest tenth of the population living there, as a proportion of the earnings of the richest tenth living in all territories.



Land area

Technical notes

- Data are from the United Nations Development Programme's Human Development Report, 2004
- Income is measured in Purchasing Power Parity (PPP) US$. This is used because a dollar can buy more in Namibia than in Japan, due to different exchange rates and prices. PPP is value of income where it is earnt, measured in US$ equivalent.
- See website for further information.

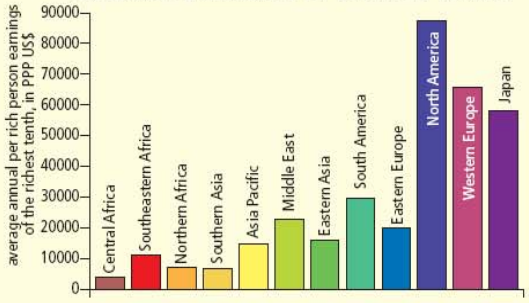
HIGHEST AND LOWEST ANNUAL EARNINGS OF THE RICHEST TENTH OF POPULATION

Rank	Territory	Value
1	Luxembourg	161840
2	United States	105914
3	Ireland	100846
4	Equatorial Guinea	96653
5	Hong Kong (China)	91039
6	Greenland	87252
7	Norway	86372
8	Seychelles	79000
9	Singapore	78173
10	Switzerland	76580

Rank	Territory	Value
191	Niger	2801
192	Madagascar	2642
193	Tajikistan	2479
194	Sierra Leone	2453
195	Dem Republic Congo	2272
196	Burundi	2236
197	Malawi	2199
198	Yemen	2174
199	Ethiopia	1944
200	United Republic Tanzania	1692

*earnings by the richest tenth of the population in US$ purchasing power parity per rich person**

AVERAGE EARNINGS OF RICHEST TENTH

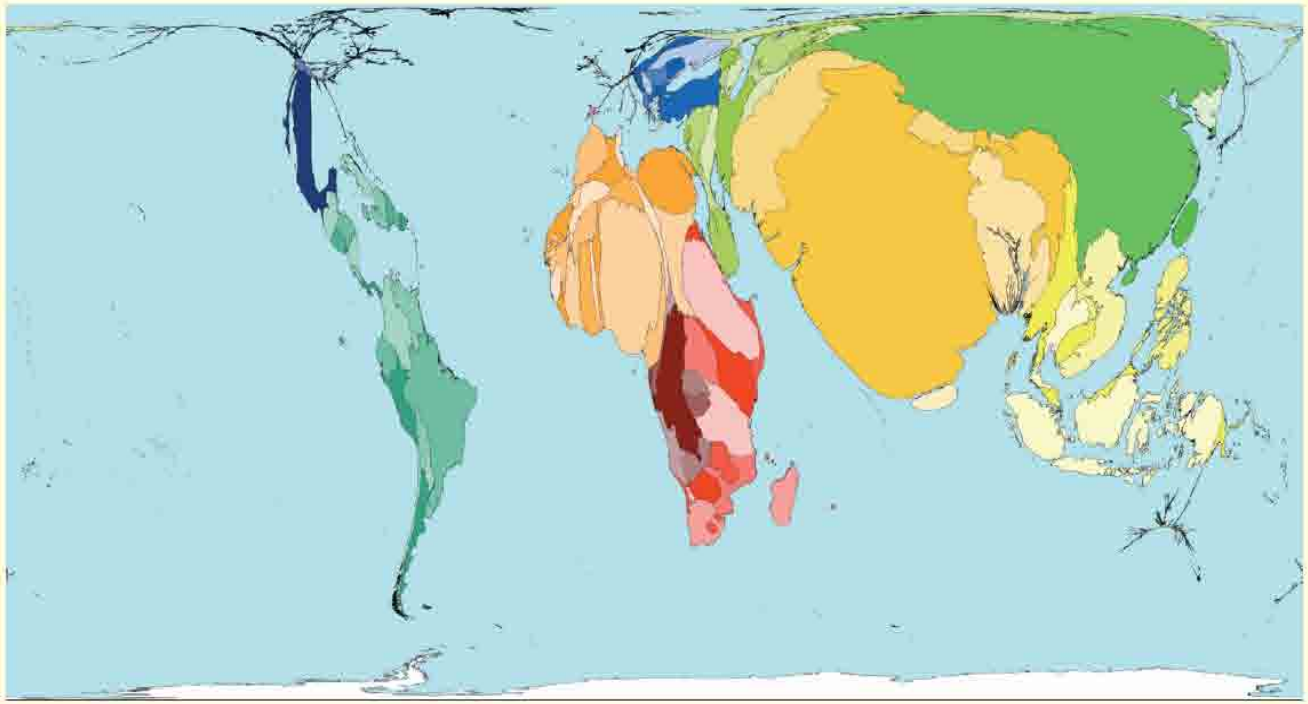


"There are the rich people in every country. The US is just a bit more extravagant about it."

Heidi Hendricks, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Living on up to US$10 a day



In Indonesia US$10 buys more than it does in the United States, so comparing earning in US$ alone does allow for the cost of living changing between places. The map shows purchasing power parity (PPP) - someone earning PPP US$10 in Indonesia can buy the equivalent of what PPP US$10 would buy in the United States. As such more practical assessments of individuals' earnings can be made.

In 7 out of the 12 regions more than half of the population live in households where the people live on below PPP US$10 a day. In Central Africa 95% of households have workers earning this little; in Western Europe and Japan less than 1% of the population does.

Territory size shows the proportion of all people living on US$10 purchasing power parity or less a day worldwide, that live there.

Land area

Technical notes

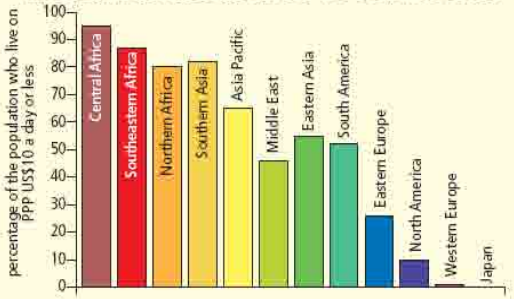
- Data are from the United Nations Development Programme's Human Development Report, 2004
- Income is measured in Purchasing Power Parity (PPP) US$. This is used because a dollar can buy more in Namibia than in Japan, due to different exchange rates and prices. PPP is value of income where it is earnt, measured in US$ equivalent.
- See website for further information.

PERCENTAGE OF THE POPULATION LIVING ON LESS THAN PPP US$ 10 A DAY

Rank	Territory	Value	Rank	Territory	Value
1	Ethiopia	99.9	191	Czech Republic	0.072
2	United Republic of Tanzania	99.8	192	Austria	0.039
3	Burundi	99.5	193	Germany	0.019
4	Yemen	99.5	194	Finland	0.004
5	Malawi	99.2	195	Belgium	0.003
6	Dem Republic Congo	99.2	196	Sweden	0.001
7	Rwanda	98.9	197	Denmark	0.001
8	Tajikistan	98.9	198	Japan	<0.001
9	Guinea-Bissau	98.5	199	Norway	<0.001
10	Madagascar	98.4	200	Luxembourg	<0.001

percentage of the population living on less than US$10 purchasing power parity (PPP) a day

INCOME DISTRIBUTION: UP TO US$ 10 A DAY

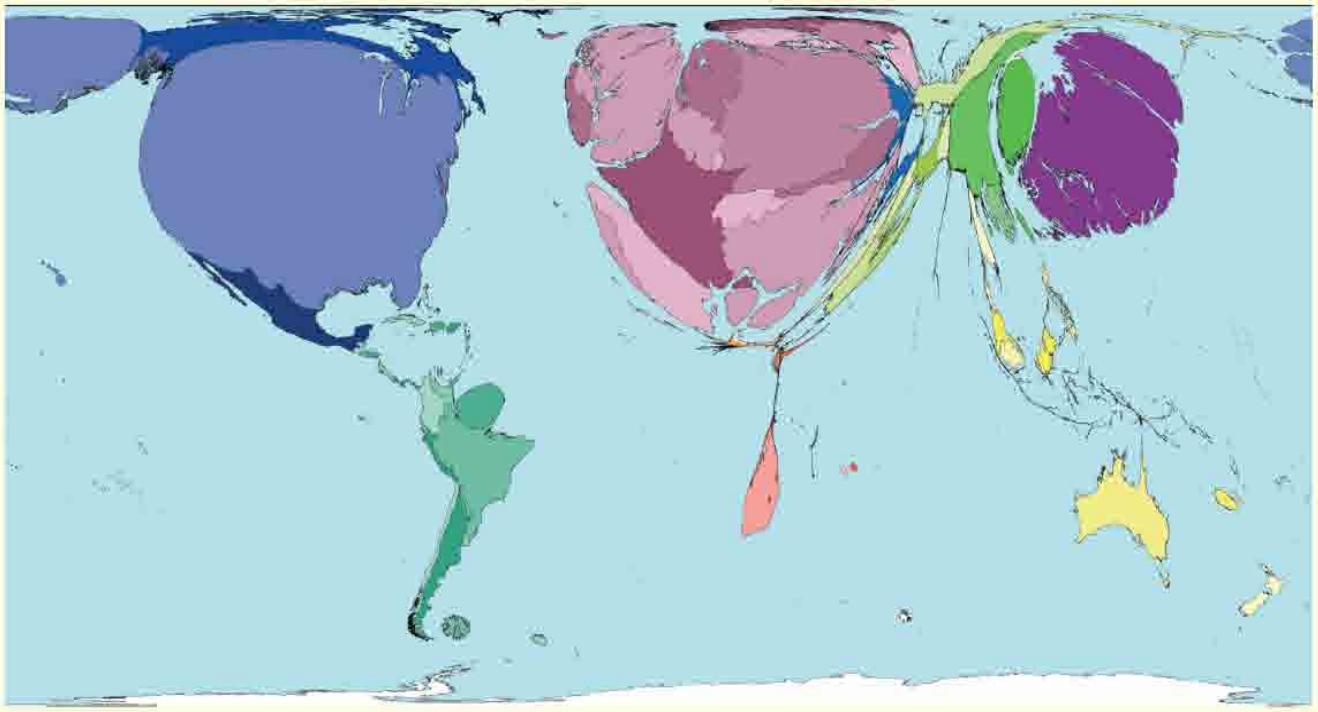


"There is no work here, and when you do find a job, you earn pathetically low wages. I'm a factory watchman, and I earn the equivalent of eight dollars for a 12-hour day."

Pirana, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Living on US$ 100 to 200 a day



In all regions except for North America, Western Europe and Japan, less than 2.1% of the population live in households which on US$100-200 purchasing power parity (PPP) a day each. Within North America, Western Europe and Japan 16-19% of the population live on this amount.

In 75 territories less than 1 in 1000 people live on this much, despite using purchasing power parity where a higher value is given to the currency in territories where it is cheaper to live.

As the measure of purchasing power parity takes into account the cost of living in each territory, earning PPP US$150 in Ethiopia means that the same goods and services could be bought as with US$150 in Germany.

Territory size shows the proportion of all people living on PPP US$ 100-200 a day worldwide, that live there.

Land area

Technical notes

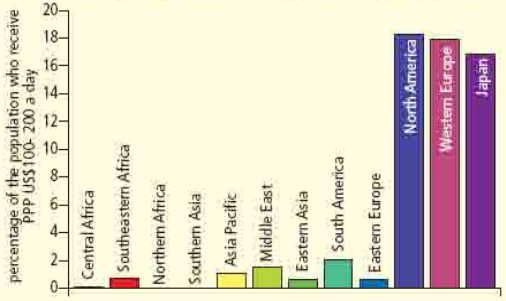
- Data are from the United Nations Development Programme's Human Development Report, 2004
- Income is measured in Purchasing Power Parity (PPP) US$. This is used because a dollar can buy more in Namibia than in Japan, due to different exchange rates and prices. PPP is measured in US$.
- *The table does not include territories where fewer than 1 in 1000 people earn PPP US$100-200 a day.
- See website for further information.

PERCENTAGE OF THE POPULATION LIVING ON PPP US$ 100 TO 200 A DAY

Rank	Territory	Value	Rank	Territory	Value
1	Luxembourg	44	116	Philippines	0.26
2	Norway	38	117	Bulgaria	0.22
3	Ireland	28	118	Honduras	0.20
4	Denmark	26	119	Cape Verde	0.19
5	United States	23	120	Samoa	0.16
6	Switzerland	23	121	Nicaragua	0.16
7	Austria	22	122	Algeria	0.14
8	Canada	22	123	Timor-Leste	0.14
9	Netherlands	22	124	Turkmenistan	0.11
10	Iceland	20	125	Zimbabwe	0.11

percentage of population living in households on US$ 100-200 purchasing power parity a day each

INCOME DISTRIBUTION: US$100-200 A DAY

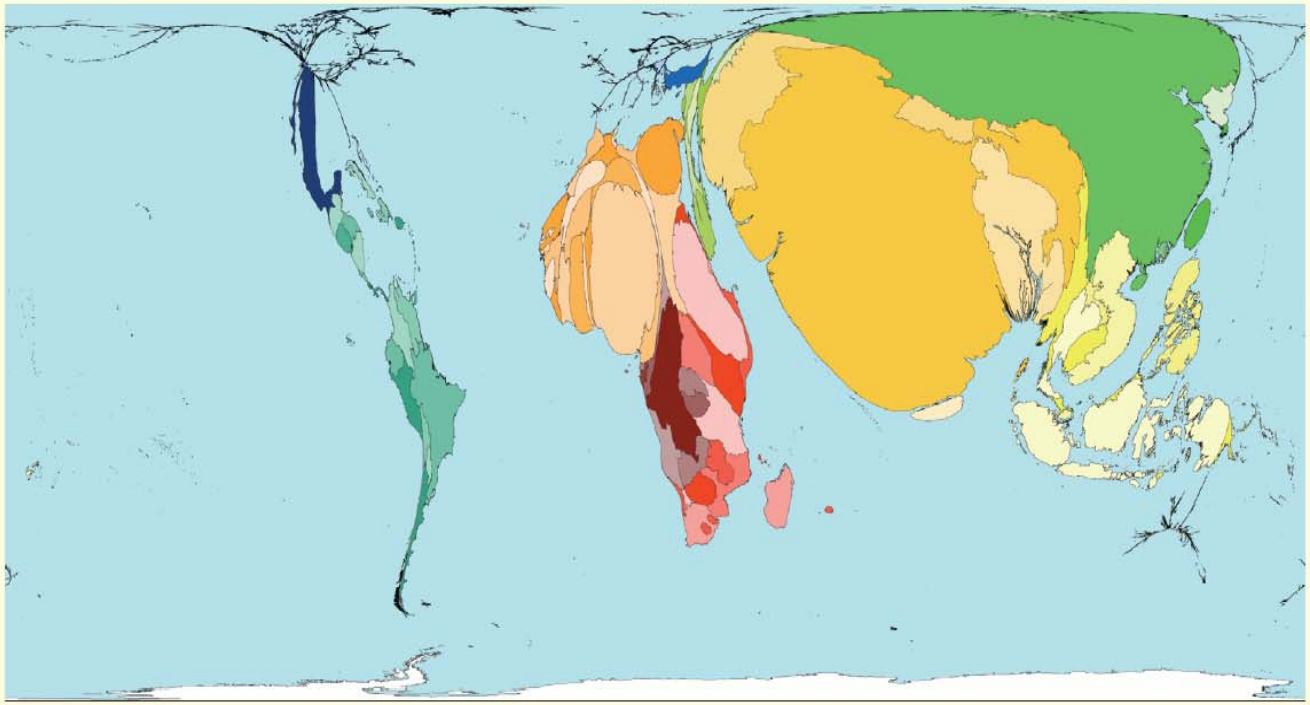


"Every man is rich or poor according to the degree in which he can afford to enjoy the necessaries, conveniences, and amusements of human life."

Adam Smith, 1776

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Absolute Poverty

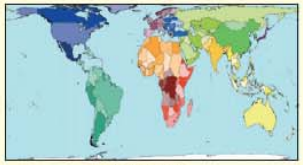


Absolute poverty is defined as living on the equivalent of US$2 a day or less. In 2002, 43% of the world population lived on this little. This money has to cover the basics of food, shelter and water. Medicines, new clothing, and school books would not be on the priority list.

When almost an entire population lives on this little, it is unsurprising if undernourishment is high, education levels are low, and life expectancy short. In both Nigeria and Mali, 9 of every ten people survives on less than US$2 a day.

South America has a relatively small poor population, yet 39 million people have less than US$2 a day in Brazil.

Territory size shows the proportion of all people living on less than or equal to US$2 in purchasing power parity a day.



Land area

Technical notes

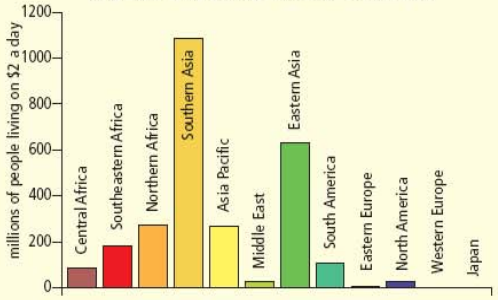
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *Omitted are territories where the regional average was assumed due to missing data (Democratic Republic of Congo, Angola, Congo, Gabon, Sao Tome & Principe, and Equatorial Guinea ranked 5th; the Maldives and Bhutan ranked 24th).
- See website for further information.

TERRITORIES WITH HIGH ABSOLUTE POVERTY LEVELS

Rank	Territory	Value	Rank	Territory	Value
1	Nigeria	90.8	17	Nepal	82.5
2	Mali	90.6	18	Burkina Faso	81.0
3	Burundi	89.2	19	Ethiopia	80.7
4	Zambia	87.4	20	India	79.9
11	Niger	85.3	20	Nicaragua	79.9
12	Rwanda	84.6	22	Ghana	78.5
13	Central African Republic	84.0	23	Mozambique	78.4
14	Madagascar	83.3	26	Cambodia	77.7
15	Gambia	82.9	27	Malawi	76.1
16	Bangladesh	82.8	28	Sierra Leone	74.5

*percentage of population living on US$2 a day adjusted for purchasing power parity**

LIVING ON US$2 A DAY OR LESS

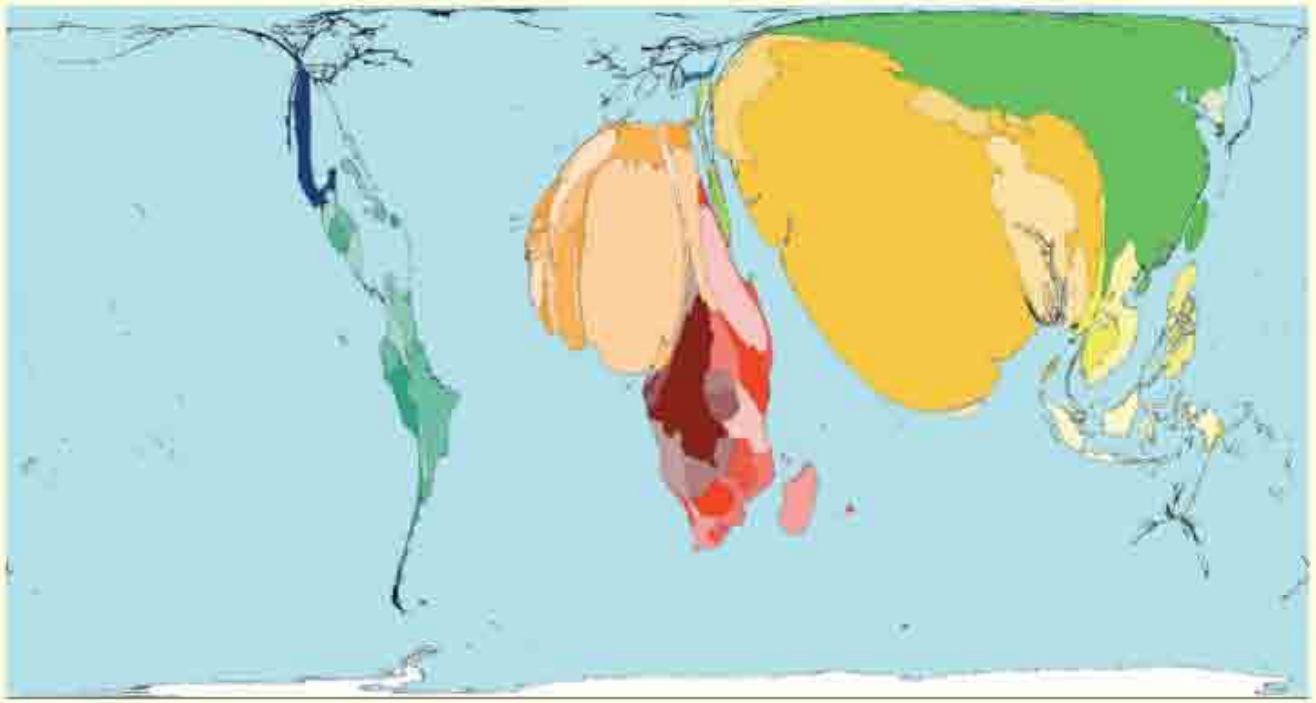


"Trickle-down theory – the less than elegant metaphor that if one feeds the horse enough oats, some will pass through to the road for the sparrows."

John Kenneth Galbraith, undated

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

The Wretched Dollar (up to $1 a day)



The first Millennium Development Goal is to halve, between 1990 and 2015, the proportion of people who live on the equivalent of US$1 a day, or less. In 2002, an estimated 17% of the world population lived on this amount. They lived on less than or equal to what, to be precise, US$1.08 would have bought in the United States in 1993.

In over twenty territories more than a third of the population lives on less than US$1 a day. All but two of these territories are in Africa.

The largest population living on US$1 a day is in Southern Asia, most of whom live in India.

Territory size shows the proportion of all people living on less than or equal to US$1 in purchasing power parity a day.

Land area

Technical notes

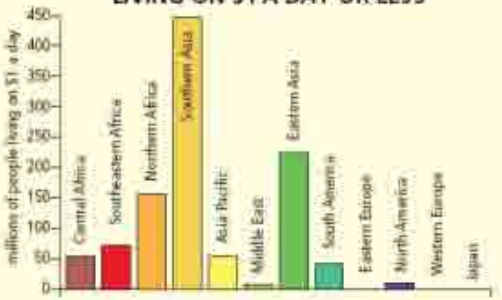
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *16 territories for which data was missing, and for which a regional average was assumed that placed them in the top 36, have not been listed in the table due to uncertainty in their positions.
- See website for further information.

HIGHEST PROPORTIONS OF THE POPULATION LIVING ON US$1 A DAY

Rank	Territory	Value	Rank	Territory	Value
1	Mali	73	17	Burkina Faso	45
2	Nigeria	70	18	Ghana	45
3	Central African Republic	67	19	Malawi	42
4	Zambia	64	20	Mozambique	38
5	Niger	61	21	Nepal	38
6	Gambia	59	22	Lesotho	36
7	Burundi	58	23	Bangladesh	36
8	Sierra Leone	57	23	Zimbabwe	36
15	Madagascar	49	25	Rwanda	36
16	Nicaragua	45	36	Namibia	35

*percentage of the population living on US$1 a day or less adjusted for purchasing power parity**

LIVING ON $1 A DAY OR LESS

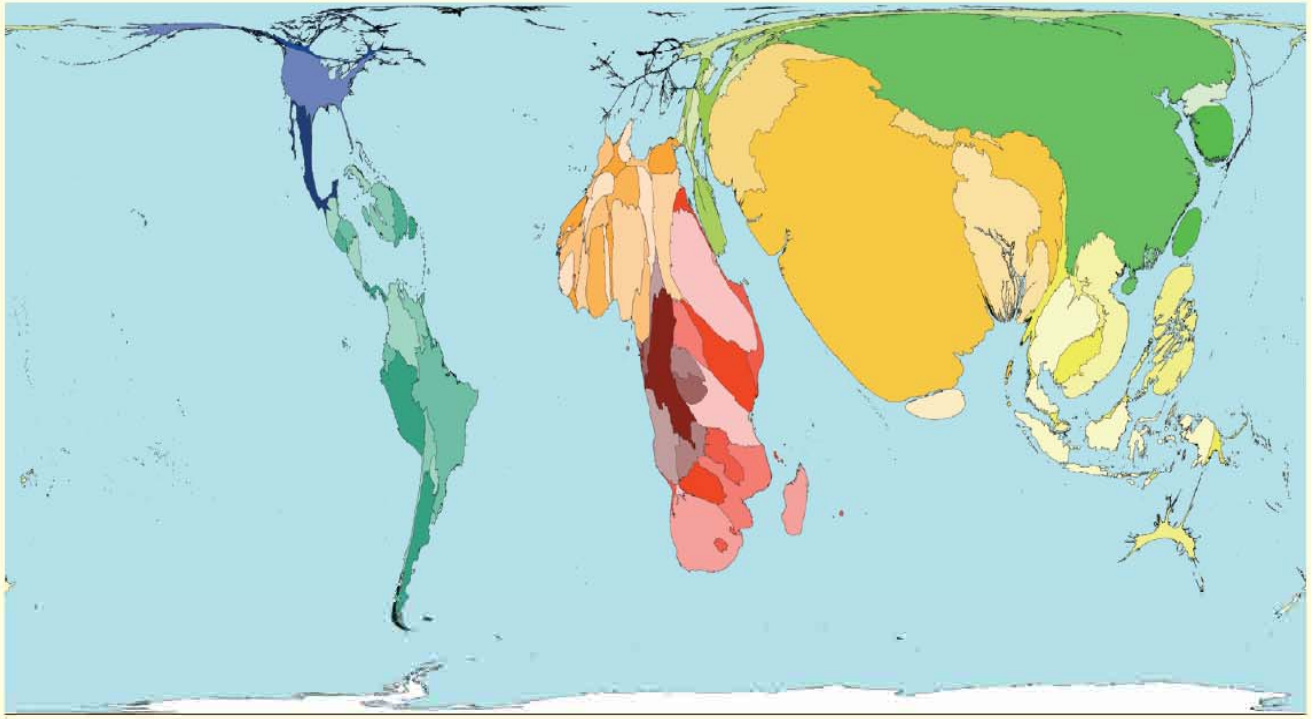


"The mass of the people struggle against the same poverty, flounder about making the same gestures ... It is an underdeveloped world, a world inhuman in its poverty ..."

Franz Fanon, 1961

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Undernourishment in 1990



Undernourishment is not being able to meet the minimum level of dietary energy consumption - that required to be able to undertake daily tasks. This is measured against a minimum weight, which varies by height, age and gender.

In 1990, 840 million people, or 16% of the world population were undernourished. The largest counts of undernourished people are found in India and China. The highest percentage of undernourished people was in Mozambique, where 69% of the population did not have enough to eat.

Almost a quarter of all territories recorded no undernourishment in 1990. The regions of Japan, Eastern Europe and Western Europe are barely visible on the map.

Territory size shows the proportion of all undernourished people worldwide, that live there.

Land area

Technical notes

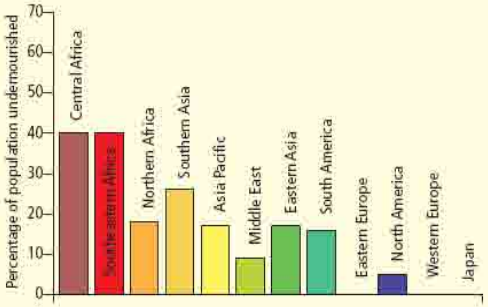
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *There were no territories where 1 or 2% of the population was undernourished, 45 territories had 0% undernourishment. The four territories that assume the North American average, ranked jointly at 147 are not included in the table.
- See website for further information.

HIGHEST AND LOWER UNDERNOURISHMENT LEVELS

Rank	Territory	Value	Rank	Territory	Value
1	Mozambique	69	142	Algeria	5
2	Haiti	65	142	Egypt	5
3	Angola	61	142	Islamic Republic of Iran	5
4	Chad	58	142	Mexico	5
5	Central African Republic	50	142	Syrian Arab Republic	5
6	Burundi	49	151	Jordan	4
6	Malawi	49	151	Saudi Arabia	4
8	Sierra Leone	46	151	United Arab Emirates	4
9	Zambia	45	154	Lebanon	3
10	Kenya	44	154	Malaysia	3

*percentage of the population that was undernourished in 1990**

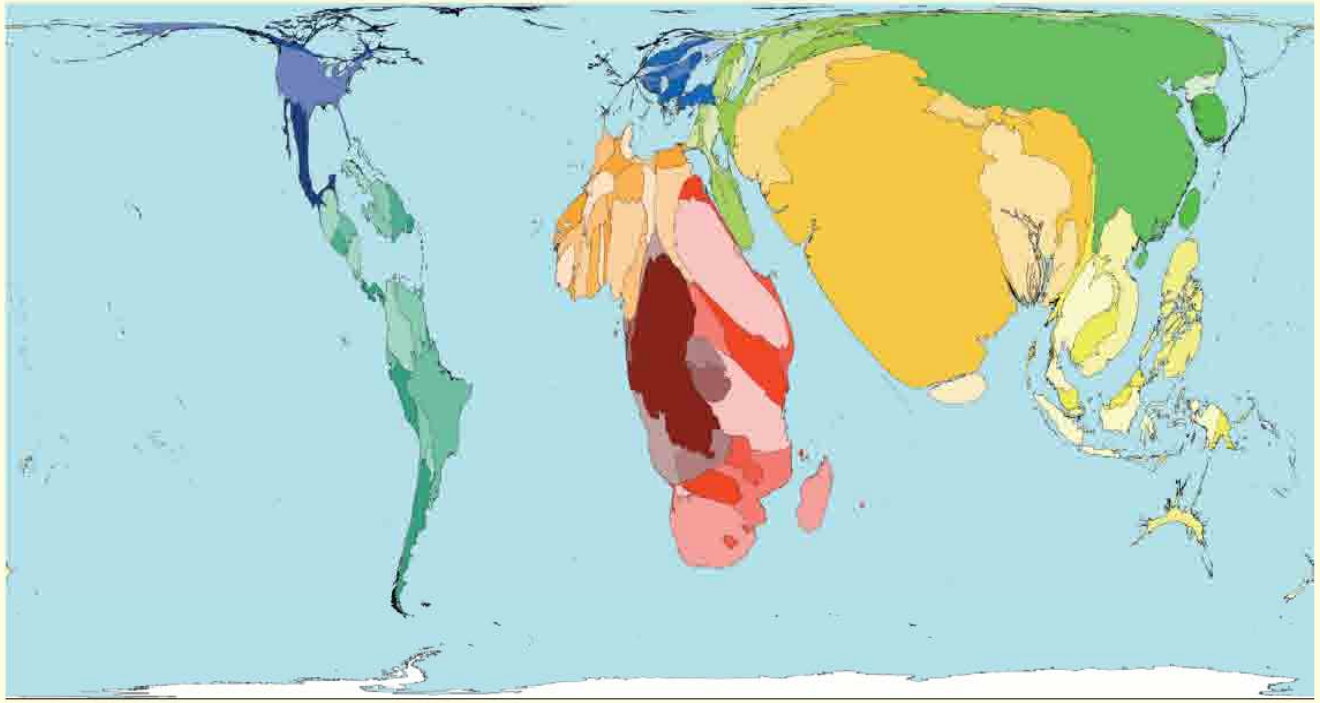
UNDERNOURISHMENT, 1990



"Should we really let our people starve so we can pay our debts?" Julius Nyerere, undated

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Undernourishment in 2000

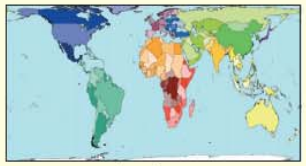


Over the ten year period from 1990 to 2000, the number of people in the world that lived on an inadequate amount of food increased from 840 million to 858 million. Due to the population increases over this period, the percentage of the population that is undernourished simultaneously decreased from 16% to 14%.

Of all the people living in Central Africa, over 60% are undernourished. The Democratic Republic of Congo has the highest levels of undernourishment: 3 in every 4 people there are undernourished.

Reducing the proportion of undernourished peoples is an aim of Millennium Development Goal 1.

Territory size shows the proportion of all undernourished people worldwide, that live there.



Land area

Technical notes

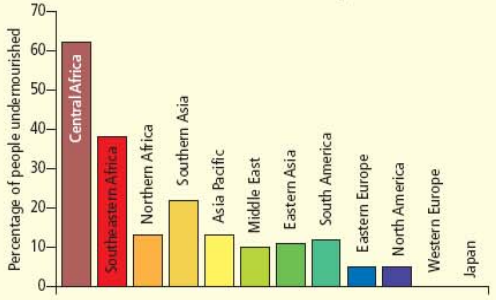
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *Territories with data estimated from the regional averages are not included in the table (Equatorial Guinea and Sao Tome and Principe are ranked 4th; Somalia, Djibouti, Comoros, South Africa and the Seychelles are ranked 18th).
- See website for further information.

TERRITORIES WITH MOST UNDERNOURISHMENT

Rank	Territory	Value	Rank	Territory	Value
1	Dem Republic Congo	75	13	Central African Republic	44
2	Tajikistan	71	14	United Republic of Tanzania	43
3	Burundi	70	15	Ethiopia	42
6	Eritrea	61	16	Rwanda	41
7	Mozambique	53	17	Zimbabwe	39
8	Armenia	51	18	Cambodia	38
9	Sierra Leone	50	18	Mongolia	38
9	Zambia	50	25	Kenya	37
11	Angola	49	26	Madagascar	36
11	Haiti	49	27	Chad	34

*percentage of the population that was undernourished in 2000**

UNDERNOURISHMENT, 2000



"The number of hungry people remains intolerably high, progress in reaching them unconscionably slow and the costs in ruined lives and wasted resources incalculably large."

Lynn Brown, 2004

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Income Summary

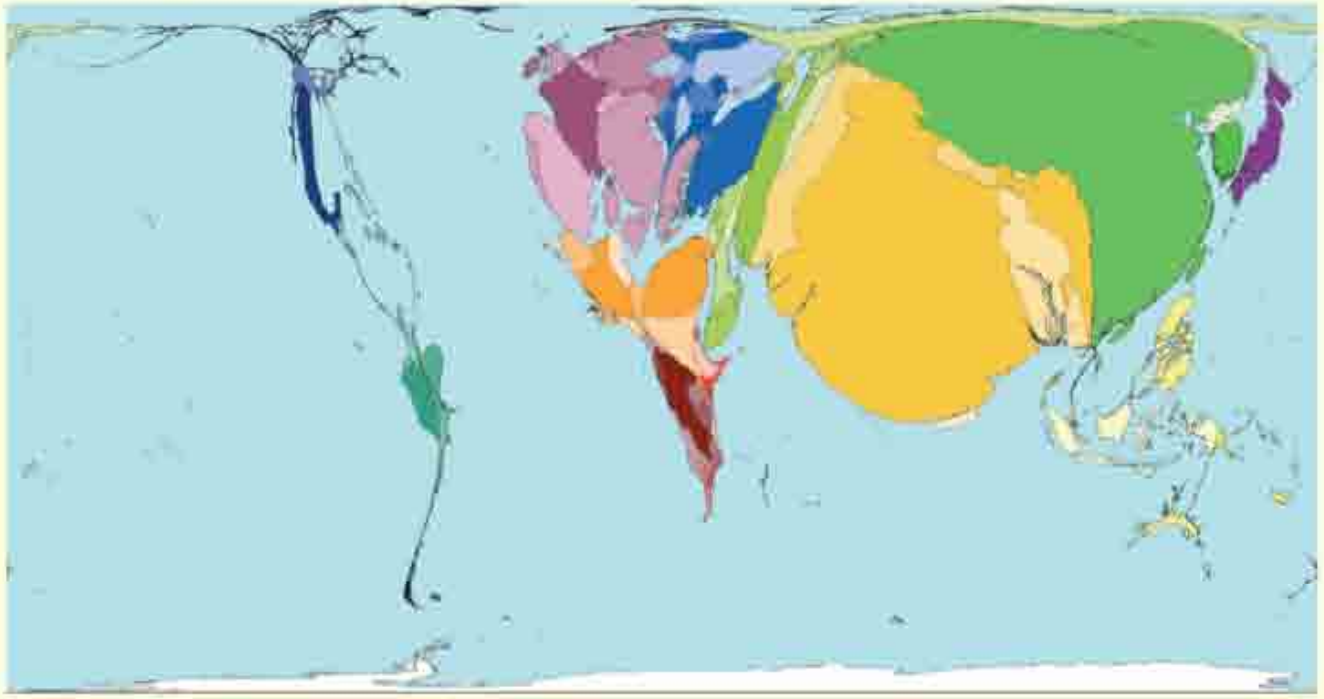
- Capitalism is divided for classes of very rich and very poor, and so called middle class in between. Government can call for tax and social benefit to balance the inequality among classes.
- Very divided income level worldwide and it’s going to be even more!
- Globalization dictates income redistribution throughout the value chain and across national boundary

Income Q’s and A’s

- All rich’s and poor’s expect continuous income growth, but how can this growth rate be sustainable in the future
- Should we limit or reduce the income of rich’s and render it to poor’s for even-out of this disparity--- “Hope for poor’s and Charity from Rich’s”

Wealth

Wealth Year 1



This is an estimate of the wealth of territories over 2000 years ago, using modern boundaries and modern concepts. There was probably much less variation between regions. The lowest wealth was in South America, with an average Gross Domestic Product (GDP) per person of US$400 adjusted for purchasing power. The world average was US$445. By 1990 the average per person GDP adjusted for purchasing power was US$5248; wealth per person in the poorest region was 4% of that in the richest.

As GDP per person variations are low this map looks very similar to the population map for year 1. The Americas produced less because fewer people lived there.

Territory size shows the proportion of worldwide gross domestic product, equalised in purchasing power parity, found there in year 1 current era.

Land area

Technical notes

- Data are from Angus Maddison's 2003 The World Economy
- Gross Domestic Product is measured in Purchasing Power Parity (PPP) US$, thus PPP US$1 had similar purchasing power then as in 1990 in the United States
- *The population for Madagascar, Singapore and New Zealand was thought to be 0 in year 1
- See website for further information

MOST AND LEAST WEALTH IN YEAR 1

Rank	Territory	Value
1	Bangladesh	453.7
2	India	452.8
3	Italy	452.7
4	Greece	451.9
5	France	451.8
6	Republic of Korea	451.8
7	Pakistan	451.8
8	Spain	451.7
9	Germany	451.7
10	China	451.6

Rank	Territory	Value
191	Paraguay	400.14
192	Brazil	400.13
193	Uruguay	400.11
194	Argentina	400.11
195	Canada	400.05
196	Panama	400.02
197	Greenland	400.01
198	Madagascar	0.00
198	Singapore	0.00
198	New Zealand	0.00

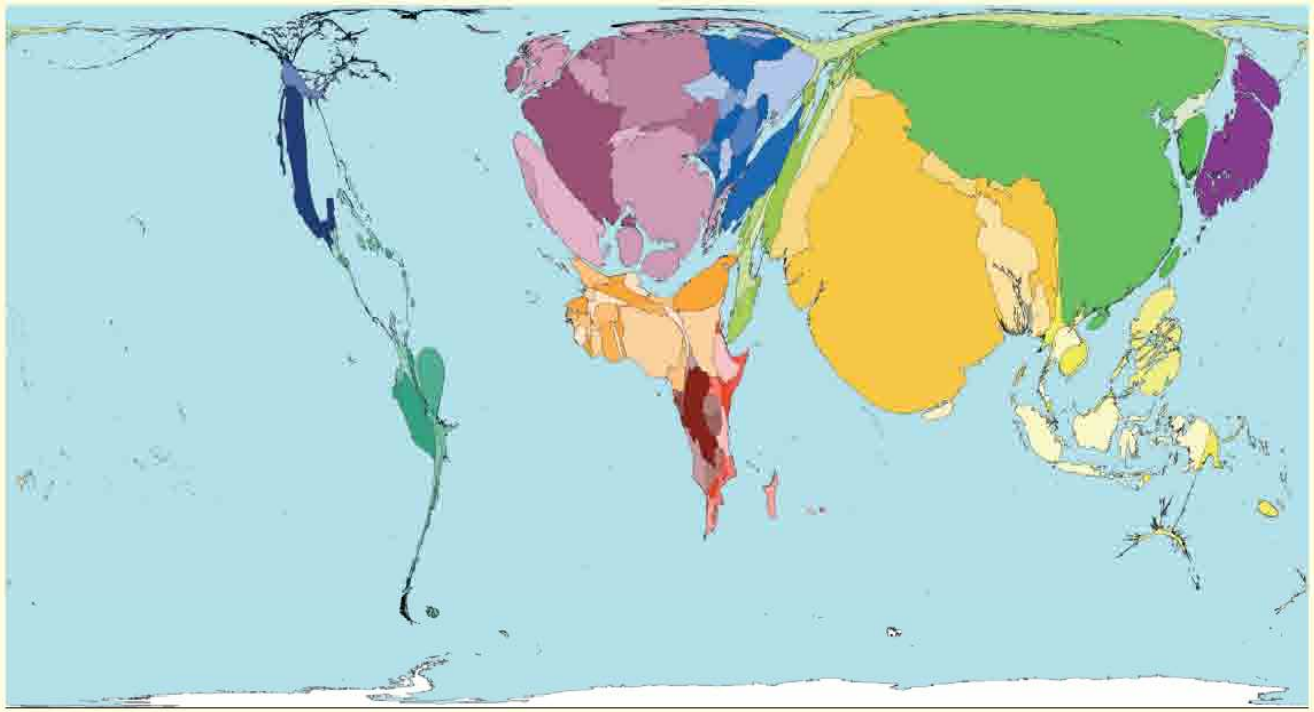
*average gross domestic product per person in year 1 in purchasing power parity of 1990 US$**

WORLD WEALTH DISTRIBUTION IN YEAR 1

"Travellers and scholars who were attracted by the charms and fame of Bangladesh since time immemorial ... showered effusive epithets on its bounties and wealth, affluence and prosperity ..." United Nations Bangladesh Mission, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Wealth Year 1500

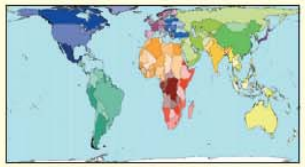


In the year 1500 European territories were some of the wealthiest on earth, when measured by the Gross Domestic Product (GDP) per person.

The regions with the largest total GDPs were Eastern Asia and Southern Asia. These were also the most populous regions at that time.

The regions with the lowest GDP in 1500 were Central Africa and Southeastern Africa. These regions also had the lowest GDP per person. In 2002 these regions enjoyed an even smaller proportion of the world total GDP expressed in purchasing power parity dollars than they did in 1500.

Territory size shows the proportion of worldwide Gross Domestic Product equalised in US$ in purchasing power parity that was produced there in 1500.



Land area

Technical notes

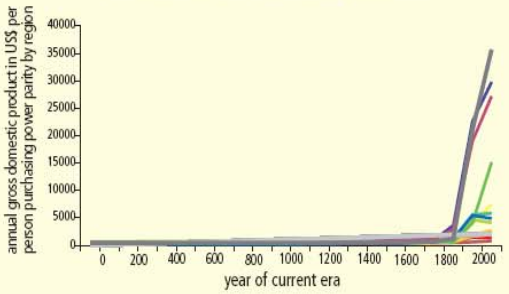
- Data are from Angus Maddison's 2003 The World Economy.
- Gross Domestic Product is measured in Purchasing Power Parity (PPP) US$, thus PPP US$1 has the same purchasing power in every territory. This PPP is in 1990 prices.
- See website for further information.

TOP TEN AND OTHER NOTABLE RATES OF WEALTH PER PERSON IN YEAR 1500

Rank	Territory	Value	Rank	Territory	Value
1	Italy	1100	11	Norway	640
2	Belgium	875	12	Switzerland	632
3	Netherlands	761	21	Portugal	606
4	Denmark	738	23	China	600
5	France	727	53	India	550
6	United Kingdom	714	60	Ireland	526
7	Austria	707	61	Japan	500
8	Sweden	695	65	Iraq	499
9	Germany	688	86	Turkey	496
10	Spain	661	106	Egypt	475

*US$ of Gross Domestic Product in purchasing power parity per person in 1500**

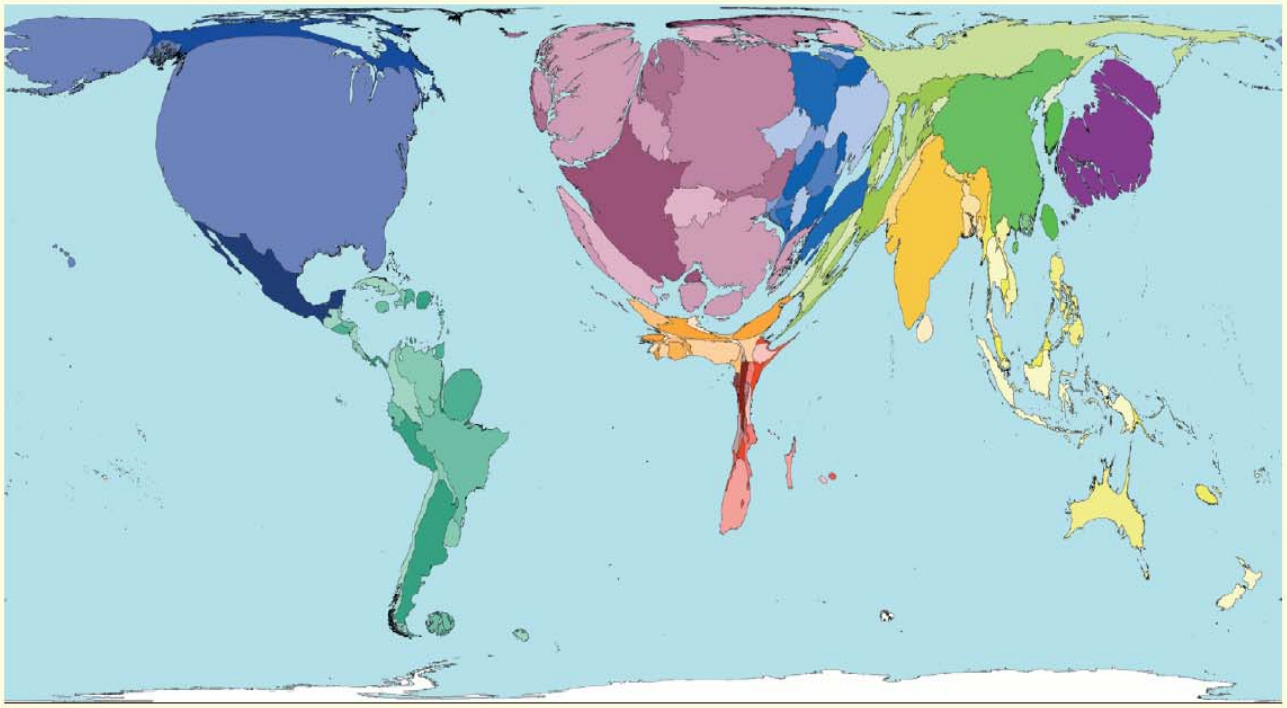
TIMELINE OF WORLD WEALTH



"Slaves captured in raids and war grew in importance as a commodity ... Kola nuts ... were also important, as were the dyestuffs of northern Nigeria. All these goods were highly prized in and around the Mediterranean basin." Richard Effland, 2003

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

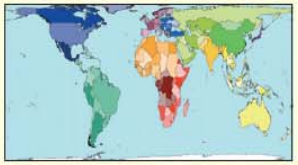
Wealth Year 1960



In 1960 most of the world's wealth was recorded as being produced in North America and Western Europe. Wealth distribution maintained a similar pattern to that in 1900, except that the proportion of world wealth found in Asian territories generally decreased, whilst it tended to increase in South American territories.

The highest levels of Gross Domestic Product per person in 1960 were in the small Middle Eastern territories of Qatar, Kuwait and the United Arab Emirates. The territories with the lowest Gross Domestic Product per person were mainly in Northern Africa and Southeastern Africa.

Territory size shows the proportion of worldwide Gross Domestic Product measured in US$ equalised for purchasing power parity that was produced there in 1960.



Land area

Technical notes

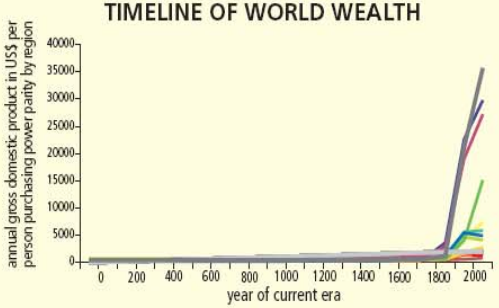
- Data are from Angus Maddison's 2003 The World Economy.
- Gross Domestic Product is measured in Purchasing Power Parity (PPP) US$, thus PPP US$1 has the same purchasing power in every territory. This PPP is in 1990 prices.
- See website for further information.

MOST AND LEAST WEALTHY TERRITORIES IN 1960

Rank	Territory	Value	Rank	Territory	Value
1	Qatar	33104	191	Mali	535
2	Kuwait	28813	192	Cape Verde	508
3	United Arab Emirates	22433	193	Guinea-Bissau	501
4	Switzerland	12457	194	United Republic of Tanzania	459
5	United States	11328	195	Lesotho	458
6	France	9785	196	Burundi	444
7	Venezuela	9646	197	Ethiopia	439
8	New Zealand	9465	198	Botswana	403
9	Denmark	8812	199	Malawi	394
10	Australia	8791	200	Guinea	392

*US$ of Gross Domestic Product in purchasing power parity per person in 1960**

TIMELINE OF WORLD WEALTH

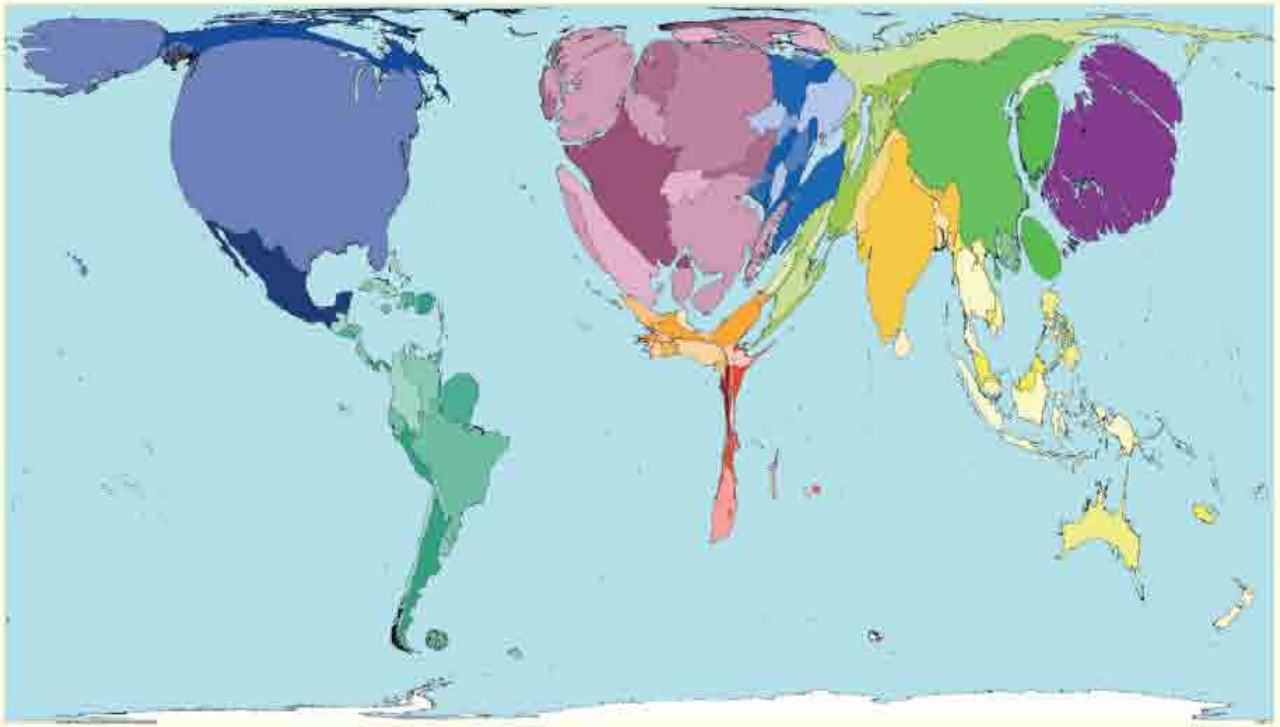


"The first Asian economic miracle was Japan's after World War II, rooted in the changes of the Meiji restoration ... The Asian Tigers ... began to emerge from 1960 onward ..."

Luis Alberto Moreno, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Wealth Year 1990



In 1990 the region with the lowest wealth or Gross Domestic Product (GDP) was Central Africa. The GDP of Central Africa was 0.8% of the GDP of the richest region, North America. If just 1% of the North America's GDP had been redistributed to Central Africa the region's GDP would have more than doubled.

Wealth per person had doubled since 1960, and the world GDP rose from PPP US$8 trillion to US$27 trillion over these thirty years. This vast increase in wealth was distributed in a broadly similar pattern to 30 years before. One change is the growth of Japan, China, the Republic of Korea and Taiwan.

Territory size shows the proportion of worldwide Gross Domestic Product measured in US$ equalised for purchasing power parity that was produced there in 1990.

Land area

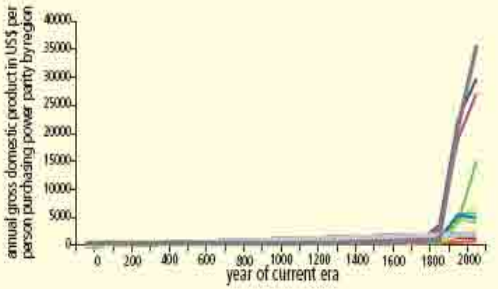
Technical notes
- Data are from Angus Maddison's 2003 The World Economy.
- Gross Domestic Product is measured in Purchasing Power Parity (PPP) US $, thus PPP US$1 has the same purchasing power in every territory. This PPP is in 1990 prices.
- See website for further information.

MOST AND LEAST WEALTHY TERRITORIES IN 1990

Rank	Territory	Value	Rank	Territory	Value
1	United States	23201	191	Bangladesh	640
2	France	22603	192	Afghanistan	601
3	Switzerland	21482	193	Uganda	592
4	Canada	18872	194	Ethiopia	581
5	Japan	18789	195	Niger	562
6	Greenland	18662	196	Malawi	558
7	Norway	18466	197	United Republic of Tanzania	540
8	Denmark	18452	198	Guinea	526
9	Sweden	17695	199	Dem Republic Congo	525
10	Hong Kong (China)	17541	200	Chad	421

*US$ of Gross Domestic Product in purchasing power parity per person in 1990**

TIMELINE OF WORLD WEALTH

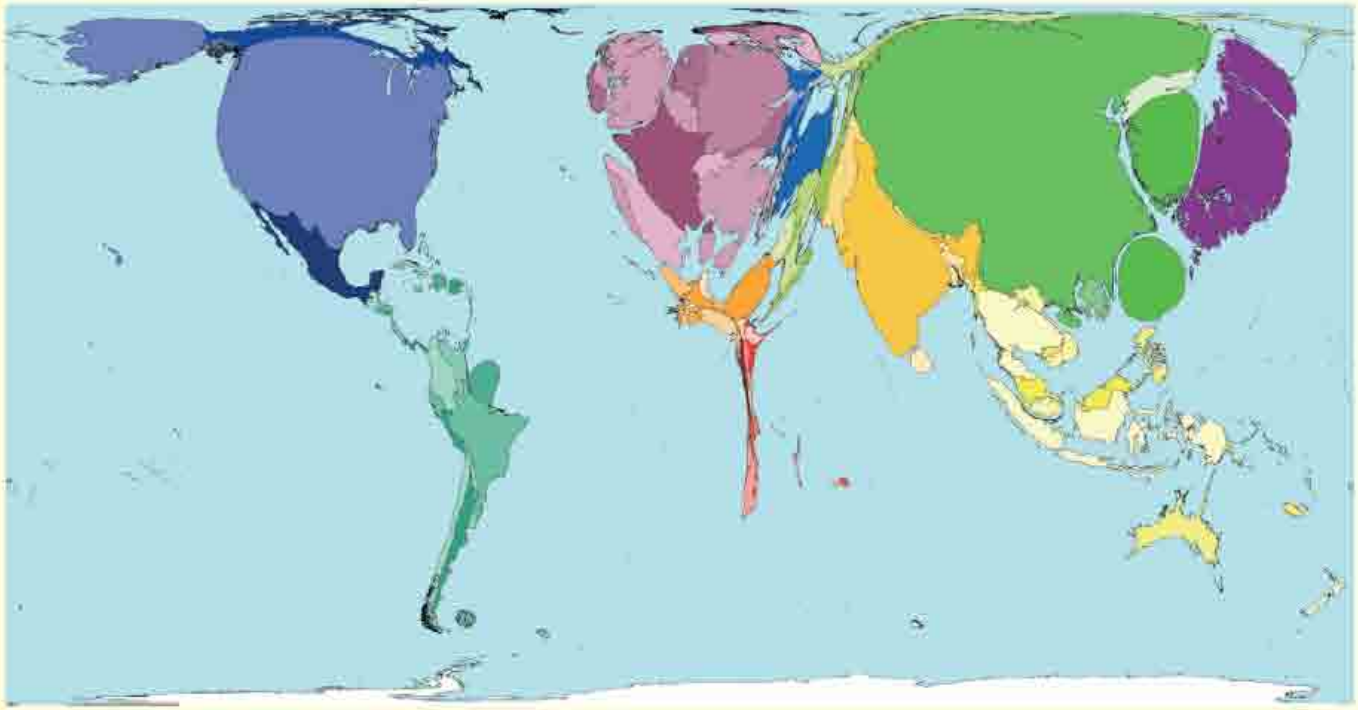


"As of 1990 ... the Korean stock market was equal in size to all the emerging markets of East Asia combined."

Andrew Horvat, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Wealth Year 2015



The projected wealth of China in 2015 could mean it producing 27% of all the wealth in the world, if the economic trends established between 1975 and 2002 continue for another 13 years. In year 1 of the current era China produced 26% of the wealth in the world, but very slowly declined to generating only 5% of the world total in 1960.

Whilst China is predicted to recover its former position within the world economy, this time instead of the Americas having a very small percentage of world wealth, as in year 1, now it is African territories that are predicted to remain small on the international financial stage. Eastern European territories are also predicted to have decreasing proportions of world wealth.

Territory size shows the proportion of worldwide Gross Domestic Product measured in US$ equalised for purchasing power parity to be produced there in 2015.

Land area

Technical notes

- Data are from Angus Maddison's 2003 The World Economy and the United Nations Population Division's 2002 World Population Estimates.
- Gross Domestic Product is measured in Purchasing Power Parity (PPP) US$, thus PPP US$1 has the same purchasing power in every territory. This PPP is in 1990 prices.
- See website for further information.

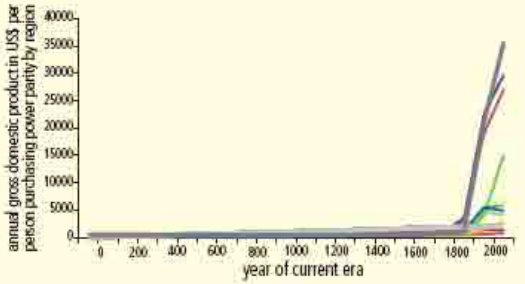
TERRITORIES PREDICTED TO BE THE MOST AND LEAST WEALTHY BY 2015

Rank	Territory	Value
1	Taiwan	64519
2	Hong Kong (China)	51470
3	Singapore	48645
4	Malta	42407
5	Luxembourg	38526
6	Republic of Korea	38249
7	United States	38063
8	Norway	36830
9	Japan	35694
10	Ireland	34677

Rank	Territory	Value
191	Comoros	533
192	Dem Republic Congo	525
193	Chad	493
194	Central African Republic	485
195	Zambia	480
196	Djibouti	446
197	Sierra Leone	443
198	Afghanistan	423
199	Tajikistan	361
200	Niger	348

*US$ of Gross Domestic Product in purchasing power parity per person in 1990**

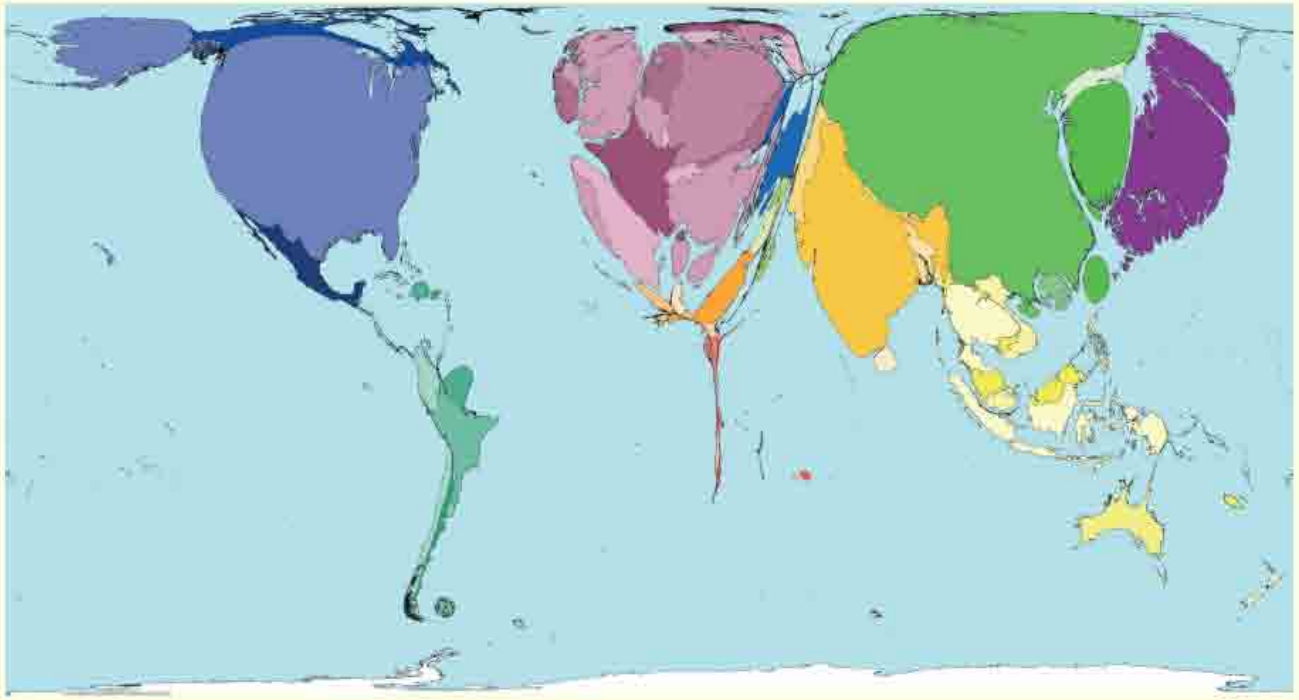
TIMELINE OF WORLD WEALTH



"Asia's rise is the economic event of our age. Should it proceed as it has over the last few decades, it will bring the two centuries of global domination by Europe and, subsequently, its giant North American offshoot to an end." Martin Wolf, 2003

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Wealth Growth



Two thirds of the territories in the world have experienced a growth in their wealth from 1975 to 2002. The biggest absolute wealth increase has been in China. Eastern Asia has experienced the largest proportional increases in wealth, averaging a growth in Gross Domestic Product (GDP) of 8% a year.

Unfortunately those territories with the smallest GDPs have, at best, only experienced a very small proportion of worldwide increases in wealth. Although distributions of wealth do change, the map shows wealth growth in places that are already relatively wealthy. The territories with the largest increases in GDP, when taking local prices into account, were China, the United States, Japan, India and Germany.

Territory size shows the proportion of worldwide growth in wealth that occurred there between 1975 and 2002.

Land area

Technical notes

- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *Those territories where there was no rise in wealth are not shown in the table. Only the Democratic Republic of Congo had no change in wealth.
- The quote refers to Equatorial Guinea.
- See website for further information.

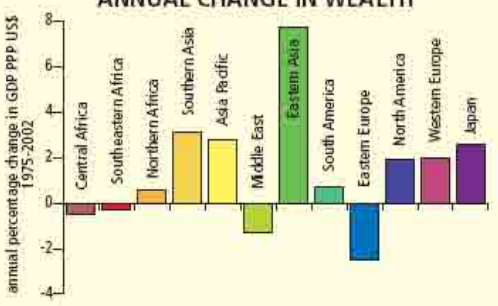
HIGHEST AND LOWEST INCREASES IN RELATIVE WEALTH

Rank	Territory	Value
1	Luxembourg	39968
2	Equatorial Guinea	28600
3	Ireland	24991
4	Norway	19235
5	Hong Kong (China)	18496
6	Singapore	17601
7	United States	14805
8	Republic of Korea	13523
9	Japan	13466
10	Cyprus	12898

Rank	Territory	Value
124	Chad	161
125	Benin	160
126	Vanuatu	152
127	Guatemala	109
128	Ecuador	95
129	United Republic of Tanzania	87
130	Kenya	79
131	Honduras	69
132	Ethiopia	41
133	Malawi	30

*rise in Gross Domestic Product in US$ adjusted for purchasing power parity per person, between 1975 and 2002**

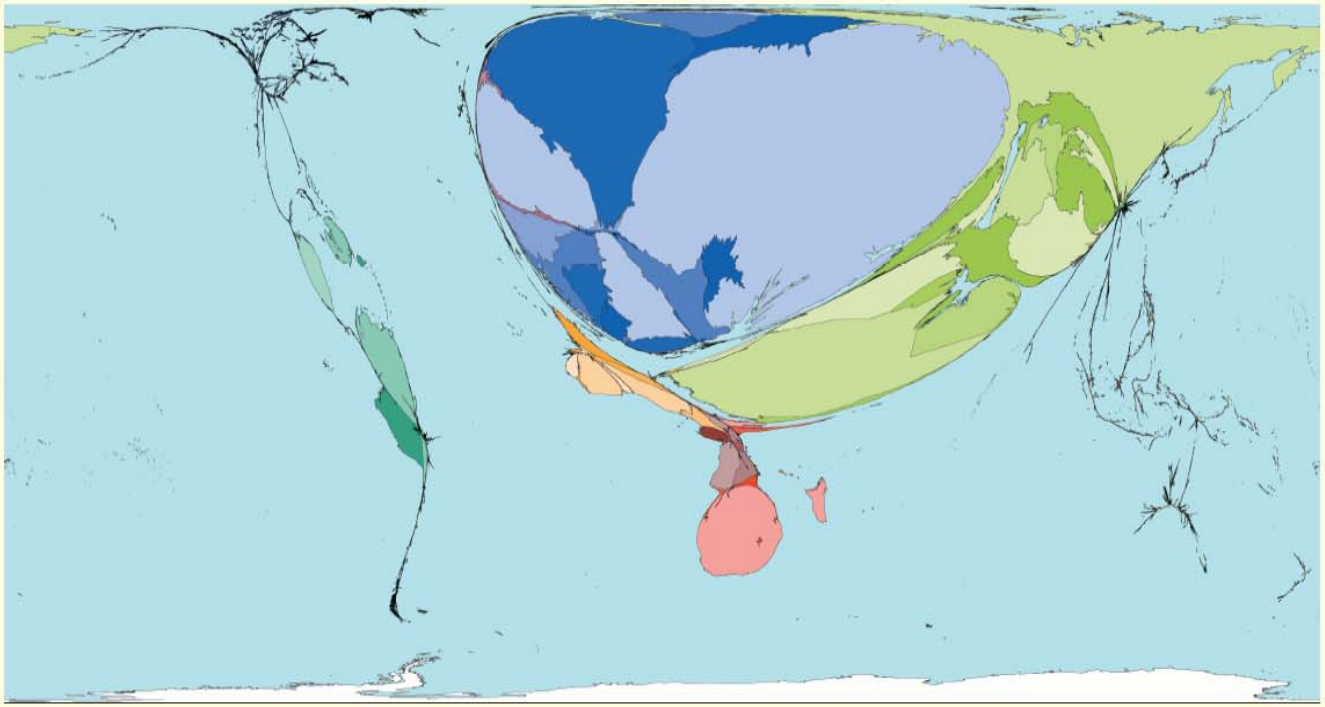
ANNUAL CHANGE IN WEALTH



"This rapid growth, coupled with the country's miniscule population of less than 500 000, has brought GDP per capita estimates (PPP) to an astounding $50 240, the second highest in the world after Luxembourg." Brendan McSherry, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

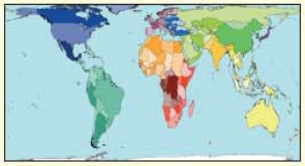
Wealth Decline



A third of all territories have experienced a wealth decline from 1975 to 2002 when measured adjusted for local purchasing power. Most of these territories are in Eastern Europe and the Middle East. The Ukraine, the Russian Federation, Poland and Saudi Arabia have experienced the largest decreases in Gross Domestic Product. The wealth decline in the Ukraine is more than twice that in any other territory.

In some regions no territories have experienced wealth decline. These regions are: Southern Asia, Asia Pacific, Eastern Asia, North America, Western Europe and Japan.

Territory size shows the proportion of worldwide decline in wealth that occurred there between 1975 and 2002.



Land area

Technical notes

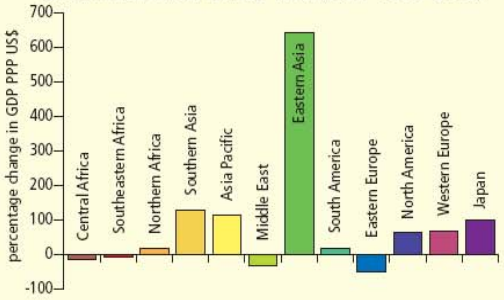
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *Those territories where there was no decline in wealth are not shown in the table. Only the Democratic Republic of Congo had no change in wealth.
- See website for further information.

HIGHEST AND LOWEST RELATIVE WEALTH DECREASES

Rank	Territory	Value	Rank	Territory	Value
1	Ukraine	25903	57	Zimbabwe	166
2	United Arab Emirates	25847	58	Somalia	164
3	Slovenia	17826	59	Nigeria	152
4	Czech Republic	15172	60	Congo	149
5	Saudi Arabia	12409	61	Mongolia	144
6	Poland	10153	62	Gambia	94
7	Turkmenistan	10073	63	Eritrea	62
8	Lithuania	9922	64	Guinea-Bissau	60
9	Croatia	9845	65	Mali	52
10	Tajikistan	8608	66	Senegal	43

*fall in Gross Domestic Product adjusted for purchasing power parity US$ per person 1975-2002**

CHANGES IN WORLD WEALTH 1975-2002



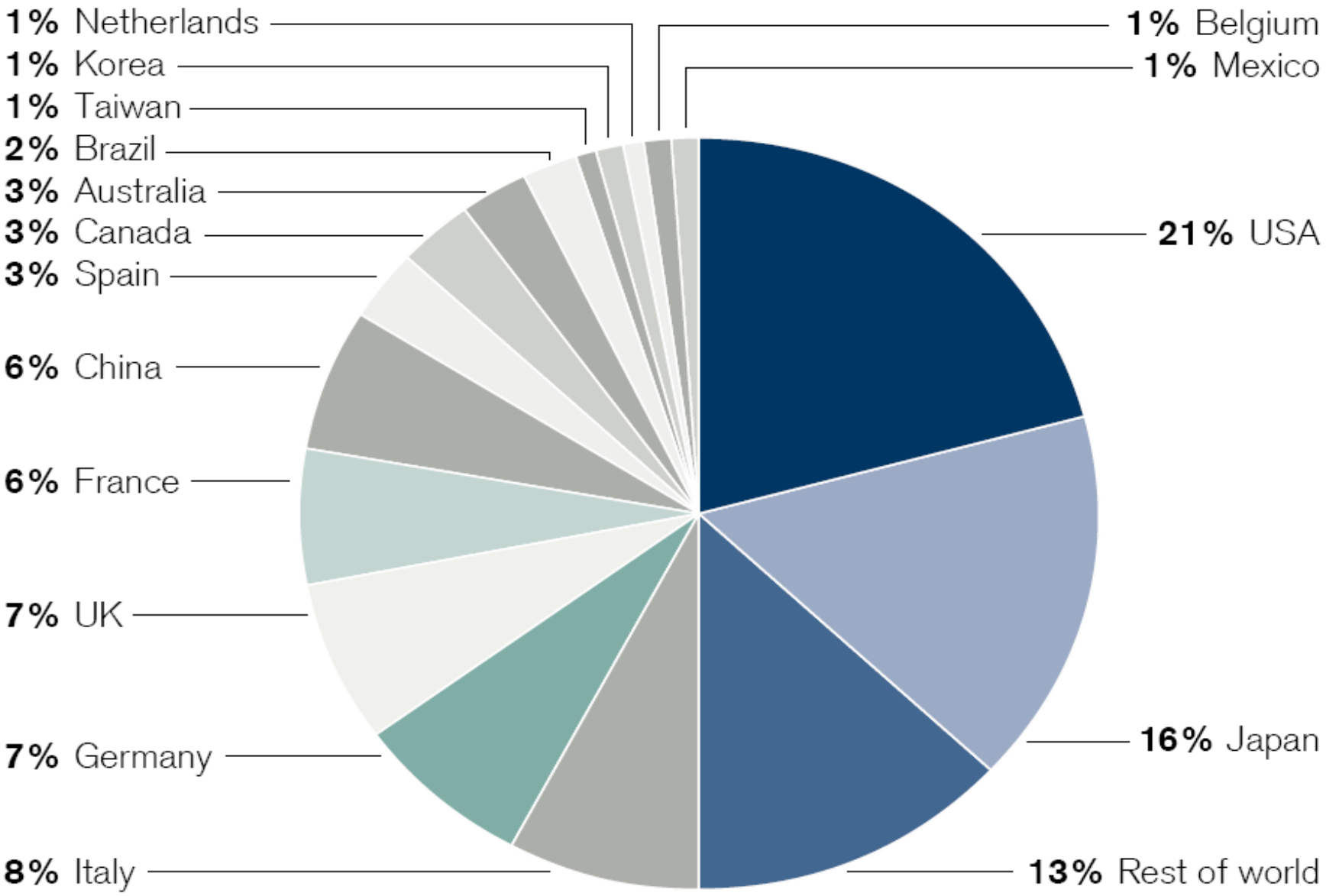
"We used to have a variety of food in the shops and it was easier to take care of our children. Now we have to sell or kill what is left of our livestock ..."

Talaibek Yernazarov, 1997

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Owners of wealth above USD 100,000 by country of residence

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011



Dollar millionaires by country of residence

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011

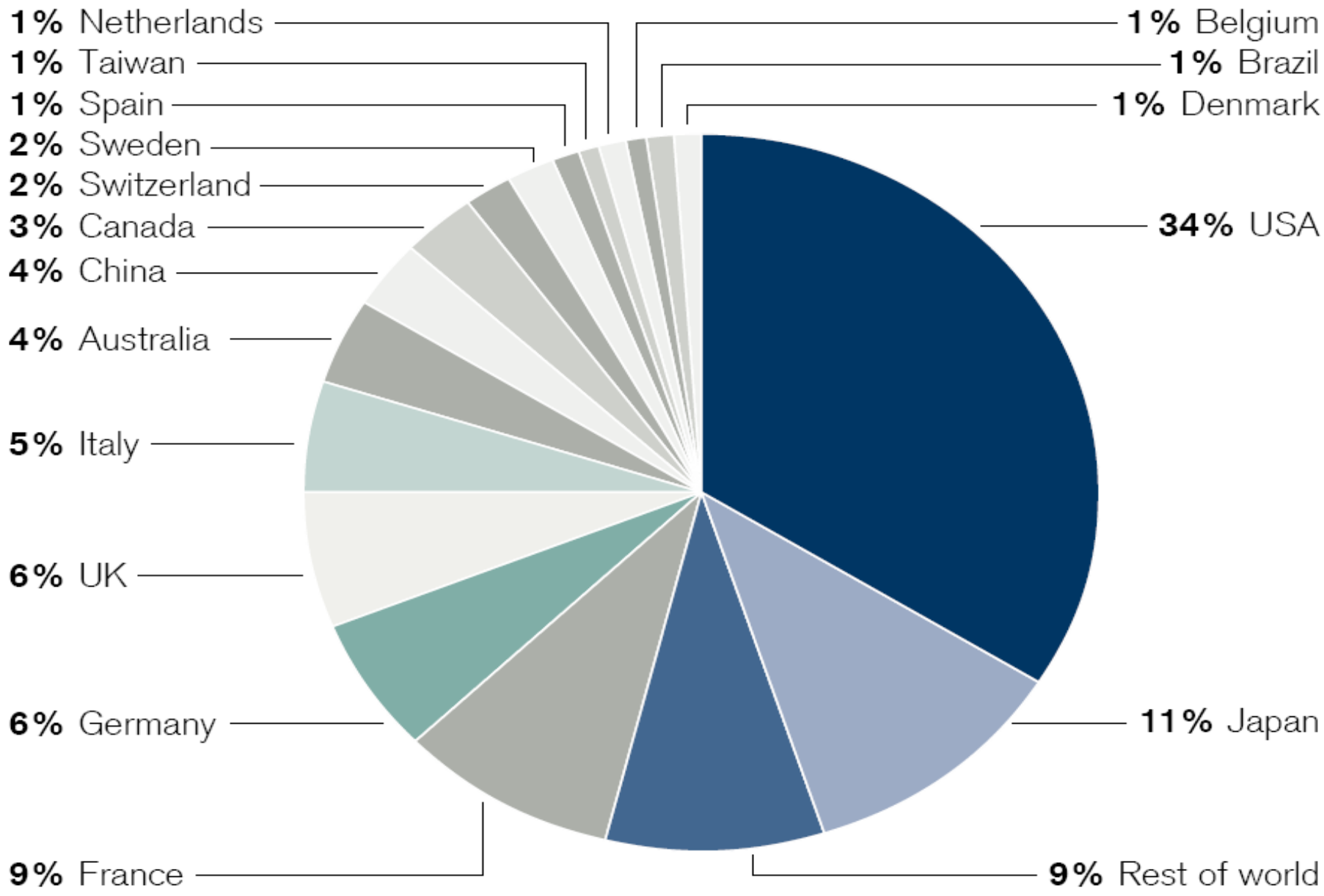
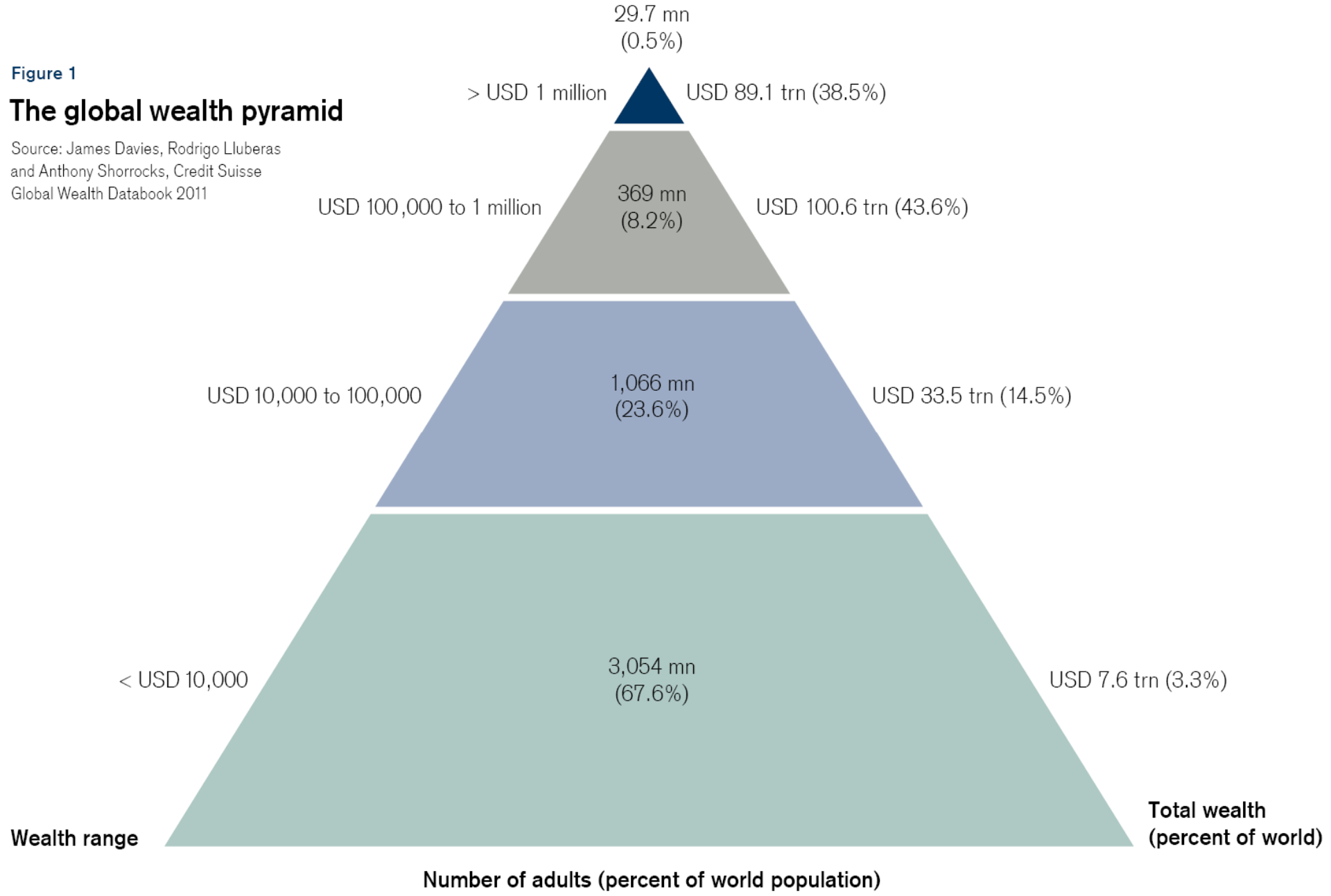


Figure 1

The global wealth pyramid

Source: James Davies, Rodrigo Lluberas and Anthony Shorrocks, Credit Suisse Global Wealth Databook 2011

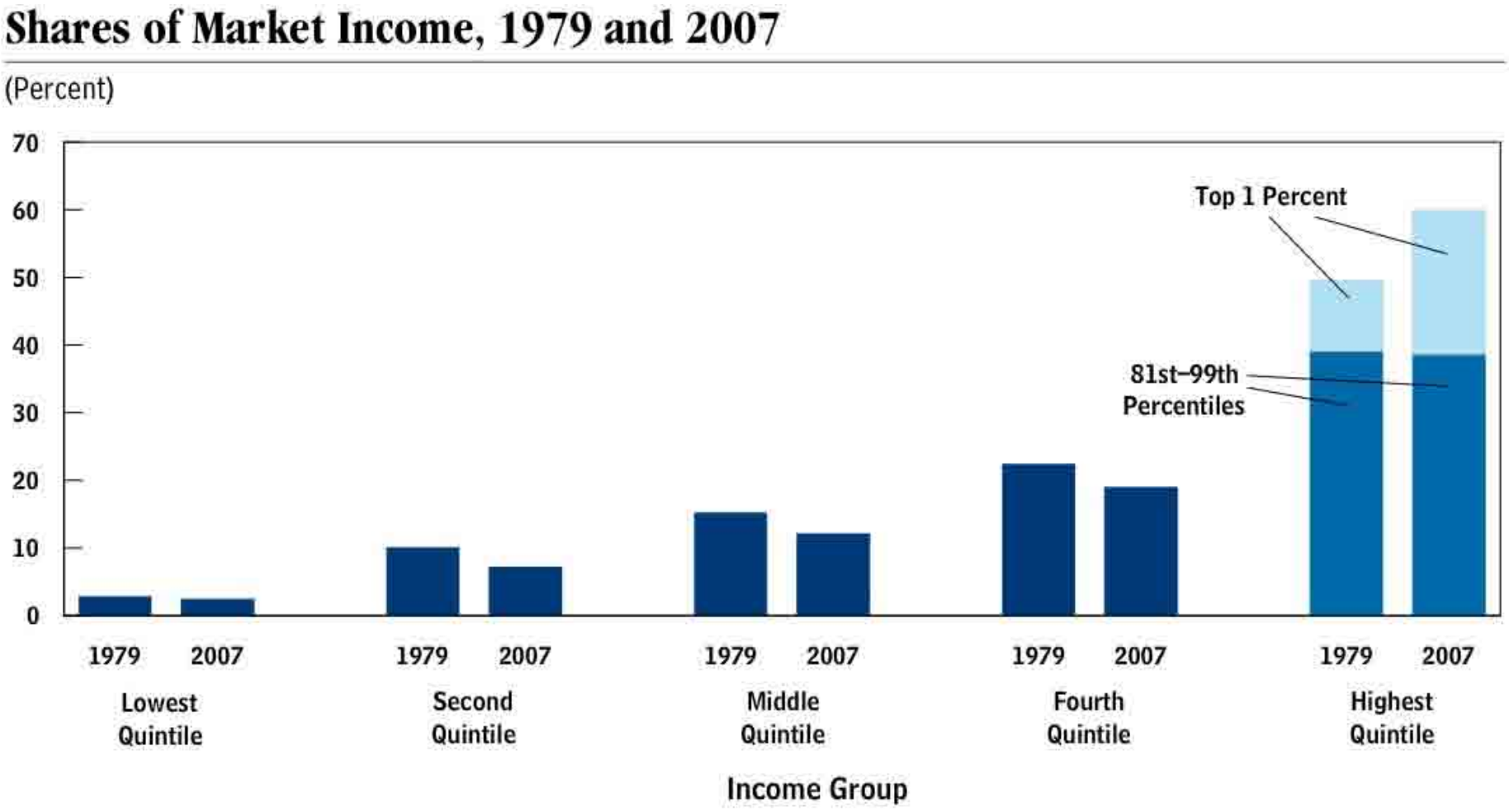


World Bank: Compilation of National Wealth

Country	*National wealth (USD, trillion)*	*National wealth (local currency, trillion)*	*Population(million)*	*Current exchange rate (per USD)*	*per capita wealth(USD)*	*Year*
United States (households only)	57.4	57.4	312	-	$184,000	2011-Q4
Japan	35.22	2,712	127.9	77	$275,377	2009
Germany (fixed assets only)	18.04	13.56	81.8	1.33	$220,474 (fixed)	2011
France	16.11	12.115	62	1.33	$259,886	2009
United Kingdom	11.39	7.3	62.3	1.56	$182,825	2010-Q4
Australia	8.655	8.089(total) /6.0 (household)	22.7	1.07	$381,277(total)/$ 282,819(Household)	Jun-2011
South Korea	6.185	7,385	48.6	1194	$127,263	2009
Canada	6.0	6.4	34.5	1.06	$173,913	2011-Q2
Russia	5.61	179.6 (calculated)	145	32	$38,709	2005
Taiwan	4.23	130.2	23	30.8	$183,794	2009
Switzerland	4.2	4.59 (calculated)	6.5	1.09	$648,200	2005
Singapore (household only)	0.997	1.247	5.1	1.25	$195,490	2011-3Q

1% vs 99%
(Wealth Inequality)

US: 1% vs 99%



Source: Congressional Budget Office.

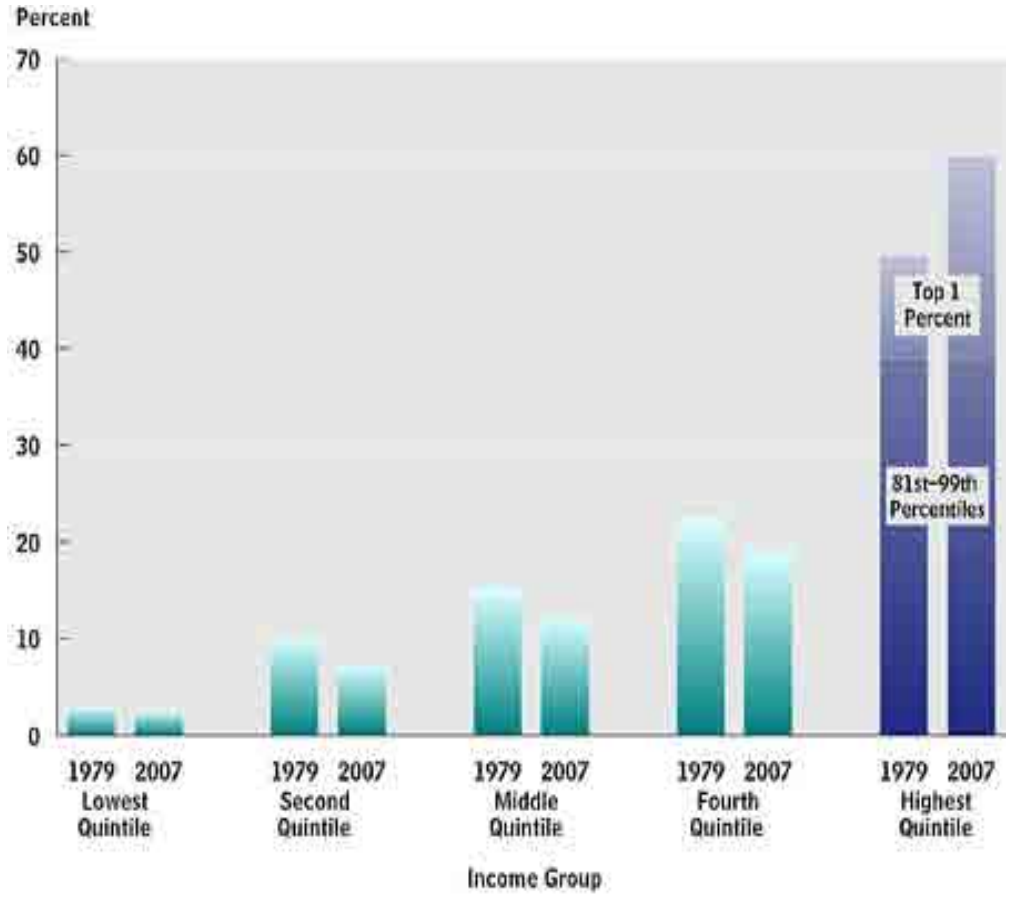
Note: For information on income definitions, the ranking of households, the allocation of taxes, and the construction of inequality indexes, see "Notes and Definitions" at the beginning of this study.

http://cboblog.cbo.gov/?p=2909

US: between 1979 and 2007

- For the 1 percent of the population with the highest income, average real after-tax household income grew by 275 percent.
- For others in the 20 percent of the population with the highest income, average real after-tax household income grew by 65 percent.
- For the 60 percent of the population in the middle of the income scale, the growth in average real after-tax household income was just under 40 percent.
- For the 20 percent of the population with the lowest income, the growth in average real after-tax household income was about 18 percent.

Market Income Shifted Toward Higher-Income Households



- The major reason for the growing unevenness in the distribution of after-tax income was an increase in the concentration of market income—income measured before government transfers and taxes—in favor of higher-income households. Specifically, over the 1979 to 2007 period, the highest income quintile's share of market income increased from 50 percent to 60 percent, while the share of market income for every other quintile declined. In fact, the distribution of market income became more unequal almost continuously between 1979 and 2007 except during the recessions in 1990–1991 and 2001.

1% vs 99%: EU vs US

- Despite the trend towards higher inequality, the EU region still has less inequality than most other regions of the world
- Inequality in the US is generally higher than in Western Europe
- Inequality in the UK and continental Europe is higher than in the Nordic economies
- The Nordic economies are generally considered as being the most successful economies in the world in terms of achieving equity with growth
- Inequality in the European Emerging economies varies considerably

Long-run Trend in Inequality

- Over the last two decades inequality has been increasing throughout much of the world
- This has been true in the three regions of the EU – North America, Western Europe and the European Emerging Economies of East, Central, and Southeast Europe, the Caucasus, and Central Asia
- This has been due to changes in technology, globalization and government policy
- Inequality has several dimensions including: the overall income distribution, by gender, ethnic groups, by geographical regions, and intergenerational
- Although inequality has increased, in the EU the poorest have been generally protected

Government Policy and Equity

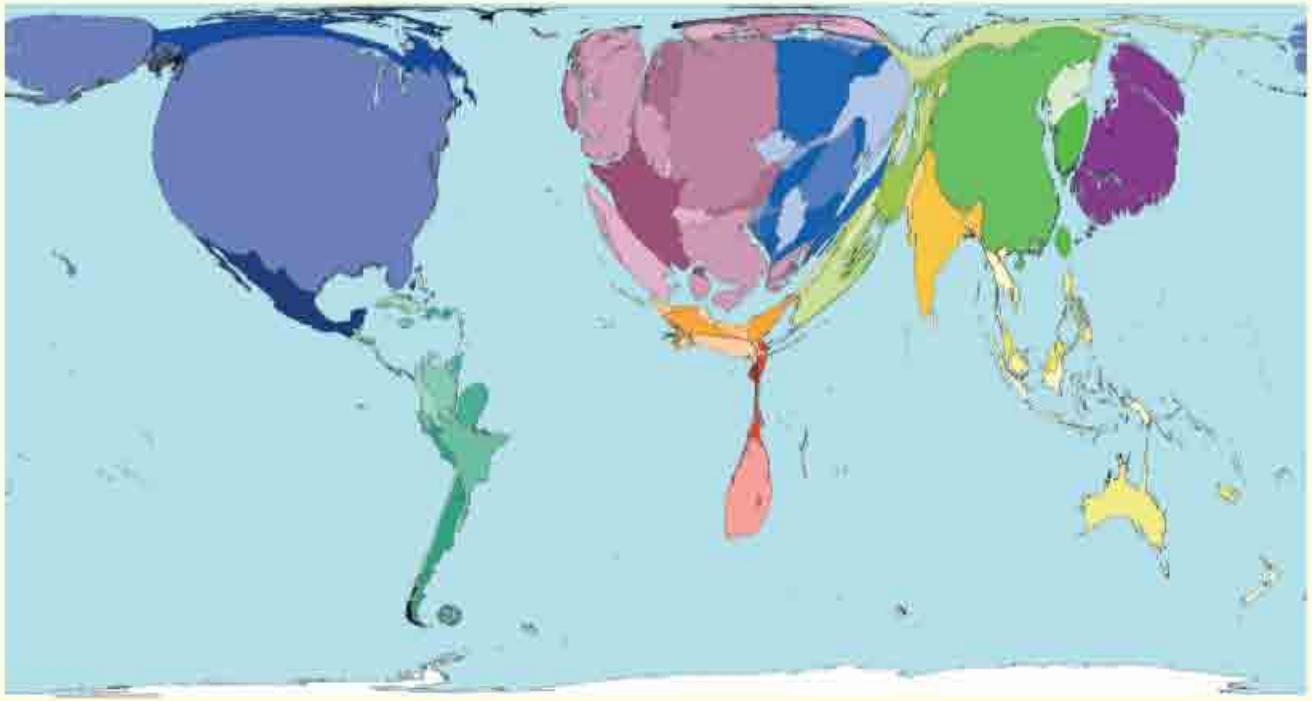
- There are two competing social models in the EU
- A “free market or American” model which emphasizes equality of opportunity, market provision of services, limited labor market regulation, and a safety net limited to the poorest
- A “European or social” model which emphasizes social cohesion, equality of outcomes, universal provision of health, education and other public services, labor market regulation, and generous social transfers
- Over the last two decades there has been a move from the European model to the American model under the belief that this will promote faster economic growth
- How successful this transition has been in terms of increasing growth is debatable, but it has resulted in a general increase in inequality

Wealth Q’s and A’s

- Is there a limit on wealth growth?
- Which nation can sustain a continuous growth of wealth?
- Global policy to even out disparity!
- 1% vs 99% sustainable?
- QE effect on wealth!

Pollution

Carbon Emission 1980



In 1980 there were 16 billion tonnes of carbon dioxide emissions made worldwide; emissions in 1980 were 70% of the carbon emitted in 2000.

In 1980 the most carbon dioxide emissions came from the United States, China and Germany. Emissions per person from the United States were 14 times greater than those from China. Emissions depend on levels and type of industrialisation, types of transport and fossil fuel usage. Per person the most polluting territories emit 1000 times more carbon dioxide than the least polluting. Although emissions have increased greatly over years between 1980 and 2000, the distribution of emissions remains similar.

Territory size shows the proportion of carbon dioxide emissions in 1980 that were directly from there.

Land area

Technical notes
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *The denominator used is population in 2002, to allow comparison of change.
- See website for further information.

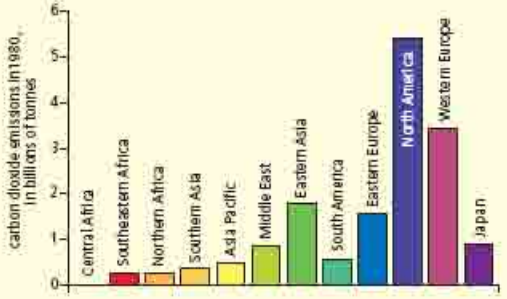
MOST AND LEAST CARBON EMISSIONS IN 1980

Rank	Territory	Value
1	Luxembourg	28.9
2	Bahamas	27.3
3	Brunei Darussalam	25.5
4	Qatar	23.0
5	United States	16.3
6	Canada	15.4
7	Germany	13.1
8	Belgium	12.8
9	Trinidad & Tobago	12.4
10	Denmark	11.7

Rank	Territory	Value
191	Uganda	0.050
192	Comoros	0.050
193	Niger	0.049
194	Burundi	0.031
195	Central African Republic	0.031
196	Bhutan	0.031
197	Nepal	0.030
198	Cambodia	0.029
199	Chad	0.028
200	Ethiopia	0.027

*tonnes of carbon emitted in 1980 per person living in that territory**

CARBON DIOXIDE EMISSIONS IN 1980

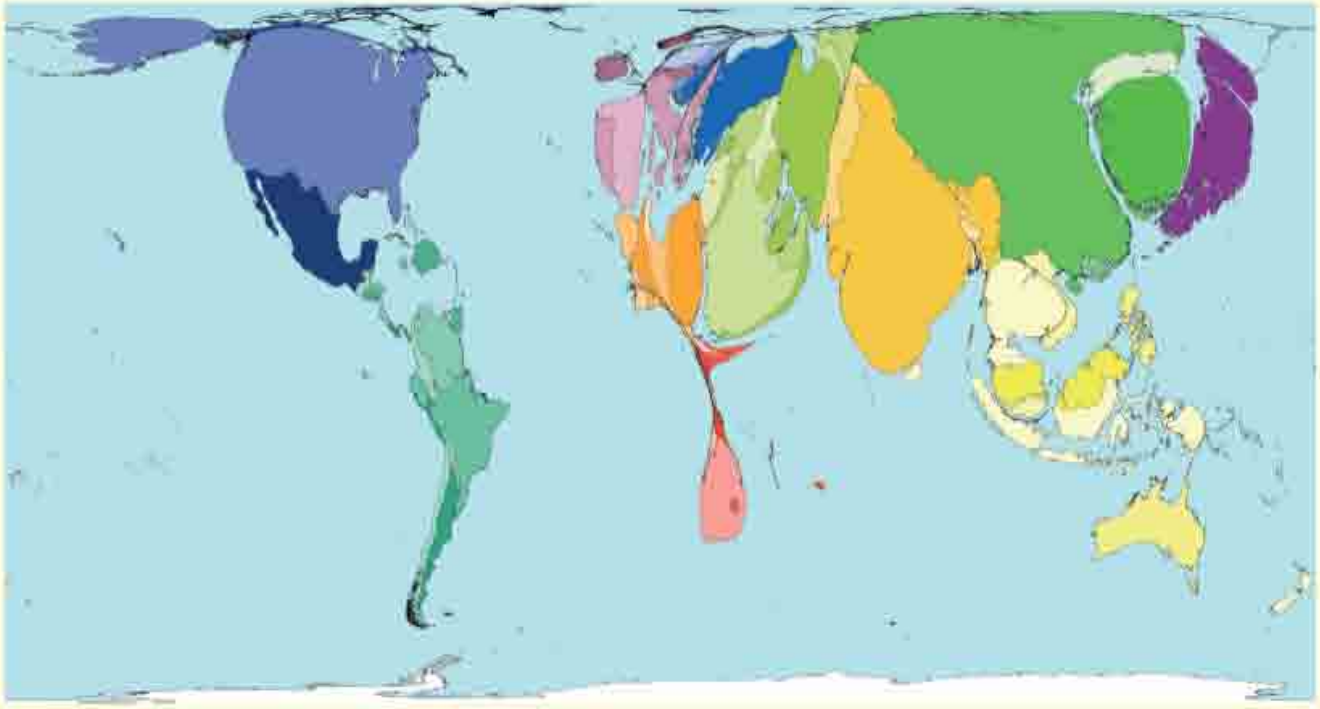


"... the world need[s] to differentiate between the survival emissions of the poor and luxury emissions of [the] rich."

Sunita Narain, 2002

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Carbon Emissions Increase



Between 1980 and 2000, 72% of territories increased their emissions of carbon dioxide, totalling 6.6 billion tonnes a year. Other territories reduced their emissions by 1.9 billion tonnes a year.

The biggest increases in carbon dioxide emissions over this period were in China, the United States and India. 42% of the world population live in these 3 territories, they caused 45% of the world increases. The per person increase in emissions from the United States was over 3 times larger than China's, and over 4 times India's.

The largest increases in carbon dioxide emissions per person living there were in Qatar, then Bahrain.

Territory size shows the proportion of all territory level increases in carbon dioxide emissions between 1980 and 2000, that occurred there.

Land area

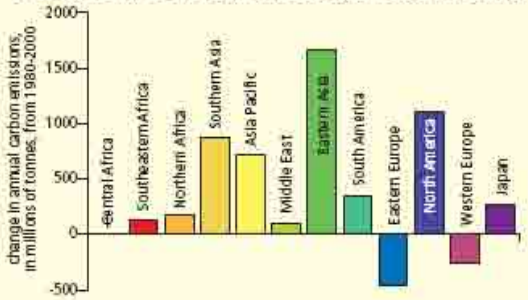
Technical notes
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *The denominator used is population in 2002, so that the change shown is simply in emissions.
- See website for further information.

HIGHEST INCREASES IN CARBON DIOXIDE EMISSIONS

Rank	Territory	Value
1	Qatar	41.1
2	Bahrain	15.6
3	Kuwait	11.7
4	Saudi Arabia	11.2
5	United Arab Emirates	10.1
6	Trinidad & Tobago	7.7
7	Australia	7.1
8	Singapore	6.4
9	Republic of Korea	6.3
10	Israel	6.3
11	Libyan Arab Jamahiriya	5.7
12	Oman	5.4
13	Malta	4.9
14	Malaysia	4.7
15	Ireland	4.6
16	Cyprus	4.2
17	Greece	3.8
18	New Zealand	3.4
19	Turkmenistan	3.4
20	Portugal	3.3

*increase in carbon emitted between 1980 to 2000, in tonnes per person per year**

CHANGE IN CARBON EMISSIONS 1980 TO 2000

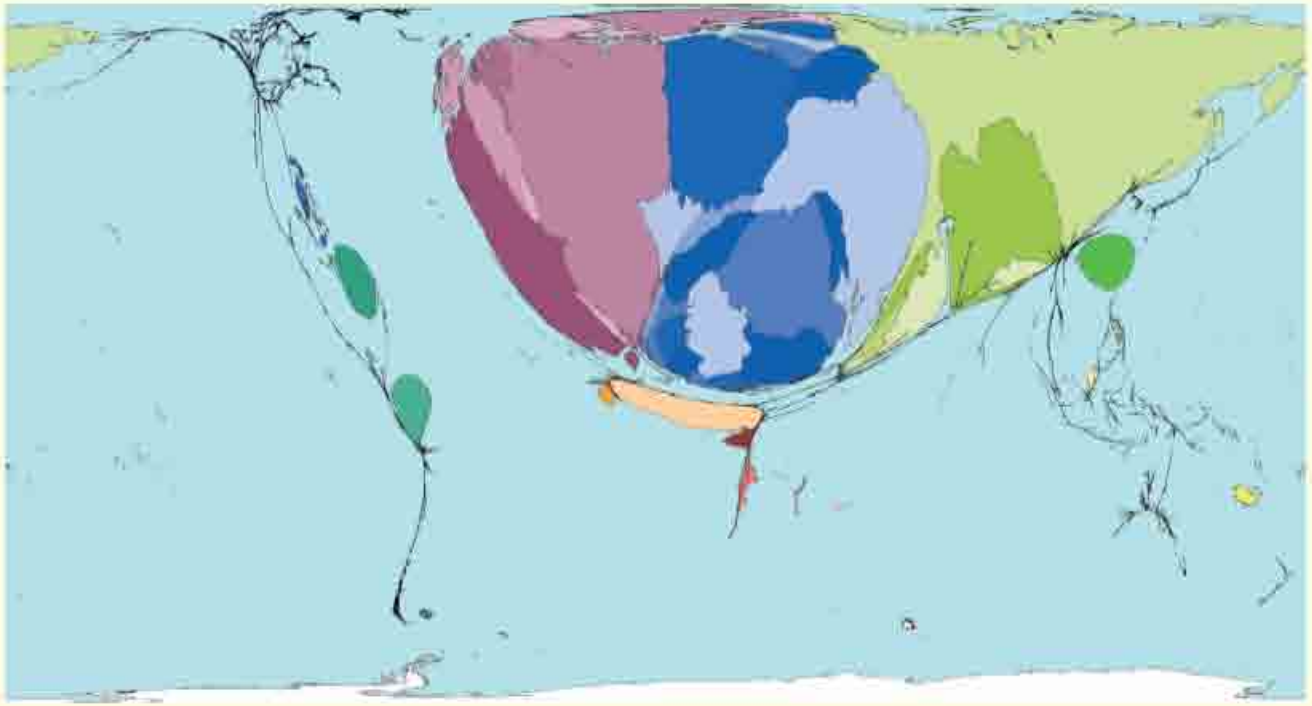


"... emissions of carbon dioxide – the most important cause of climate change – continue to rise in many parts of the world ..."

Michel Jarraud, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Carbon Emissions Decrease



Between 1980 and 2000, roughly 58 territories decreased their annual carbon dioxide emissions. Together these territories reduced annual emissions by 1.9 billion tonnes; carbon emission increases from other territories were 3.5 times greater than this decrease.

Almost half of the decrease was in territories formerly in the Union of Soviet Socialist Republics, followed by Germany at 15%, Poland at 8%, and France at 6%. Decline in industrial production and factory closure contributed to some decreases. Nevertheless, the Russian Federation emitted the third largest quantity of carbon dioxide in 2000.

Territory size shows the proportion of all territory level decreases in carbon dioxide emissions between 1980 and 2000, that occurred there.

Land area

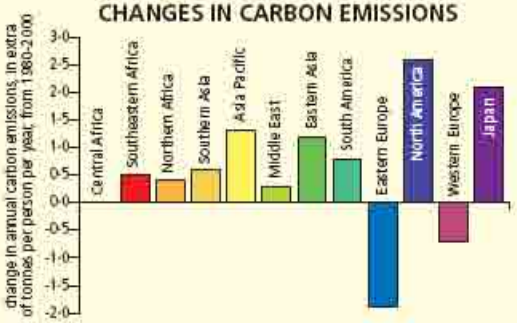
Technical notes
- Data are from the United Nations Development Programme's 2004 Human Development Report.
- *The denominator used is population in 2002, so that change shown is simply emissions.
- See website for further information.

LARGEST DECREASES IN CARBON EMISSIONS

Rank	Territory	Value
1	Bahamas	21.6
2	Luxembourg	9.5
3	Kazakhstan	7.7
4	Estonia	6.7
5	Puerto Rico	4.6
6	Brunei Darussalam	4.5
7	Romania	4.4
8	Serbia & Montenegro	4.3
9	Ukraine	3.9
10	Bulgaria	3.9
11	Poland	3.8
12	Germany	3.5
13	Denmark	3.4
14	Russian Federation	3.3
15	Azerbaijan	3.3
16	Belgium	2.8
17	Republic of Moldova	2.8
18	Sweden	2.8
19	Belarus	2.7
20	Lithuania	2.7

*decrease in carbon emissions from 1980 to 2000, in tonnes per person in 2002**

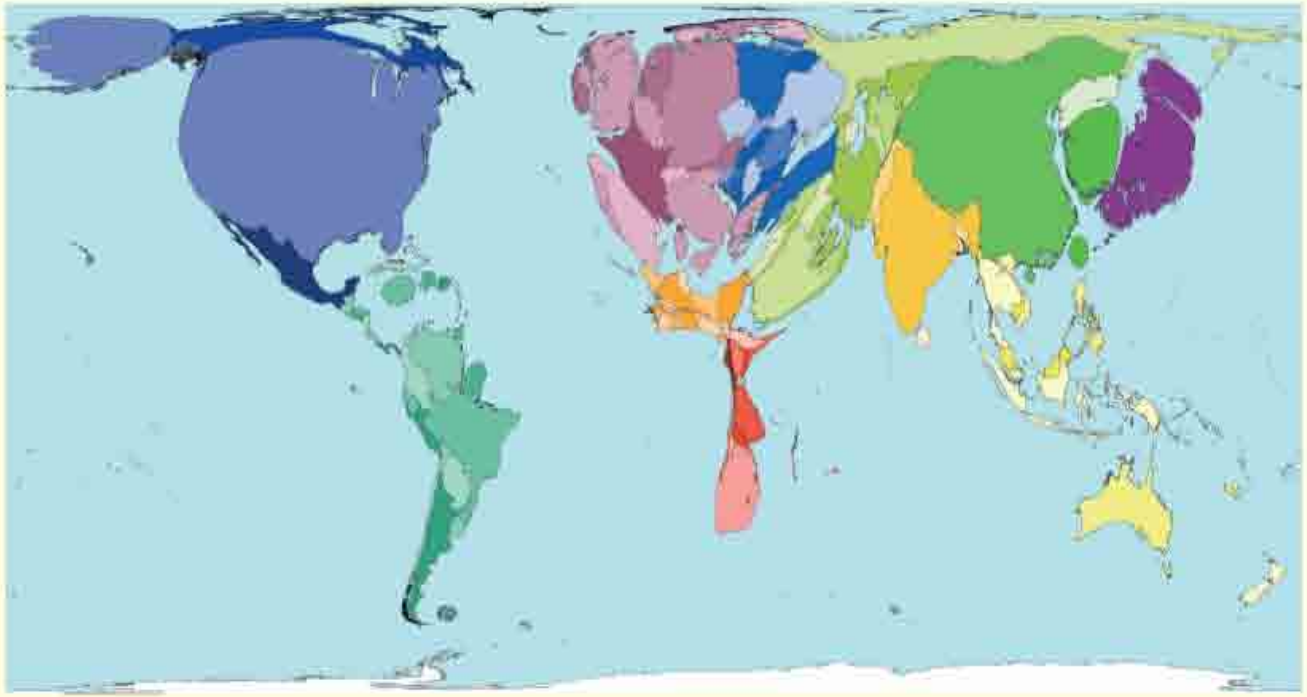
CHANGES IN CARBON EMISSIONS



"... we don't think really about what's going to happen 20 years from now ..." Mirjam Lablans, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Greenhouse Gases



Greenhouse gases trap heat in the earth's atmosphere, causing it to warm up. The greenhouse gases shown here are carbon dioxide, methane and nitrous oxide. These gases account for 98% of the greenhouse effect. Other greenhouse gases, not shown here, are various fluorocarbons and sulphur hexafluoride.

The territories that emit the most greenhouse gases are the United States, China, the Russian Federation and Japan. However, the most emissions per person are in Qatar: equivalent to 86 tonnes of carbon dioxide per year. Qatar has significant oil and gas reserves, and in 2002 was populated by 600,000 people.

Territory size shows the proportion, by their global warming potential, of all greenhouse gas emissions that come from there.

Land area

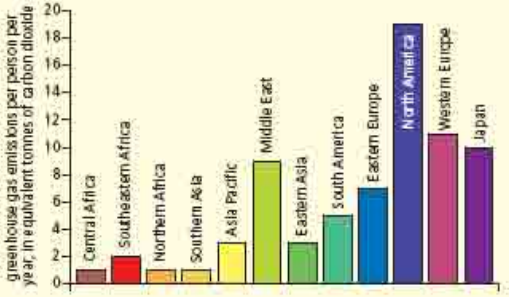
Technical notes
- Data are from the United Nations Statistics Division, 2005.
- *Greenhouse gases measured in equivalent tonnes of carbon dioxide based on global warming potential. Niue recorded as 0 in source data.
- See website for further information.

MOST AND LEAST GREENHOUSE GAS EMISSIONS

Rank	Territory	Value	Rank	Territory	Value
1	Qatar	86	191	Mozambique	0.18
2	Jamaica	45	192	Eritrea	0.18
3	Bahrain	37	193	Madagascar	0.18
4	Kuwait	27	194	United Republic Tanzania	0.18
5	Luxembourg	27	195	Liberia	0.16
6	Australia	27	196	Sierra Leone	0.12
7	Brunei Darussalam	26	197	Nepal	0.11
8	Paraguay	25	198	Afghanistan	0.05
9	United Arab Emirates	25	199	Marshall Islands	0.05
10	United States	23	200	Niue	0.00

*tonnes of greenhouse gases emitted per person per year in 2002**

GREENHOUSE GAS EMISSIONS

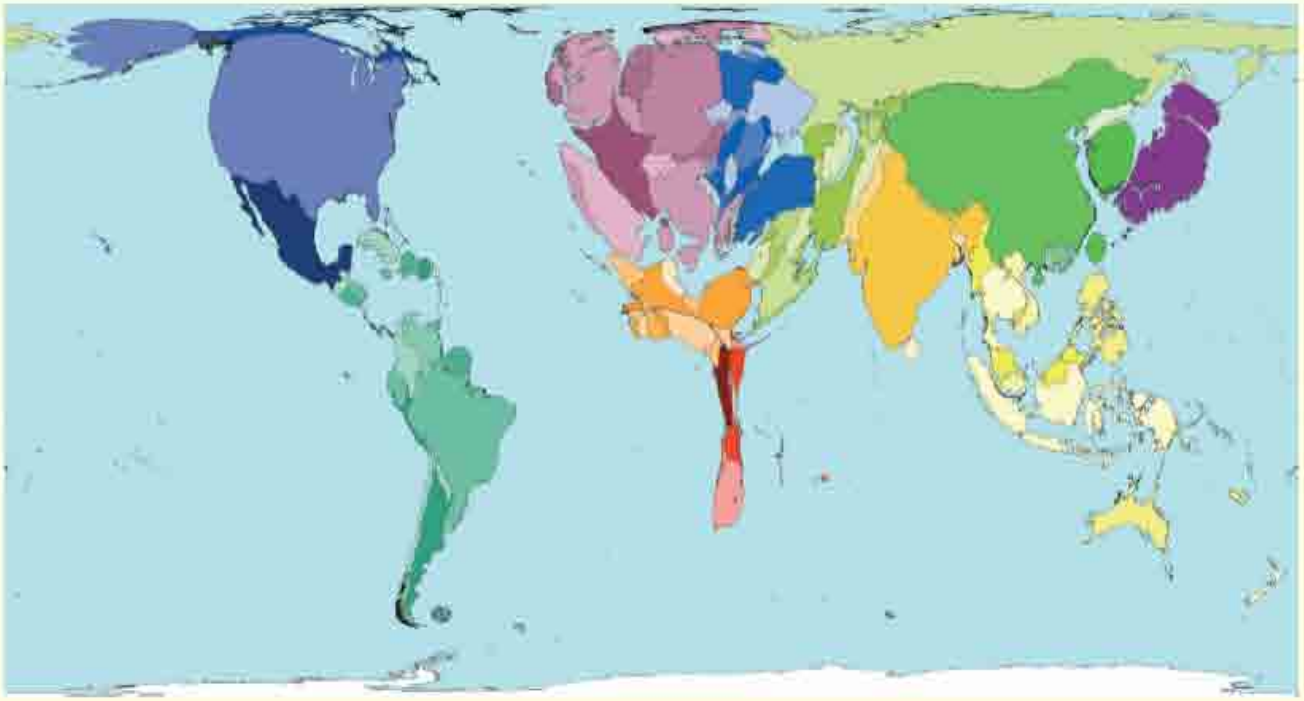


"Now during high tides, the water comes right across the ground, where the houses are, and it never happened before ..."

Elia Tauita, 2002

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Waste Generated



This map shows waste collected from homes, schools and businesses. This waste takes the forms of packaging, paper, organic waste, and bulky waste such as fridges and matresses. The most waste is produced in China, where the biggest population lives. The most waste produced per person is generated in the Russian Federation.

Very small amounts of waste are generated per person in Madagascar, Burkina Faso, Nepal and Costa Rica. In Nepal, and most other territories in the world, it is much more common to reuse containers than in richer territories. Containers in rich territories are often treated as single-use items. What is defined as waste, and thus disposed of, varies internationally.

Territory size shows the proportion of all municipal waste generated worldwide that is generated there.

Land area

Technical notes

- Data are from the United Nations Statistics Division, 2005.
- ** 128 territories do not report data and their estimated municipal waste is not shown in the table.
- China is large due to the large urban population; exact figures are unknown.
- See website for further information.

HIGH AND LOW GENERATION OF MUNICIPAL WASTE

Rank	Territory	Value
1	Russian Federation	1439
2	Monaco	1176
3	Georgia	1058
4	Singapore	1048
5	Azerbaijan	928
6	Hong Kong (China)	771
7	Luxembourg	735
8	United States	715
9	Iceland	697
10	Norway	680

Rank	Territory	Value
126	Colombia	171
129	Morocco	156
130	Benin	149
137	Panama	131
158	Bolivia	77
166	Peru	54
189	Costa Rica	17
191	Nepal	17
195	Burkina Faso	10
196	Madagascar	9

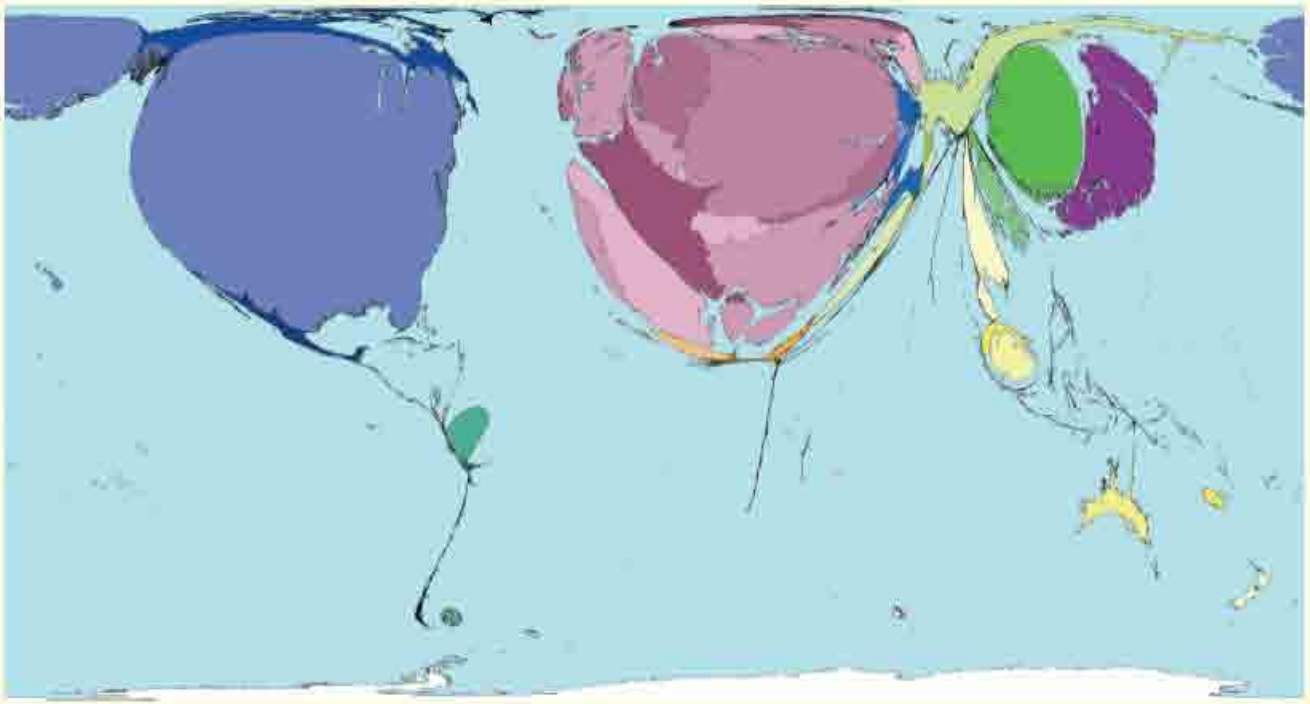
*kilogrammes of municipal waste generated per person living in that territory per year, in 2002**

MUNICIPAL WASTE GENERATED

"How many of us feel happy about the amount of plastic and packaging we ram into bins? We produce a ludicrous amount of waste ... It is completely crazy, a gross waste of the planet's resources ..." Jackie Ashley, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Waste Recycled



Worldwide, in 2002, 6.6% of municipal waste produced was recycled. Recycling means reusing 'waste' in the production process. 'Waste' implies that something is useless, but recycling implies that it is still useful.

Those territories where much waste is recycled are mainly in North America, Western Europe, but also include Japan and the Republic of Korea. Despite this, the non-recycled waste of Western Europe and North America is still more than the waste produced by people in 7 other regions.

Recycling is currently seen as desirable. However, not creating waste by using less packaging and more reusing, would reduce the need to recycle.

Territory size shows the proportion of all municipal waste that is recycled, that is recycled there.

Land area

Technical notes
- Data are from the United Nations Statistics Division, 2005.
- *161 territories which probably had no, or negligible, waste recycling.
- See website for further information

MOST RECYCLING OF WASTE

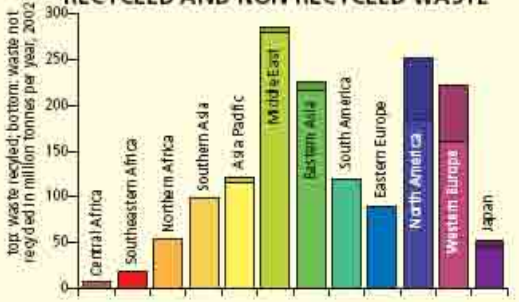
Rank	Territory	Value
1	Singapore	433
2	Hong Kong (China)	280
3	Netherlands	279
4	Norway	264
5	Germany	247
6	Denmark	230
7	United States	212
8	Luxembourg	201
9	Israel	184
10	Switzerland	180

*kilogrammes of waste recycled per person per year**

Rank	Territory	Value
1	Netherlands	45.2
2	Republic of Korea	44.0
3	Germany	41.7
4	Singapore	41.3
5	Norway	38.8
6	Sweden	38.7
7	Hong Kong (China)	36.3
8	Denmark	34.6
9	Canada	32.2
10	Israel	30.8

percentage of municipal waste recycled, 2002

RECYCLED AND NON-RECYCLED WASTE



"One of the great challenges of our time is to collectively agree on what is waste and what are second-hand products - this question extends to end-of-life ships as much as to electronic goods ..." Achim Steiner, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Nuclear Waste

Around 8910 tonnes of heavy metal nuclear waste are generated each year. This waste mainly comes from nuclear power stations. Three territories produce over 1000 tonnes a year: the United States, Canada and France. Canada also produces the most waste per person living there, although Sweden is not far behind.

Some islands in the Southern hemisphere with notable areas are: New Caledonia, the Islas Malvinas / Falkland Islands, South Georgia, and Reunion. On these maps they are assigned to France and the United Kingdom, and resized according to their combined data. Little or no nuclear waste is from these islands.

Territory size shows the proportion of all heavy metal nuclear waste produced by nuclear power stations worldwide that is produced there.

Land area

Technical notes

- Data are from the United Nations Environment Programme, 2005. Data refer to 2001. Where data is missing in the primary source, we have used electricity generated from nuclear power as a proxy (see Worldmapper dataset 114).
- *Heavy metal nuclear waste shown is limited to that generated by nuclear power stations.
- See website for further information.

HIGHEST GENERATION OF NUCLEAR WASTE

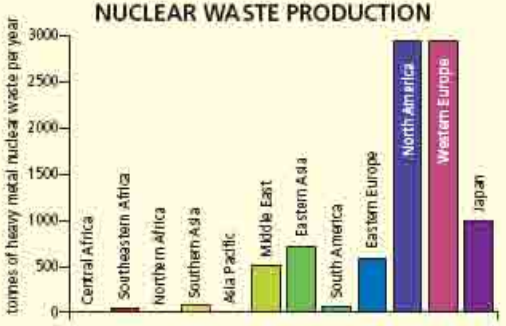
Rank	Territory	Value
1	Canada	42
2	Sweden	35
3	France	19
4	Lithuania	14
5	Belgium	14
6	Finland	14
7	Republic of Korea	13
8	United Kingdom	11
9	Slovakia	11
10	Slovenia	10

*grammes of nuclear waste per person living there**

Rank	Territory	Value
1	United States	1630
2	Canada	1300
3	France	1146
4	Japan	998
5	United Kingdom	650
6	Republic of Korea	634
7	Germany	420
8	Sweden	310
9	Belgium	144
10	Spain	136

*tonnes of nuclear waste generated**

NUCLEAR WASTE PRODUCTION

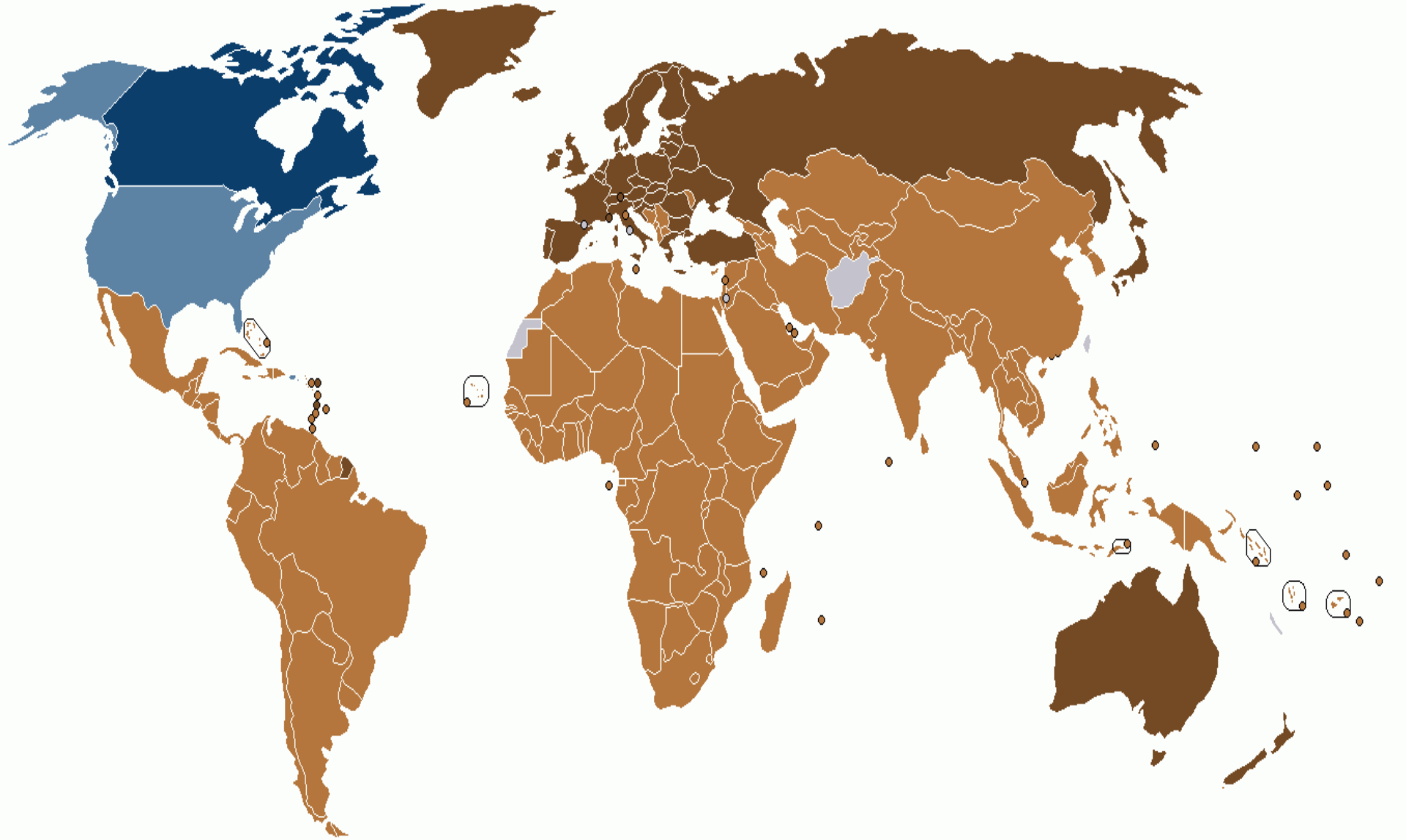


"... we have a 50-year history in this country of not finding any long-term management option for very high-level, relatively dangerous radioactive waste."

Gordon McKerron, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Participation in the Kyoto Protocol, as of December 2011: Brown = Countries that have signed and ratified the treaty (Annex I & II countries in dark brown); Blue = No intention to ratify at this stage (United Nations Framework Convention on Climate Change, 2011) . Dark blue = Canada,

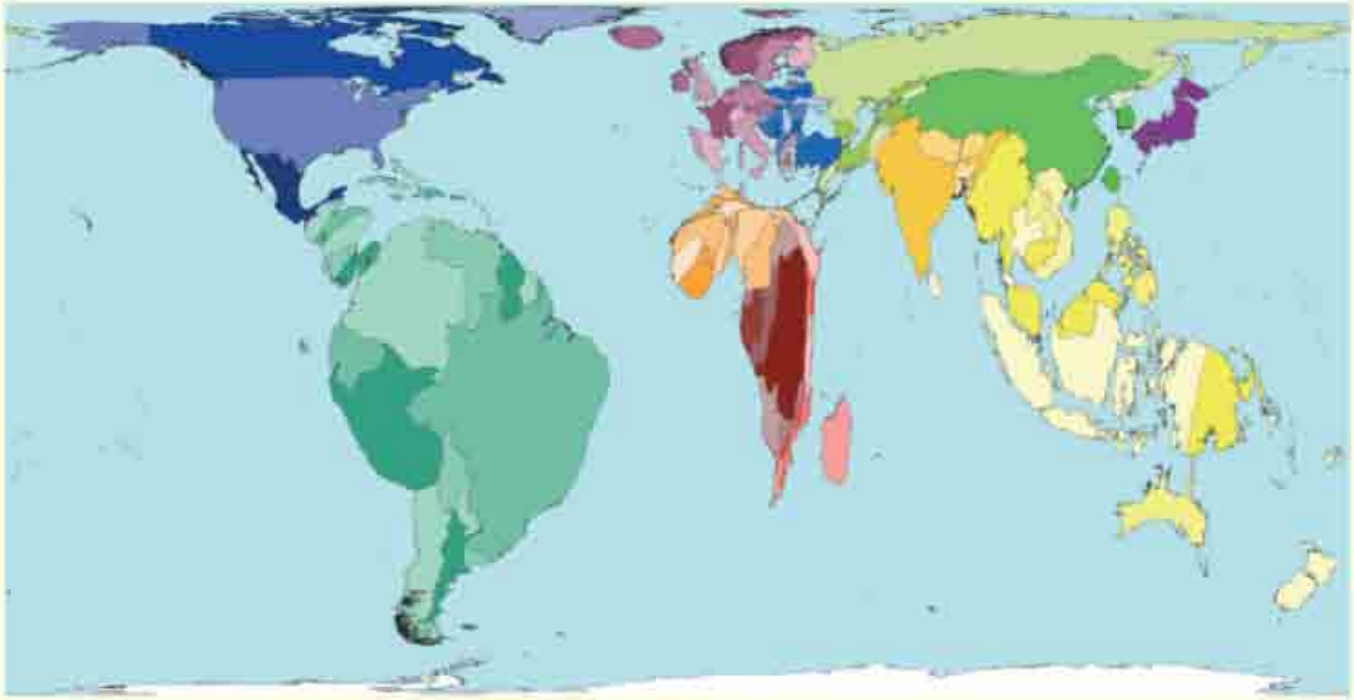


Pollution Summary

- Creation is charged by value in our world, but pollution is going to be charged by Earth’s standard.
- Kyoto protocol --- reality, what’s next!
- How to cope with global warming and climate changing!
- How to recycle and reuse waste!

Resources

Water Resources



Water resources here include only freshwater, because saline (sea) water requires treatment before most uses.

Only 43 600 cublic kilometres of freshwater is available as a resource each year, despite more than twice this amount falling as precipitation (rain and snow). Much is lost through evaporation. Those countries with higher rainfall often have larger water resources. Of all the water available, the regions of South America and Asia Pacific have the most.

People living in Kuwait use sea water that is processed at a desalination plant. As such Kuwait has no area on this map because there are no freshwater resources there.

Territory size shows the proportion of all worldwide freshwater resources found there.

Land area

Technical notes
- These data are from the United Nations Environment Programme.
- Only freshwater resources are shown here.
- *Kuwait had no recorded freshwater resources.
- See website for further information.

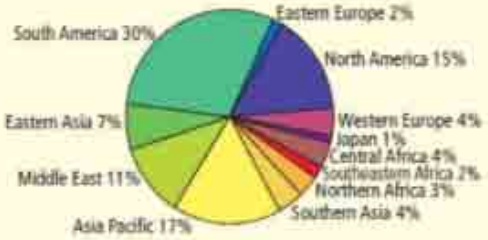
MOST AND LEAST WATER RESOURCES

Rank	Territory	Value
1	Sao Tome and Principe	227
2	Sierra Leone	223
3	Costa Rica	220
4	Liberia	208
5	Colombia	203
6	Bhutan	202
7	Panama	198
8	Taiwan	186
9	Papua New Guinea	177
10	Malaysia	177

Rank	Territory	Value
190	Qatar	0.46
191	Oman	0.32
192	Turkmenistan	0.29
193	Niger	0.28
194	Bahamas	0.20
195	Egypt	0.18
196	United Arab Emirates	0.18
197	Saudi Arabia	0.11
198	Mauritania	0.04
199	Libyan Arab Jamahiriya	0.03

*centimetres of water per year (cubic centimetres of water volume per square centimetre of land area)**

WORLD WATER RESOURCE DISTRIBUTION

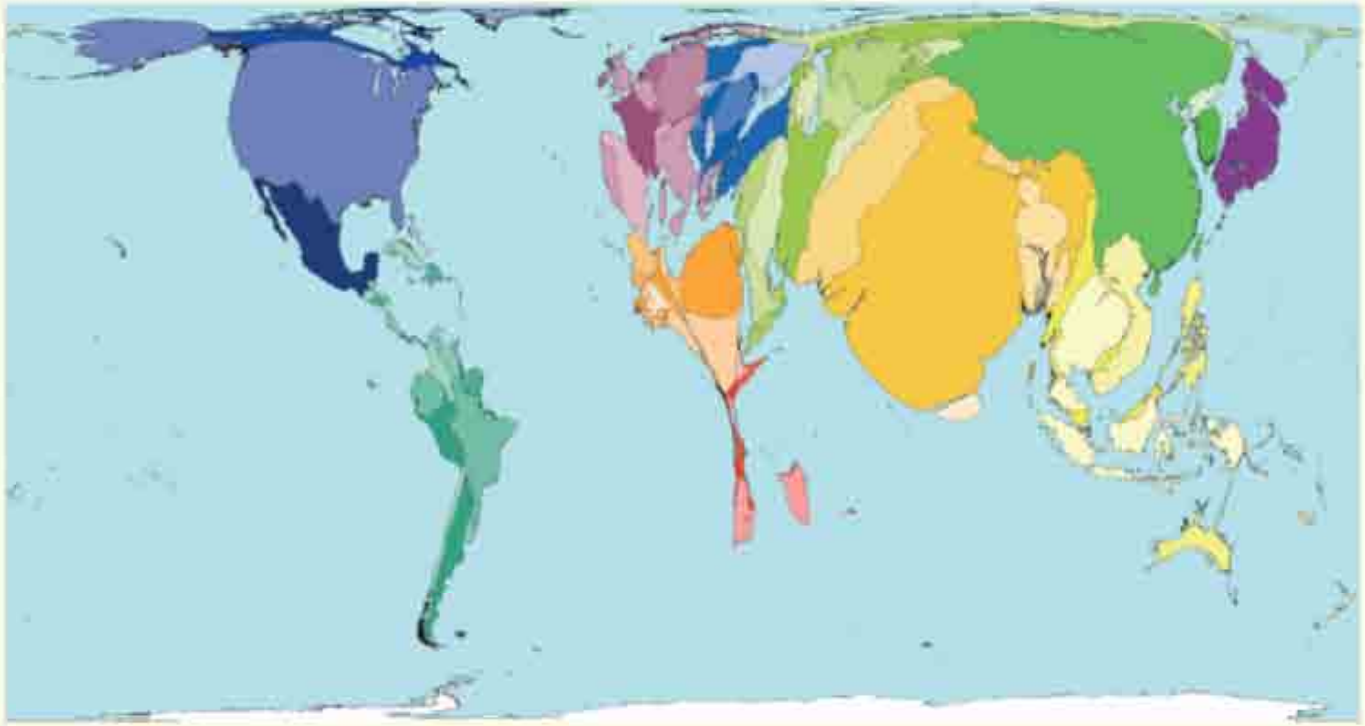


"The Amazonian basin, where ten of the twenty largest rivers in the world are to be found ... represents one fifth of the entire fresh water reserves of the planet."
Brazilian Government's Ministry of External Affairs, 2002

level, relatively dangerous radioactive waste."
Gordon McKerron, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Water Use



Four thousand cubic kilometres of water are used by people each year around the world, for domestic, agricultural and other industrial purposes. This does not include non-consumptive uses such as energy generation, mining, and recreation.

China, India and the United States use the most water. These are also the territories where the most people live. But water use per person is about three times higher in the United States than it is in India and China.

Whilst everybody needs water, people use hugely varying quantities. On average, people living in Central Africa each use only 2% of the water used by each person living in North America.

Territory size shows the proportion of worldwide water use occuring there.

Land area

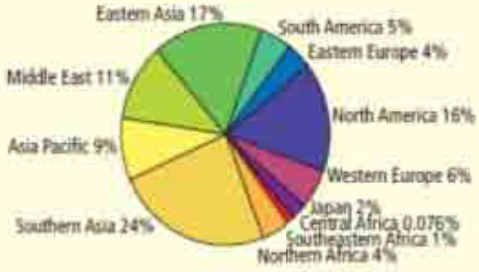
Technical notes
- Data are from the United Nations Environment Programme
- See website for further information

MOST AND LEAST WATER USAGE

Rank	Territory	Value	Rank	Territory	Value
1	Bangladesh	64	191	Djibouti	0.04
2	Bahrain	44	192	Namibia	0.03
3	Mauritius	31	194	Angola	0.03
4	Belgium	27	193	Mongolia	0.03
5	Japan	24	195	Botswana	0.03
6	Netherlands	24	196	Chad	0.02
7	Pakistan	23	197	Papua New Guinea	0.02
8	Maldives	23	198	Dem Republic Congo	0.02
9	Viet Nam	23	199	Congo	0.01
10	India	22	200	Central African Republic	<0.01

centimetres of water use per year (cubic centimetres of water volume per square centimetre of land area)

WORLD WATER USE

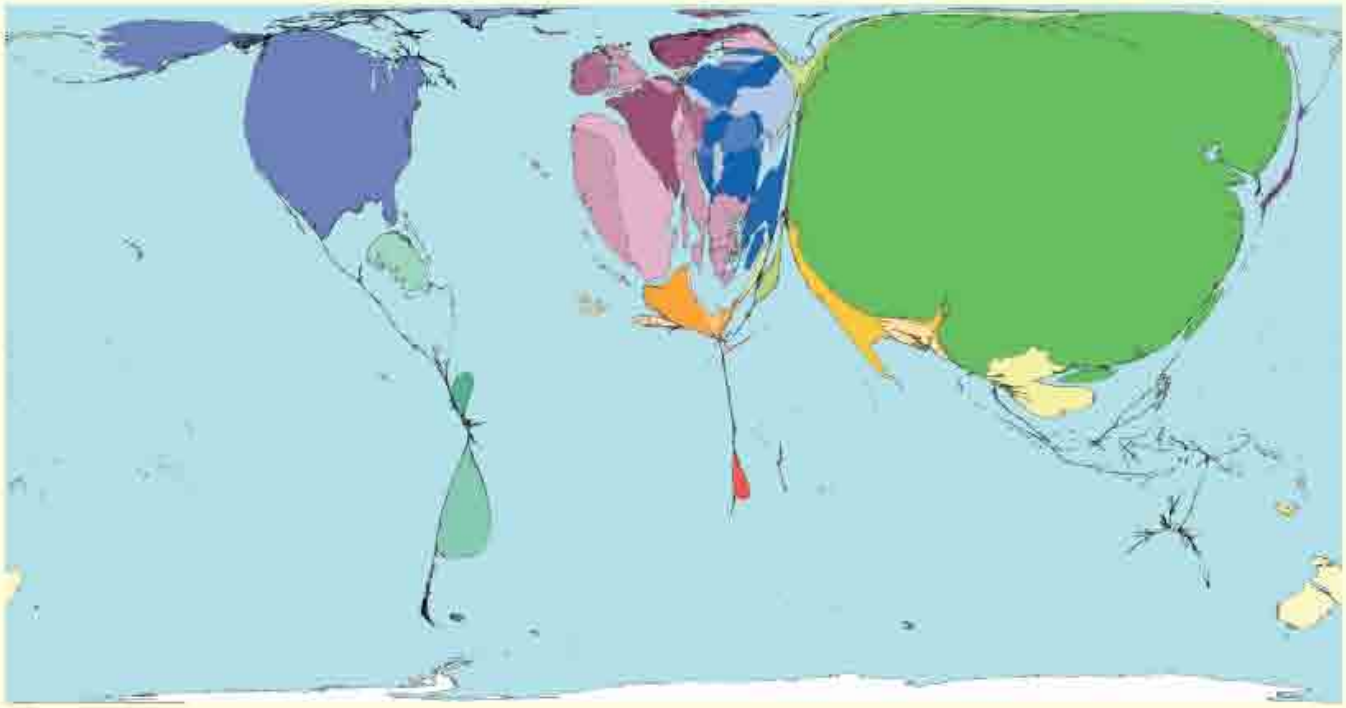


"... the right to water emanates from and is indispensable for an adequate standard of living as it is one of the most fundamental conditions for survival."

Céline Dubreuil, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Forest Growth



The territory with the most forest expansion between 1990 and 2000 was China, which gained 181 000 km^2 over the ten year period. China is also the territory with the largest population living there. The forest growth in the United States was the second largest increase, but this was only a fraction of the increase in China, at 39 000 km^2.

Unsurprisingly the most absolute forest growth has occurred in the large territories mentioned above. However the biggest increases in forest as a percentage of land area were in smaller territories such as Cape Verde, Liechtenstein and Portugal.

Worldwide there is net forest loss.

Territory size shows the proportion of worldwide net forest growth that occured there between 1990 and 2000.

Land area

Technical notes

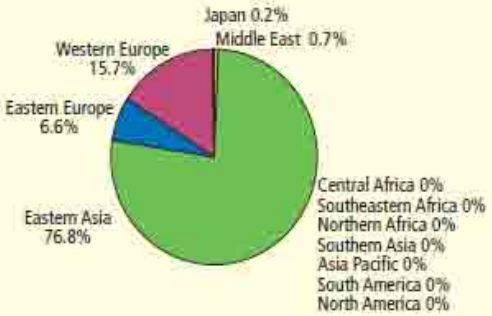
- Data are from the World Bank's World Development Indicators.
- Forest growth is the change in forest area between 1990 and 2000. Forest area is area under natural or planted stands of trees, whether productive or not.
- *Graph shows net forest growth in that region.
- **Hong Kong and Taiwan rank 15th, these were estimated values so are not shown in the table.
- See website for further information.

MOST FOREST GROWTH

Rank	Territory	Value	Rank	Territory	Value
1	Cape Verde	12.41	11	Israel	2.30
2	Liechtenstein	6.25	12	China	1.94
3	Portugal	6.23	13	Bulgaria	1.84
4	Cyprus	5.74	14	Spain	1.72
5	Gambia	4.50	17	Viet Nam	1.59
6	Swaziland	3.37	18	New Zealand	1.46
7	Uruguay	2.86	19	Bangladesh	1.27
8	Cuba	2.52	20	France	1.12
9	Ireland	2.47	21	Switzerland	1.09
10	Greece	2.33	22	Norway	1.01

*forest growth as percentage of land area***

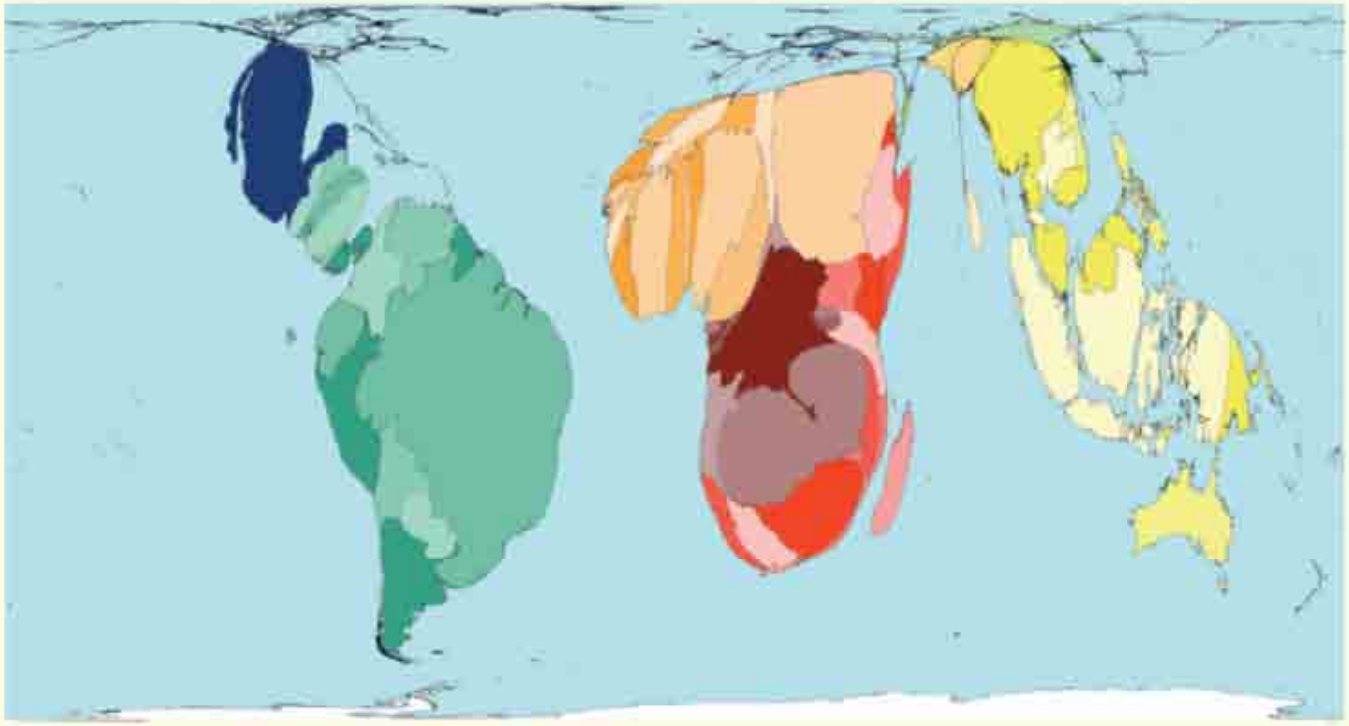
WORLD FOREST GROWTH DISTRIBUTION*



"One generation plants the trees; another gets the shade." Chinese proverb, date unknown

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Forest Loss



If the net forest loss of all territories between 1990 and 2000 is summed, 31% occurred in South America, and 21% was in Asia Pacific. Worldwide, territories with net forest loss lost 1.33 million km^2 of forest over this ten year period. Despite this, South America was the region with the largest forested area in the world in 2000. The more forest area there is, the more it is possible to lose.

Japan is unexceptional, having neither forest loss nor forest growth from 1990 to 2000.

The area of Africa covered by forest was reduced by 550 000 km^2 in the 1990s. This includes the loss of forests that covered 11.4% of Zambian land.

Territory size shows the proportion of worldwide net forest loss that occurred there between 1990 and 2000.

Land area

Technical notes

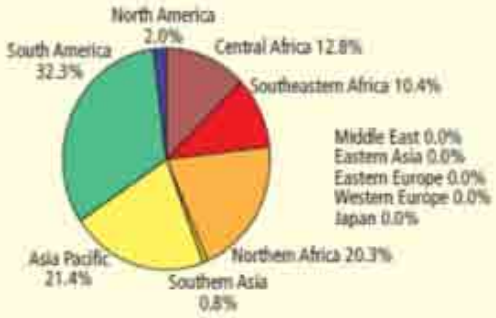
- Data are from the World Bank's World Development Indicators.
- Forest loss is the change in forest area between 1990 and 2000.
- Forest area is area under natural or planted stands of trees, whether productive or not.
- *The graph shows net forest loss in each region.
- See website for further information.

MOST FOREST LOSS

Rank	Territory	Value
1	Belize	15.6
2	Zambia	11.4
3	Nicaragua	9.7
4	Samoa	8.8
5	Cote d'Ivoire	8.3
6	Zimbabwe	8.3
7	Saint Lucia	8.2
8	Liberia	7.9
9	Myanmar	7.9
10	Guinea-Bissau	7.7
11	Malawi	7.5
12	Indonesia	7.2
13	Malaysia	7.2
14	Panama	7.0
15	Benin	6.3
16	Rwanda	6.1
17	Burundi	5.7
18	Nepal	5.5
19	Sri Lanka	5.4
20	Dominica	5.3

forest loss as a percentage of land area

WORLD FOREST LOSS DISTRIBUTION*

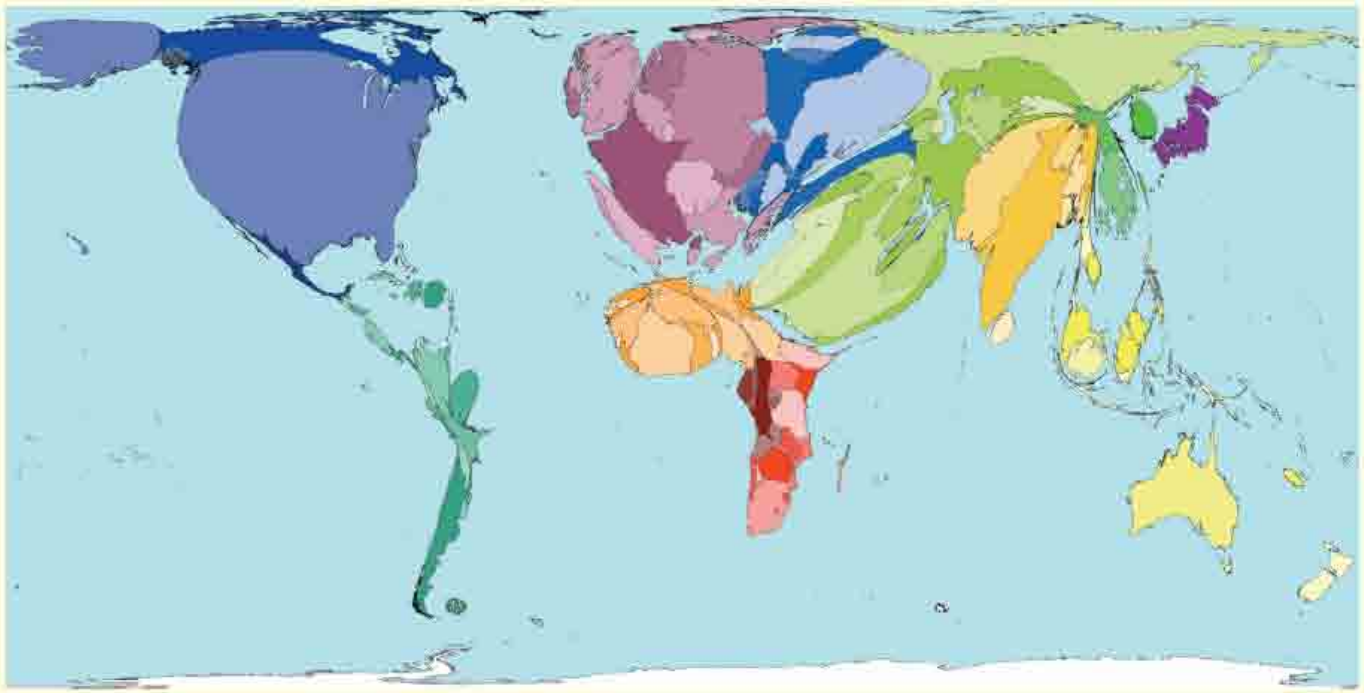


"Indonesia is blessed with some of the most extensive and biologically diverse tropical forests in the world. But the tragedy is that Indonesia has one of the highest rates of tropical forest loss in the world." E.G. Togu Manurung, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Movement

International Immigrant



Three percent of the world population in 2000 were born in a territory different to where they now live: one hundred and seventy-four million people have moved to a new territory.

The United States receives the highest number of international immigrants (people born in another territory and no longer resident there), however Andorra has highest proportion of immigrants living within its borders. Four out of every five people in Andorra are international immigrants.

In the Philippines and Guyana, territories experiencing some of the lowest immigration, only one person in every 500 is an international immigrant.

The territory size shows the number of international immigrants that live there.

Land area

Technical notes

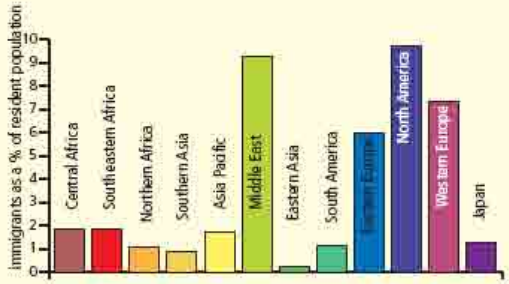
- Data source: World Bank, World Development Index, 2005
- Immigration data is from 2000.
- International migrants are people living outside the territory in which they were born, including refugees
- See website for further information

HIGHEST AND LOWEST LEVELS OF IMMIGRATION

Rank	Territory	Value	Rank	Territory	Value
1	Andorra	80	190	Myanmar	0.23
2	Qatar	68	192	Philippines	0.20
3	Monaco	68	193	Guyana	0.20
4	United Arab Emirates	66	194	Indonesia	0.18
5	Gaza Strip & West Bank	49	195	Peru	0.17
6	Kuwait	46	196	DPR Korea	0.16
7	Luxembourg	41	197	Afghanistan	0.16
8	Hong Kong (China)	39	198	Morocco	0.09
9	Jordan	37	199	China	0.04
10	Bahrain	36	200	Viet Nam	0.03

Immigrants as a % of resident population

IMMIGRANT POPULATIONS

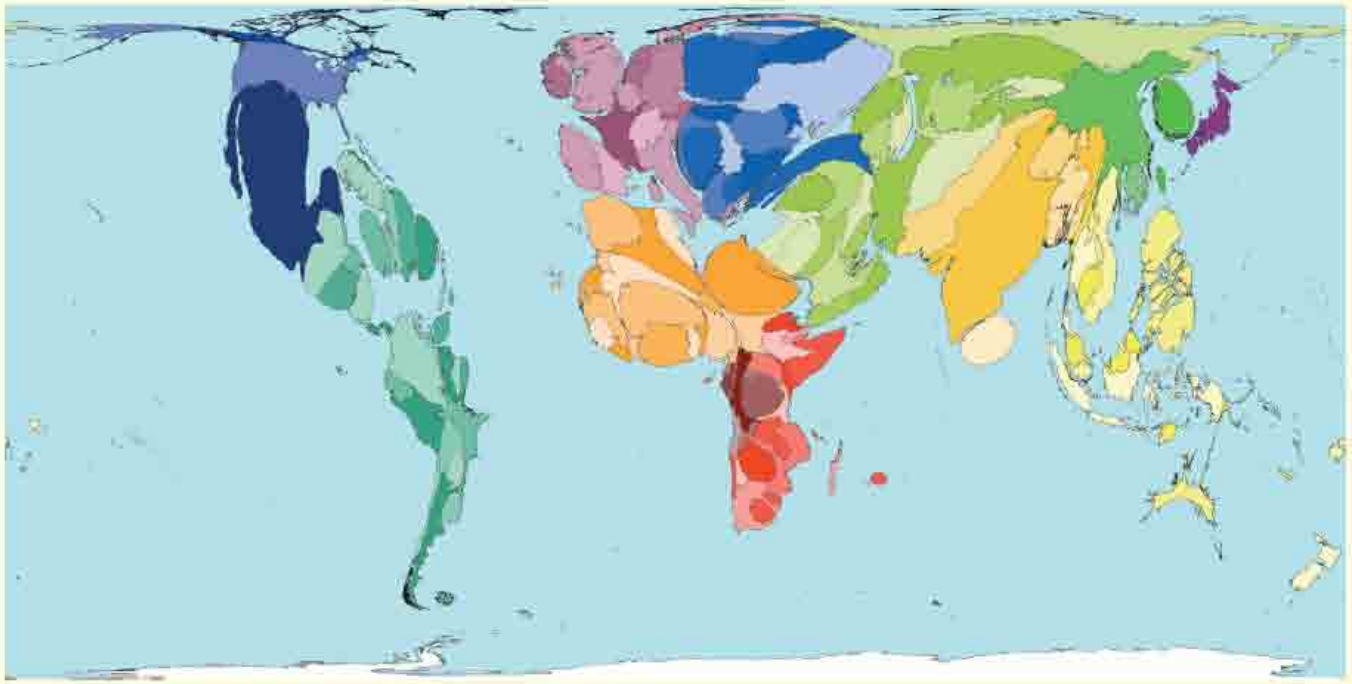


"I will do anything in Spain, any job at all. I don't intend to go back with empty pockets. I would look like less than an ant."

Simon Fortu, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

International Emigrant



This map shows the proportion of the world's international emigrants coming from each territory. The map indicates that emigrants' origins are not dominated by any single region.

Nevertheless variations exist. Regional averages for the percentage of the population that emigrate range from one percent of the population in Southern Asia, Eastern Asia and Japan, to eight percent in Eastern Europe and nine percent in the Middle East.

Land area

Technical notes
- Data source: World Bank. World Development Index, 2005
- International emigrants are people living outside the territory in which they were born, including refugees.
- See website for further information.

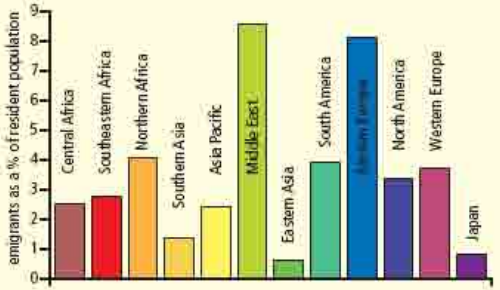
HIGHEST AND LOWEST LEVELS OF EMIGRATION

Rank	Territory	Value	Rank	Territory	Value
1	Andorra	76	191	Venezuela	0.64
2	Tonga	69	192	United Republic Tanzania	0.64
3	Saint Lucia	67	193	Taiwan	0.60
4	St Vincent & The Grenadines	66	194	Kenya	0.54
5	Monaco	65	195	Brazil	0.53
6	Gaza Strip & West Bank	60	196	Libyan Arab Jamahiriya	0.49
7	Samoa	55	197	China	0.43
8	Suriname	51	198	Bahamas	0.36
9	Guyana	50	199	Central African Republic	0.17
10	Jamaica	38	200	DPR Korea	0.16

emigrants as a % of resident population

Territory size shows the number of international emigrants originating there.

PERCENTAGE WHO EMIGRATE

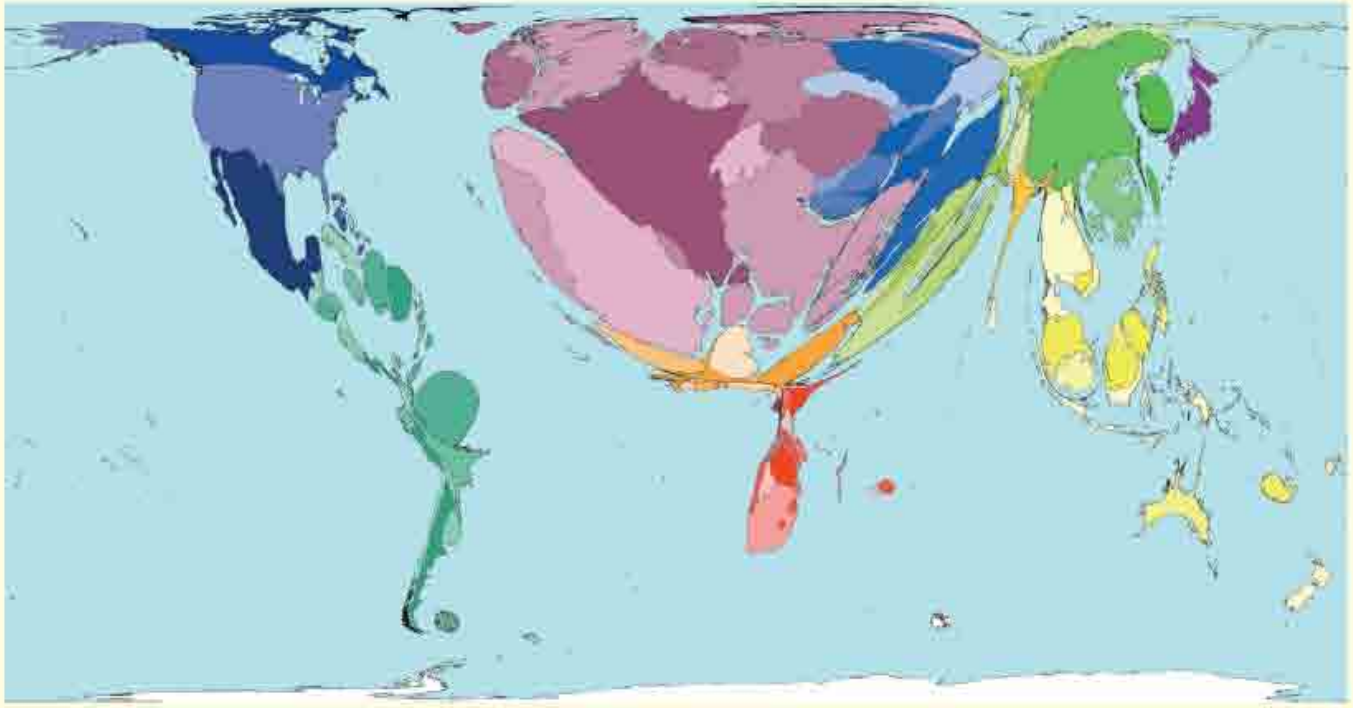


"I was determined to reach Europe or die trying. After everything I had gone through, I didn't care any more…"

Mamadou Saliou "Billy" Diallo, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Tourist Destinations



In 2003, 665 million international tourist trips were made. Dividing this by the world population would mean 10.7% holidayed abroad. However some people make multiple trips, so less than a tenth of the global population make tourist trips abroad.

Western Europe is the most popular destination for international tourists. The region receives 46% of world tourist trips. At the other extreme 0.1% of world tourist trips are made to Central African territories.

As a tourist destination Andorra receives 45 visits per person in the population, per year. The equivalent figures for Monaco and the Bahamas are 7 and 5, respectively.

Territory size shows the proportion of world international tourist trips to that territory.

Land area

Technical notes

- Data source: World Bank, World Development Indicators, 2005, table 6.14
- Here tourists are international overnight visitors.
- Graph shows total of territories' net in-tourist visits, not a regional figure.
- See website for further information.

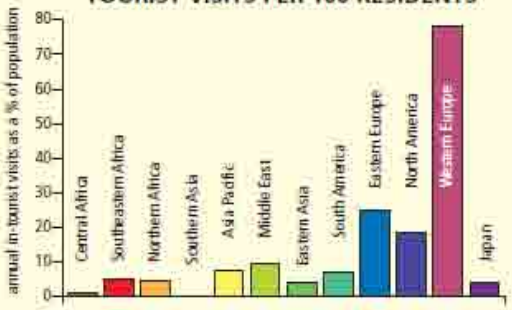
MOST AND FEWEST TOURISTS TO RESIDENTS

Rank	Territory	Value
1	Andorra	4548
2	Monaco	688
3	Bahamas	503
4	Bahrain	422
5	Palau	340
6	Cyprus	288
7	Malta	282
8	Brunei Darussalam	280
9	Saint Lucia	277
10	Iceland	257

Rank	Territory	Value
191	Pakistan	0.32
192	Bhutan	0.27
193	Central African Republic	0.26
194	Chad	0.25
195	India	0.23
196	Ethiopia	0.23
197	Sudan	0.16
198	Bangladesh	0.14
199	Democratic Republic of Congo	0.07
200	Tajikistan	0.06

annual in-tourist visits as a % of population

TOURIST VISITS PER 100 RESIDENTS



"Tourists are very fickle beasts, even the perception that a destination is risky will lead to a marked decrease in tourist traffic."

Howard Rosenzweig, 2003

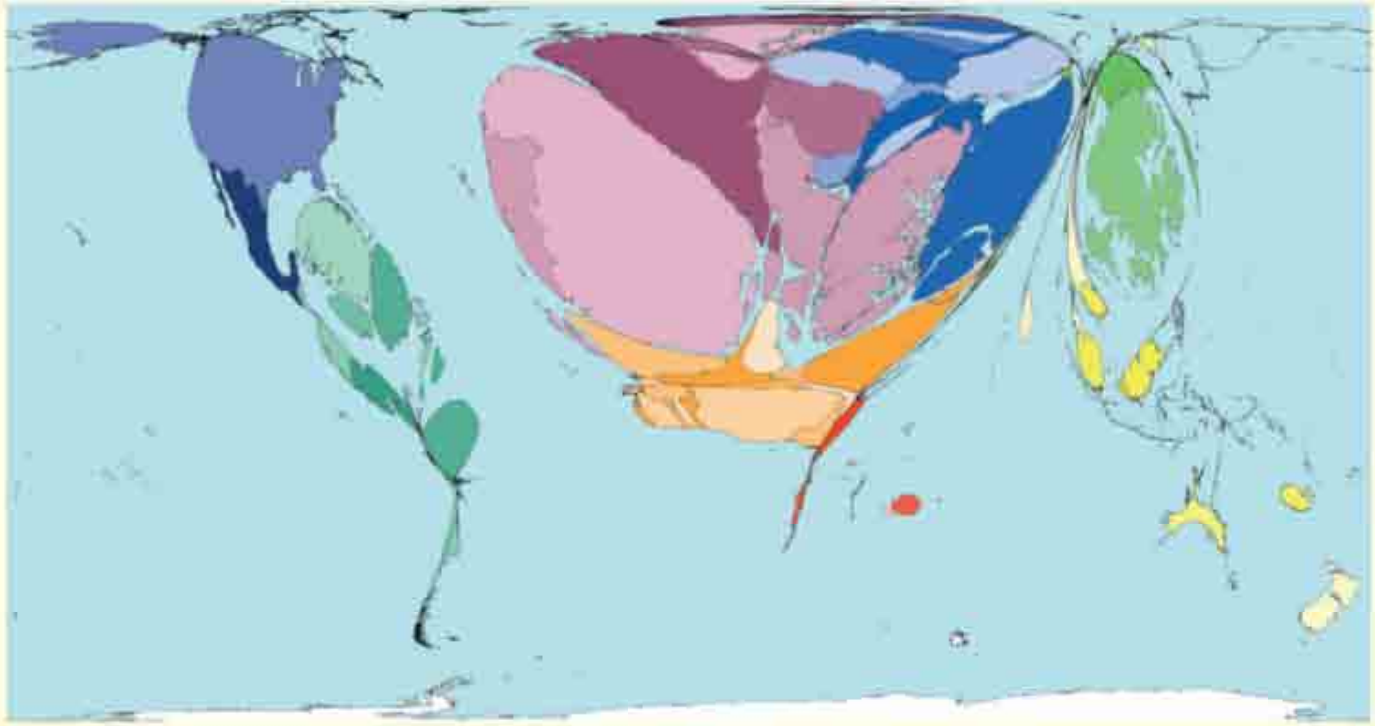
Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Movement Summary

- Immigrant can play a key part of nation growth power! --- fusion of culture and brain power
- Asia countries need policy to generate net immigration flow

Services

Transport and Travel Exports



Transport services are the movement of goods and people by air, sea and land. It is because transport services cost money that imports have higher values than exports worldwide - the transport costs are included in the import price.

Travel services mainly include the services and goods that are sold to tourists who visit a place. This might include a guided tour and some postcards. Exports are linked to tourist numbers, but also to the prices that tourists are charged.

Together, transport and travel services constitute 13.2% of all international exports of goods.

Territory size shows the proportion of worldwide net exports of transport and travel services (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net exports of transport and travel services recorded for 33 territories.
- Note that the regional average was used for 19 territories in Asia Pacific, 6 territories in Southeastern Asia, 4 territories in South America and 2 territories in East Asia.
- See website for further information.

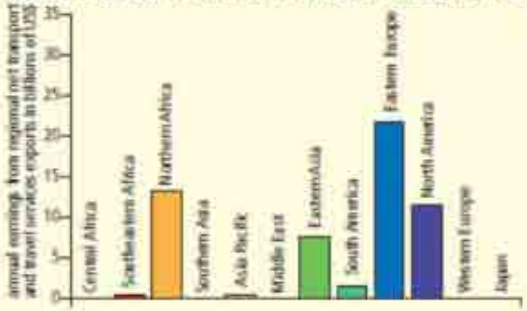
MOST AND LEAST US$ OF NET TRASNPORT AND TRAVEL EXPORTS

Rank	Territory	Value
1	Antigua & Barbuda	2606
2	Luxembourg	2163
3	Hong Kong (China)	1848
4	Cyprus	1837
5	Seychelles	1738
6	Saint Lucia	1530
7	Barbados	1415
8	Malta	1009
9	Greece	908
10	Maldives	834

Rank	Territory	Value
81	Bosnia Herzegovina	9.60
...	East Asia Average	5.45
84	Ghana	4.14
85	Albania	4.05
...	South America Average	3.49
90	Romania	3.04
91	Angola	3.01
92	Kyrgyzstan	1.83
...	Southeastern Africa Average	1.15
...	Asia Pacific Average	0.80

*US$ worth of travel and transport exports per person living in that territory**

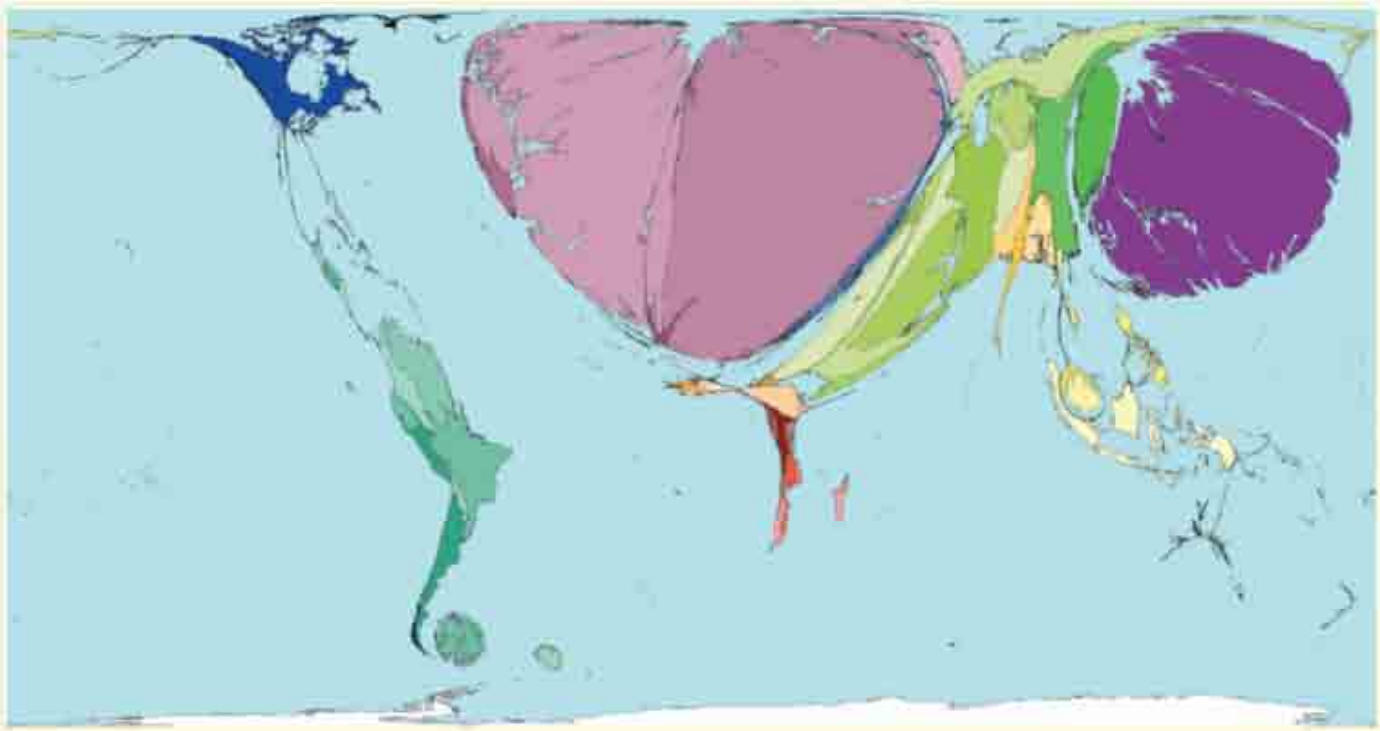
REGIONAL NET TRANSPORT AND TRAVEL EXPORTS



"Ranging from architecture to voice-mail telecommunications and to space transport, services are the largest and most dynamic component of both developed and developing country economies." World Trade Organisation, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Transport and Travel Imports



Japan and the Middle East are the regions with the highest net transport and travel imports. This is because, in total, people living in these regions spend more money than they earn on travelling and transporting goods, using services based in other regions. Japan is also the region with the highest per person imports at US$240. Most Western European transport and travel trade is 'cancelled out' because some territories are high importers whilst others are high exporters.

Kuwait is the territory with the highest imports of transport and travel services (US$ net) per person. This is three times as much as the second and third highest importers: the United Kingdom and Germany.

Territory size shows the proportion of worldwide net imports of transport and travel services (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net transport and travel services imports recorded for 117 territories.
- See website for further information.

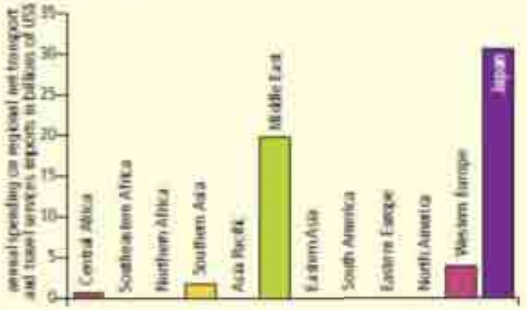
MOST AND LEAST US$ OF NET TRANSPORT AND TRAVEL IMPORTS

Rank	Territory	Value
1	Kuwait	1467
2	United Kingdom	482
3	Germany	477
4	Israel	370
5	Japan	240
6	Belgium	233
7	Singapore	228
8	Ireland	213
9	Finland	196
10	Croatia	171

Rank	Territory	Value
74	Burundi	4.44
75	Viet Nam	2.64
76	China	2.24
77	Azerbaijan	1.88
79	Nepal	1.20
78	Bhutan	1.20
80	Ethiopia	0.61
81	United Republic Tanzania	0.44
82	India	0.42
83	Republic of Moldova	0.28

*US$ worth of transport and travel imports per person living in that territory**

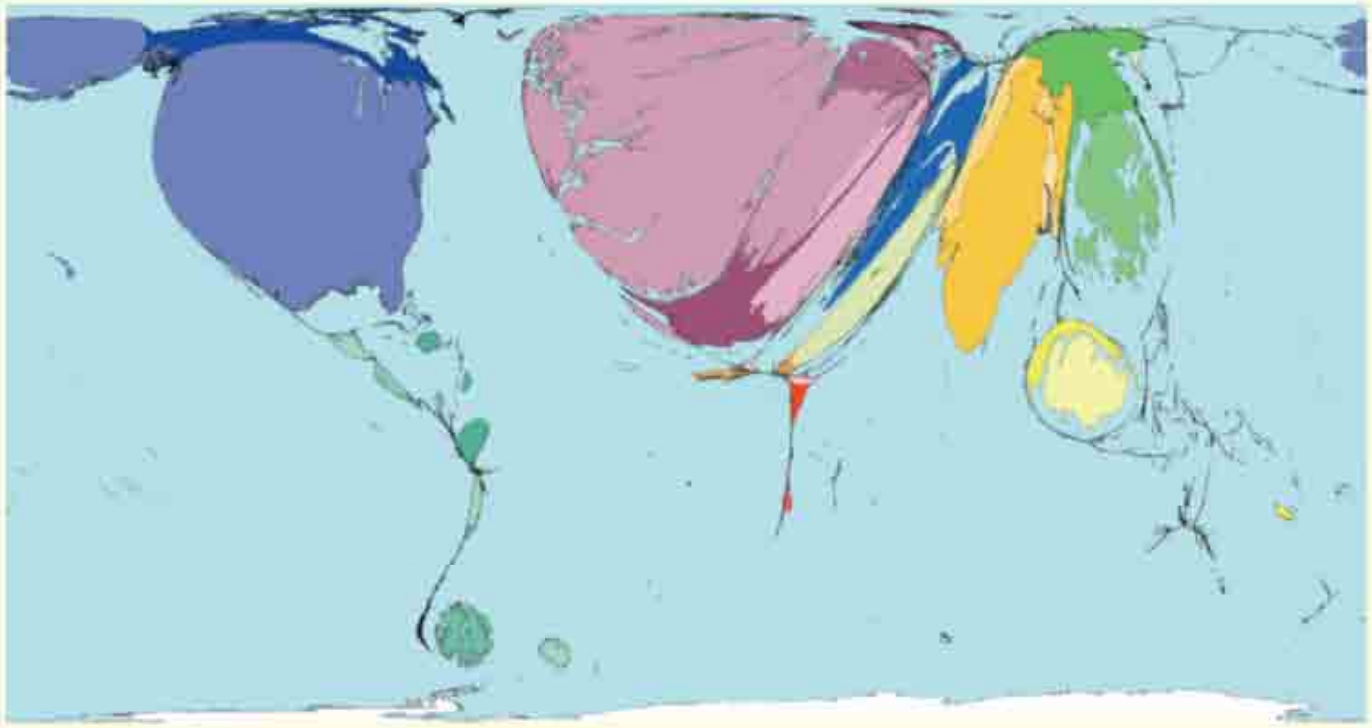
REGIONAL NET TRANSPORT AND TRAVEL EXPORTS



"Of course all export companies speak English, so there is no language barrier." Import Advise, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Mercantile and Business Exports



These services include opinion polling, communications, accountancy, waste treatment, management consultancy, and government service in consulates and military units. They amount to 8.9% of international trade.

The United Kingdom, the United States and India are the biggest net exporters of mercantile and business services. Together these territories export (US$ net) 60% of all net business and mercantile exports.

Most territories do not export (US$ net) mercantile and business services. No territories in Central Africa are net exporters of these services. Only three territories in Southeastern Africa and Northern Africa are net exporters.

Territory size shows the proportion of worldwide net exports of mercantile and business services (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2003.
- *There were no net exports of mercantile and business services recorded for 136 territories.
- See website for further information.

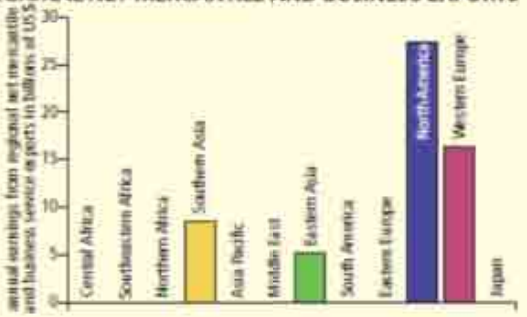
MOST AND LEAST US$ OF NET MERCANTILE AND BUSINESS EXPORTS

Rank	Territory	Value
1	Luxembourg	1893
2	Cyprus	1450
3	Hong Kong (China)	905
4	Singapore	901
5	Switzerland	461
6	Belgium	451
7	United Kingdom	437
8	Barbados	390
9	Israel	368
10	St Vincent & The Grenadines	109

Rank	Territory	Value
54	DPR Korea	3.68
56	Romania	3.66
57	Bangladesh	3.51
58	Greece	3.46
59	China	1.68
60	Ethiopia	0.99
61	Tajikistan	0.95
62	Syrian Arab Republic	0.34
63	Honduras	0.19
64	Kyrgyzstan	0.19

*US$ worth of net mercantile and business exports per person living in that territory**

REGIONAL NET MERCANTILE AND BUSINESS EXPORTS

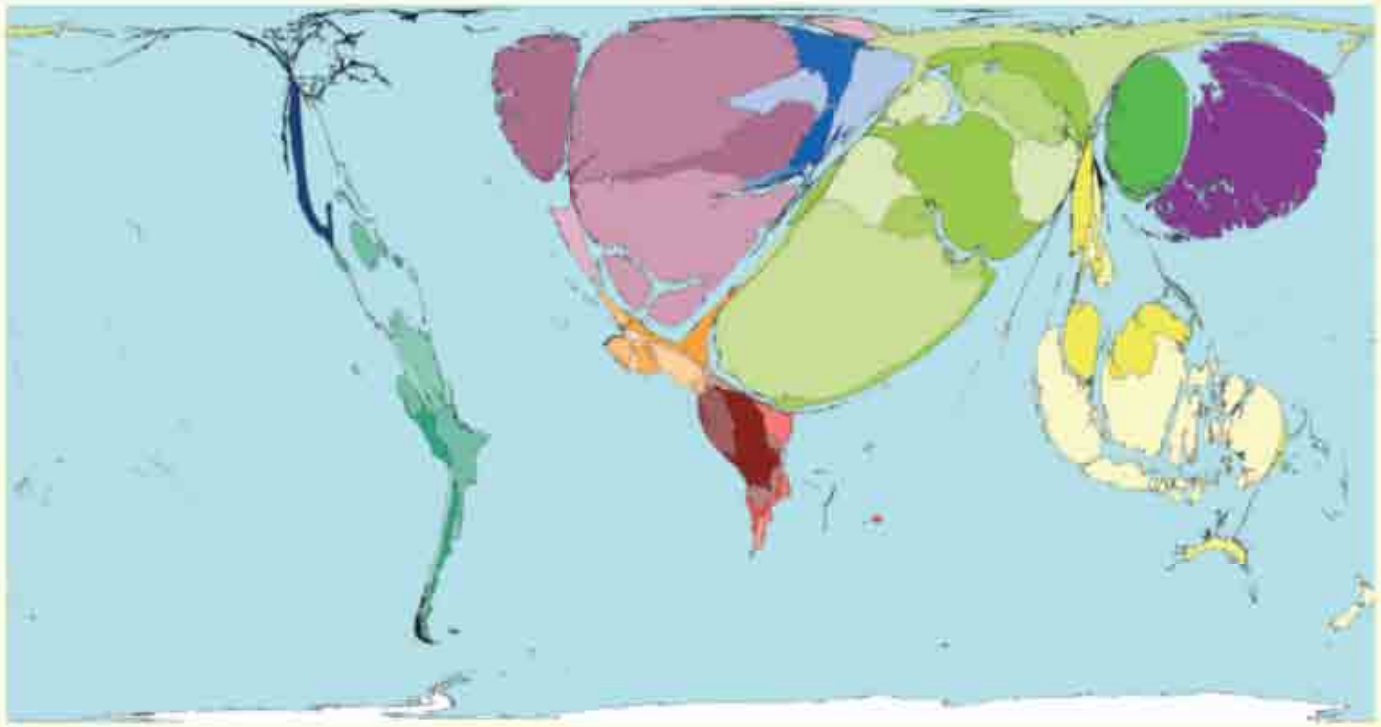


"... management consultants are part of the day to day fabric of leading edge world class companies. The more they are used, the more invaluable and acceptable their work becomes."

Brian O'Rorke, 1996

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Mercantile and Business Imports



Mercantile and business services include a vast range of activities alongside merchanting, such as communications, opinion polling, accountancy, waste treatement, management consultancy, public relations, and government service in consulates and military units.

Most territories have more net imports of such services, than net exports. Saudi Arabia, Germany, Japan and Indonesia import (US$ net) the highest values of mercantile and business services.

The Middle East imports the highest net regional value of mercantile and business services. Per person living in the Middle East US$76 of mercantile and business services is imported (net) per year.

Territory size shows the proportion of worldwide net imports of mercantile and business services (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- * There were no net mercantile and business services imports recorded for 64 territories.
- See website for further information.

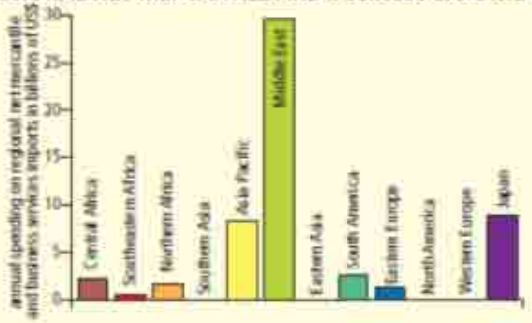
MOST AND LEAST US$ OF NET MERCANTILE AND BUSINESS IMPORTS

Rank	Territory	Value
1	Ireland	897
2	Seychelles	639
3	Saudi Arabia	517
4	Kuwait	293
5	Saint Kitts & Nevis	285
6	Austria	274
7	Antigua & Barbuda	251
8	Suriname	175
9	Congo	168
10	Saint Lucia	135

Rank	Territory	Value
124	Botswana	1.77
128	Sri Lanka	1.62
129	Thailand	1.53
130	Sierra Leone	1.40
131	Burundi	1.15
132	Angola	1.02
133	Sudan	1.00
134	United Republic Tanzania	0.65
135	Philippines	0.34
136	Madagascar	0.07

*US$ worth of mercantile and business imports per person living in that territory**

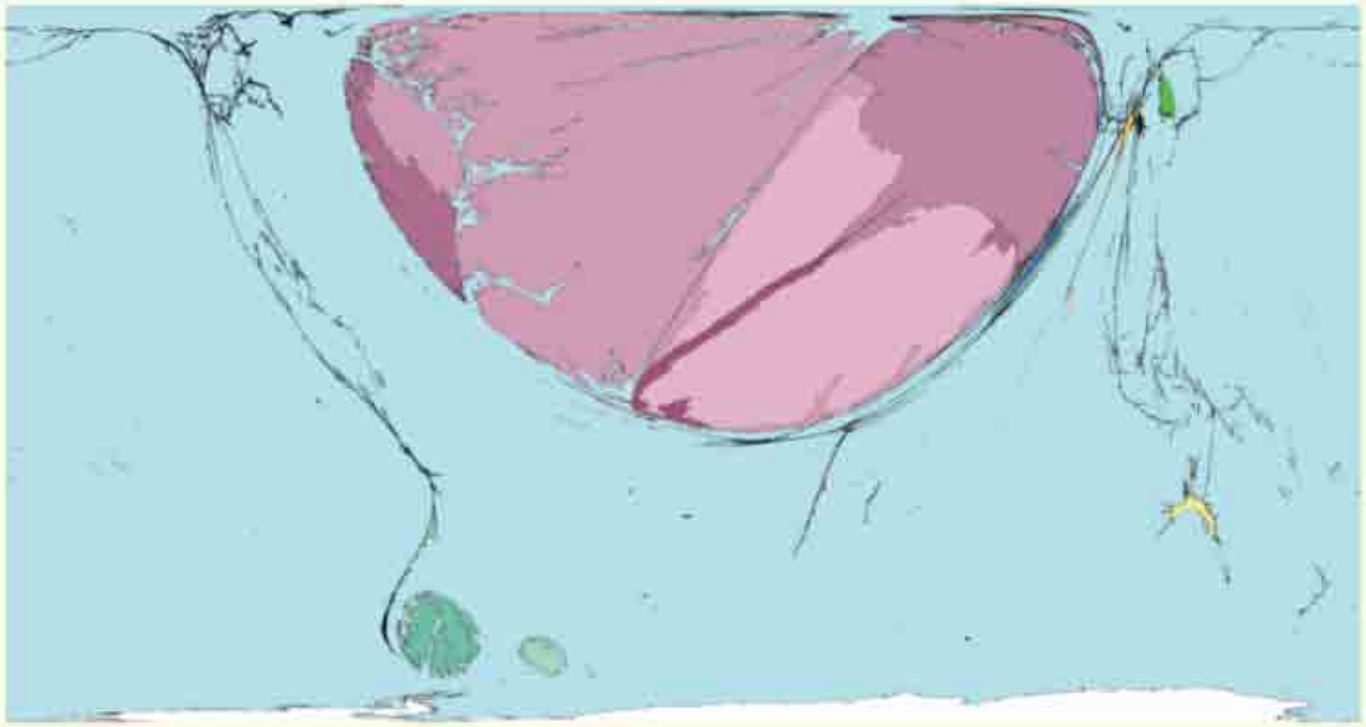
REGIONAL NET MERCANTILE AND BUSINESS EXPORTS



"In 1928, when the stock of Turkish Oil was redistributed, still at the centre of negotiations, Gulbenkian was again awarded his usual percentage and became known as 'Mr. Five Percent'." Fundação Calouste Gulbenkian, 2002

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Finance and Insurance Exports



Of all the net finance and insurance services exports in the world, 99% of the profit flows to territories in Western Europe. Despite this, almost half of the 24 territories in Western Europe have no net finance and insurance services exports. The main exporting territories for these services are the United Kingdom, Switzerland, Germany and Luxembourg. The Malvinas (or Falkland Islands) are large on this map because they are resized according to the United Kingdom data.

Territory size shows the proportion of worldwide net exports of finance and insurance services (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2003.
- *There were no net exports of finance and insurance recorded for 170 territories.
- Ranks 5-9 are based on the Western European average, which is assumed for San Marino, Monaco, Liechtenstein, Holy See, and Andorra.
- See website for further information.

MOST AND LEAST US$ OF NET FINANCE AND INSURANCE EXPORTS

Rank	Territory	Value
1	Luxembourg	12834
2	Switzerland	1227
3	Ireland	431
4	United Kingdom	412
	Western European Average	144
10	Cyprus	113
11	Barbados	96
12	St Vincent & The Grenadines	94
13	Germany	90
14	Norway	38

Rank	Territory	Value
21	Slovenia	3.17
22	Bosnia Herzegovina	3.14
23	Latvia	3.08
24	Honduras	2.66
25	Republic of Korea	1.93
26	Sri Lanka	0.95
27	Spain	0.71
28	Mozambique	0.35
29	Angola	0.07
30	India	0.05

*US$ worth of finance and insurance exports per person living in that territory**

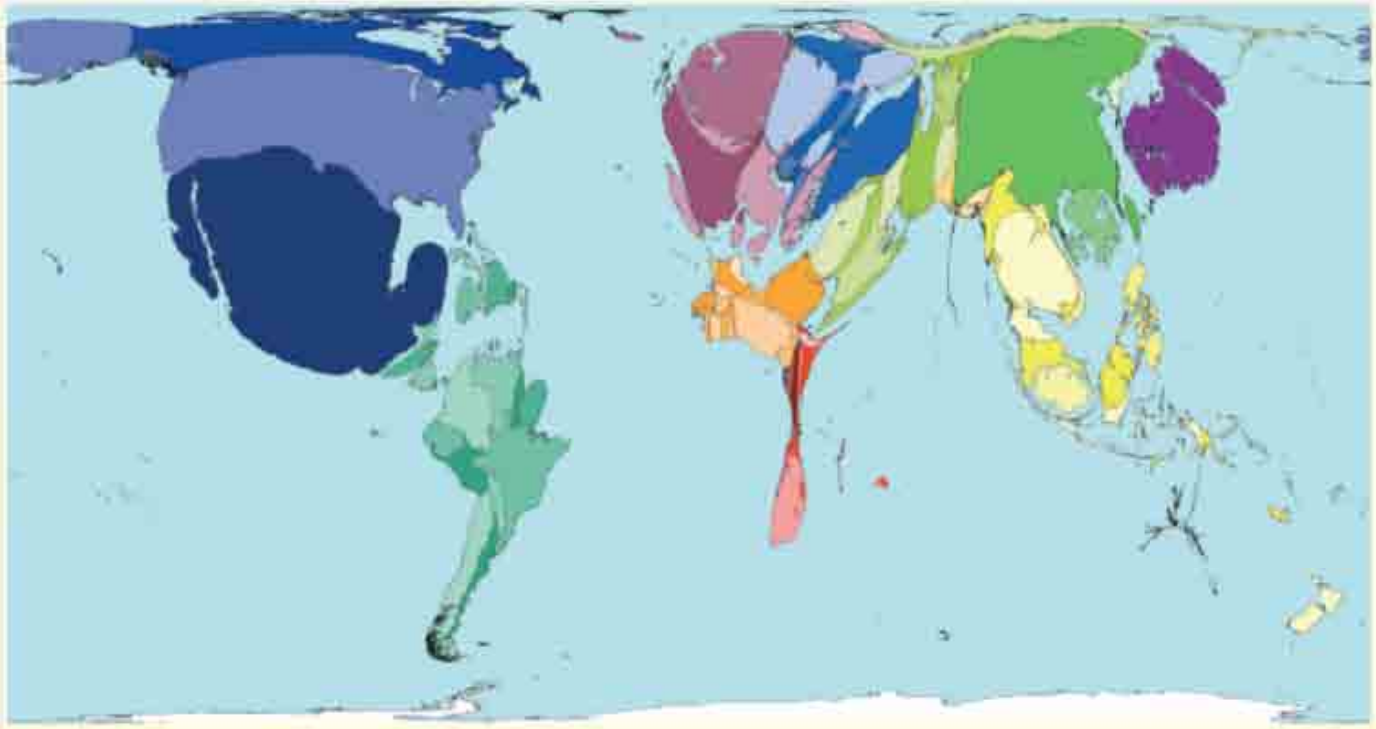
REGIONAL NET FINANCE AND INSURANCE EXPORTS

"Edward Lloyd opened a coffee shop on Tower Street in London in 1688, and that one turned into Lloyds of London, insuring the world."

Jack Schofield, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Finance and Insurance Imports



Of the 200 territories in the world, 83.5% are net importers of insurance and finance services. Insurance can be taken against risks to many things, ranging from freight insurance to life insurance. Financial services are those services provided by banks, stock exchanges, credit card enterprises, and similar institutions.

Mexico, the United States and China import the highest values of insurance and finance services (US$ net). Canada imports the fourth highest value of these services. That three of the four biggest importers are North American territories explains why the region of North America is also a net importer.

Territory size shows the proportion of worldwide net imports of finance and insurance services (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002
- *There were no net finance and insurance services imports recorded for 33 territories.
- See website for further information

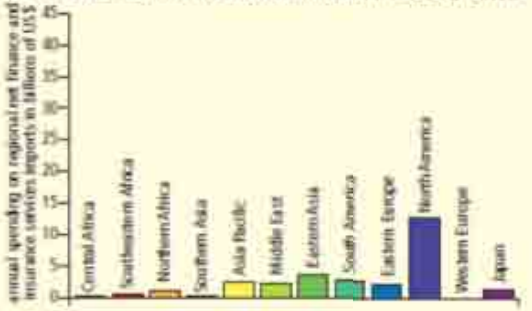
MOST AND LEAST US$ OF NET FINANCE AND INSURANCE IMPORTS

Rank	Territory	Value
1	Antigua & Barbuda	178
2	Singapore	101
3	Hong Kong (China)	85
4	Netherlands	77
5	Saint Kitts & Nevis	71
6	Belize	69
7	Guyana	63
8	Canada	63
9	Czech Republic	58
10	Israel	58

Rank	Territory	Value
158	Ethiopia	0.33
159	Lesotho	0.27
160	Madagascar	0.22
161	Georgia	0.20
162	United Republic of Tanzania	0.20
164	Nepal	0.08
163	Bhutan	0.08
165	Burundi	0.01
166	Sudan	0.01
167	Malawi	<0.01

*US$ worth of finance and insurance imports per person living in that territory**

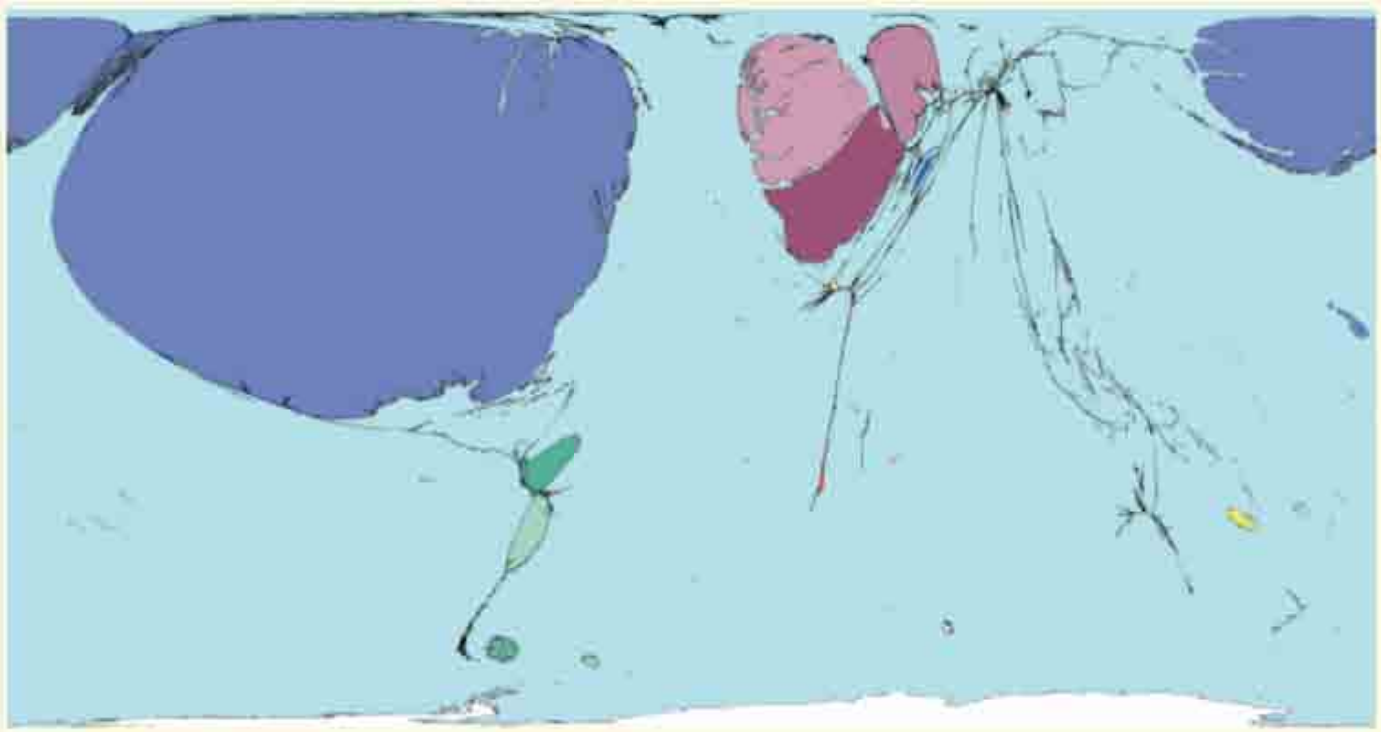
REGIONAL NET FINANCE AND INSURANCE EXPORTS



"Egyptian culture still wrestles with the idea of investing money in something with no tangible returns. Insurers need to not only promote their policies but the idea of insurance itself."

Sherine Abdel-Razek, 2005

Royalty and License Fee Exports



Only 18 (out of 200) territories are net exporters of license fees and royalties. This means that a few people living in less than a tenth of the territories in the world between them receive the US$30 billion of net export earnings for these services.

The International Monetary Fund explained that royalties and license fees include "international payments and receipts for the authorised use of intangible, non-produced, non-financial assets and proprietary rights ... and with the use, through licensing agreements, of produced originals or prototypes ...". Thus these export earnings are payments for past ideas.

Territory size shows the proportion of worldwide net exports of royalties and license fees (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002
- * Note that these tables are only the top and bottom 9 as so few territories have net royalties and license exports
- See website for further information

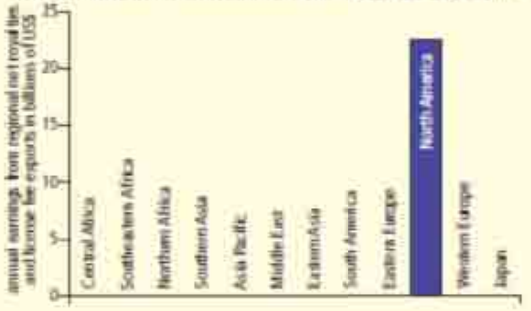
MOST AND LEAST US$ OF NET ROYALTIES AND LICENSE EXPORTS

Rank	Territory	Value
1	United States	88
2	Sweden	70
3	Greenland	53
4	Bahamas	53
5	Luxembourg	49
6	Cyprus	34
7	Paraguay	32
8	United Kingdom	30
9	France	24

Rank	Territory	Value
10	Guyana	16.00
11	Maldives	12.77
12	Lesotho	5.83
13	Namibia	1.07
14	Tunisia	1.02
15	Cape Verde	0.73
16	Cuba	0.68
17	Kyrgyzstan	0.03
18	Republic of Moldova	0.02

*US$ worth of royalties and license exports per person living in that territory**

REGIONAL NET ROYALTIES AND LICENSE EXPORTS

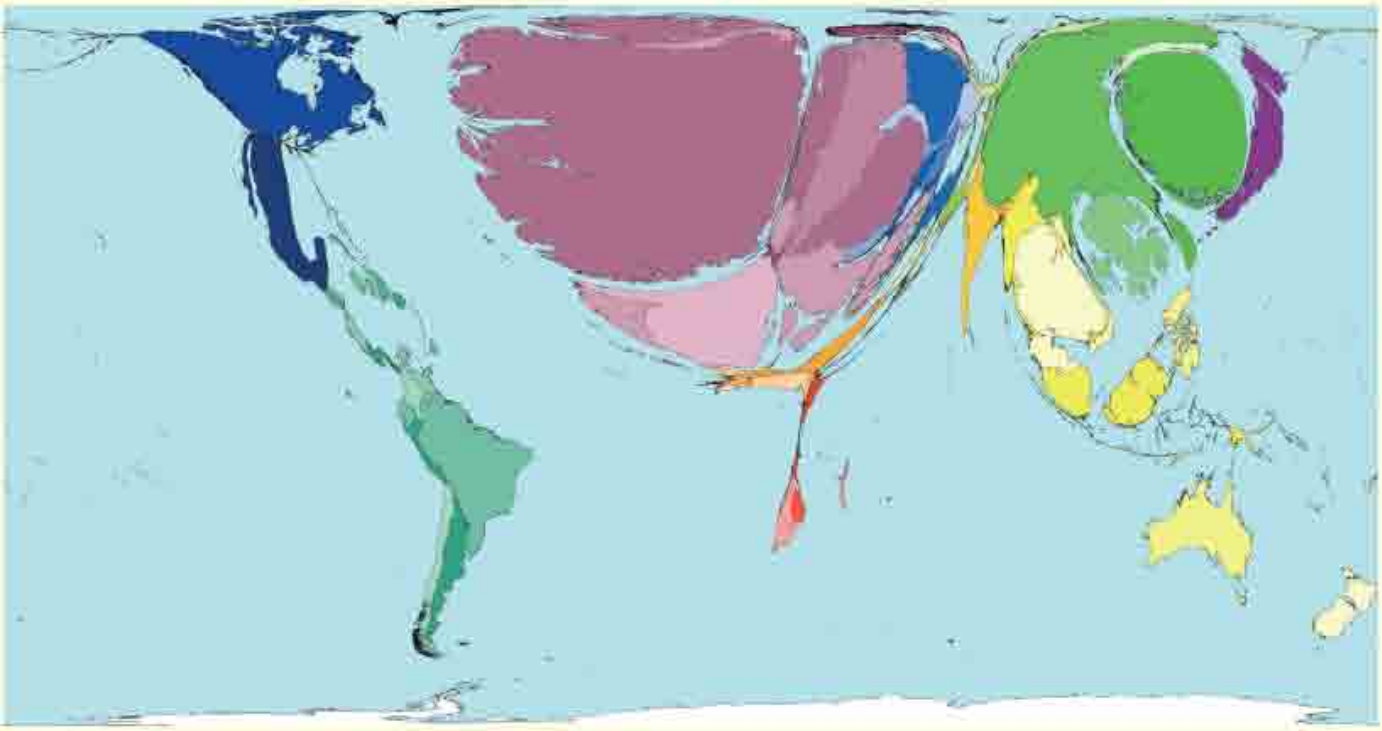


"Ideas shape our world. They are the raw materials on which our future prosperity and heritage depend."

Kamil Idris, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Royalty and License Fee Imports



Ireland imports (US$ net) the most royalties and license fees out of all territories in the world. The value of net imports of these services to Ireland is more than three times higher than the next biggest importer, which is China. Ireland's imports, when divided by the population, are also the highest per person imports in the world. The second biggest per person importer, Hong Kong, imports (net) only a fifteenth of what Ireland imports per head of population.

The high imports to Ireland partly reflect one method multinational companies use to maximise profits made, through exporting goods into the European Union via Ireland.

Territory size shows the proportion of worldwide net imports of royalties and license fees (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002
- *There were no net royalties and export fees imports recorded for 42 territories.
- Note that nine territories in Southeastern Asia used the regional average.
- See website for further information.

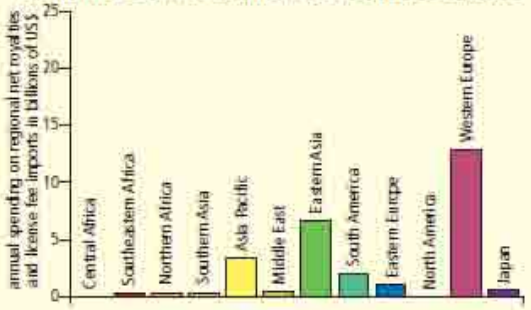
MOST AND LEAST US$ OF NET ROYALTIES AND LICENSE IMPORTS

Rank	Territory	Value
1	Ireland	2748
2	Hong Kong (China)	181
3	Austria	116
4	Barbados	80
5	New Zealand	68
6	Canada	59
7	Republic of Korea	46
8	Swaziland	41
9	Netherlands	41
10	Australia	36

Rank	Territory	Value
141	Belarus	0.24
142	Guinea	0.09
143	Pakistan	0.08
144	Tajikistan	0.07
145	Mali	0.05
146	Rwanda	0.03
147	Bangladesh	0.02
148	Malawi	0.02
149	Angola	0.02
..	Southeastern Africa Average	0.01

*US$ worth of net royalties and license imports per person living in that territory**

REGIONAL NET ROYALTIES AND LICENSE EXPORTS



"It will boost international trade and deliver an enhanced and harmonized trademark procedure that will benefit nations, brands and businesses."

Burhan Gafoor, 2006 [on the Singapore Treaty on Trademarks]

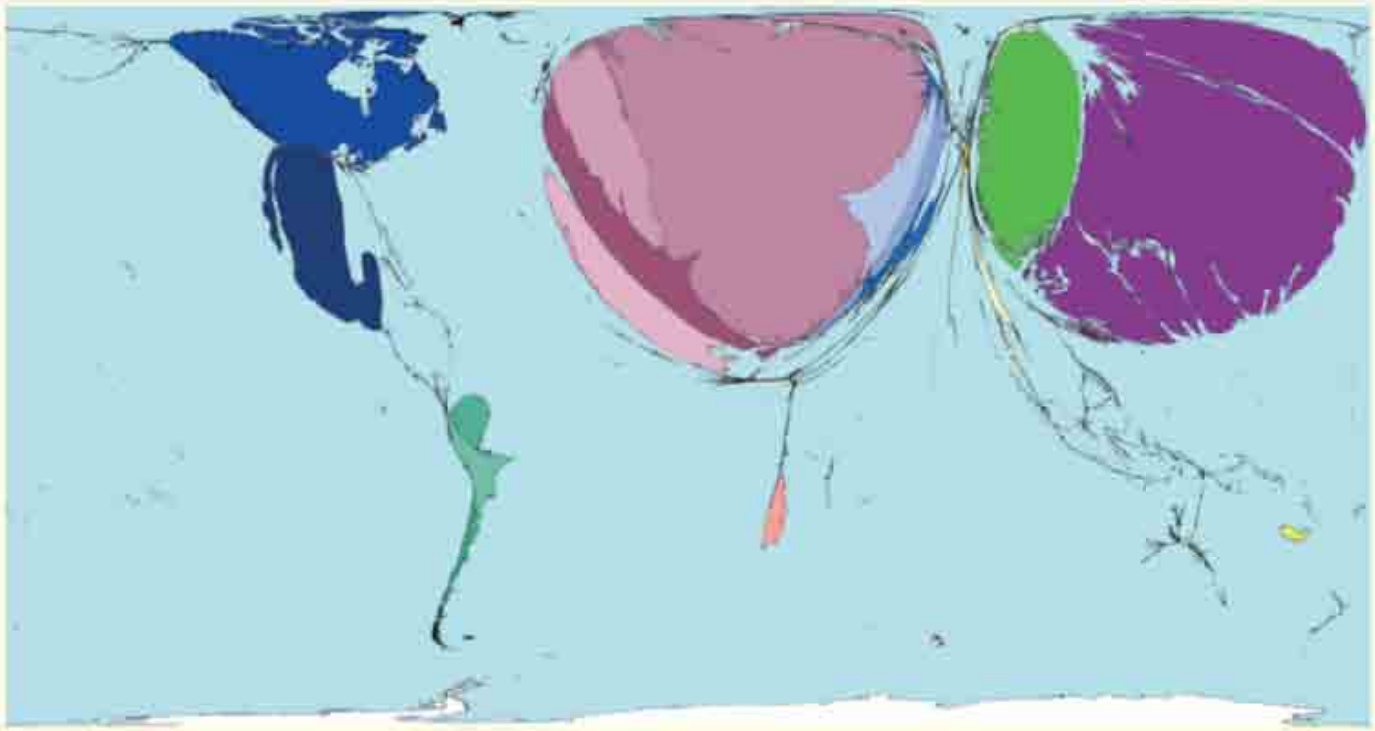
Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Services Summary

- Finance and insurance are two most recognized international services which dominate our modern society, these two services have been prided with integrity and fortress of assurance; however the latest financial crisis is a wake-up call on everybody involved.
- Loyalty and License vs. Open Source Society– which is going to prevail in the future!

Manufacturers

Car Exports(2006)



Earnings from passenger car exports make up 5.3% of all earnings made from international exports. Japan and Germany together make 61% of all net profits (US$) on international car exports.

Japanese car brands include Toyota, Nissan, Suzuki, Subaru, Honda, Mitsubishi and Mazda. German car brands include Audi, BMW, Mercedes, Volkswagen and Porsche.

The highest earning exports (net US$) per person are generally from European territories, Japan and the Republic of Korea. Most territories are net importers of cars.

Territory size shows the proportion of worldwide net exports of cars (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net exports of cars recorded for 172 territories. There are no net imports of exports of cars from 5 territories.
- See website for further information.

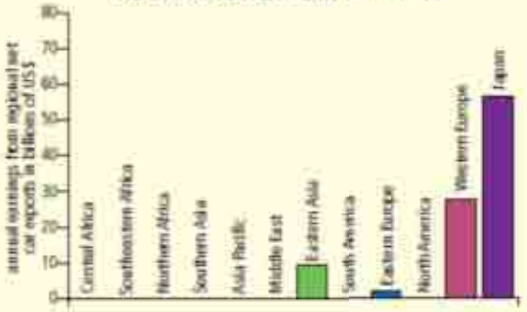
MOST AND LEAST US$ OF NET CAR EXPORTS

Rank	Territory	Value
1	Belgium	695
2	Germany	589
3	Canada	481
4	Japan	443
5	Czech Republic	317
6	Slovakia	300
7	Republic of Korea	271
8	Sweden	198
9	Slovenia	182
10	Spain	133

Rank	Territory	Value
19	Niue	16.58
20	South Africa	14.66
21	Argentina	11.35
22	Thailand	8.27
23	Bosnia Herzegovina	7.74
24	Brazil	7.15
25	Turkey	6.94
26	DPR Korea	6.53
27	Uruguay	3.81
28	India	0.11

*US$ worth of car exports per person living in that territory**

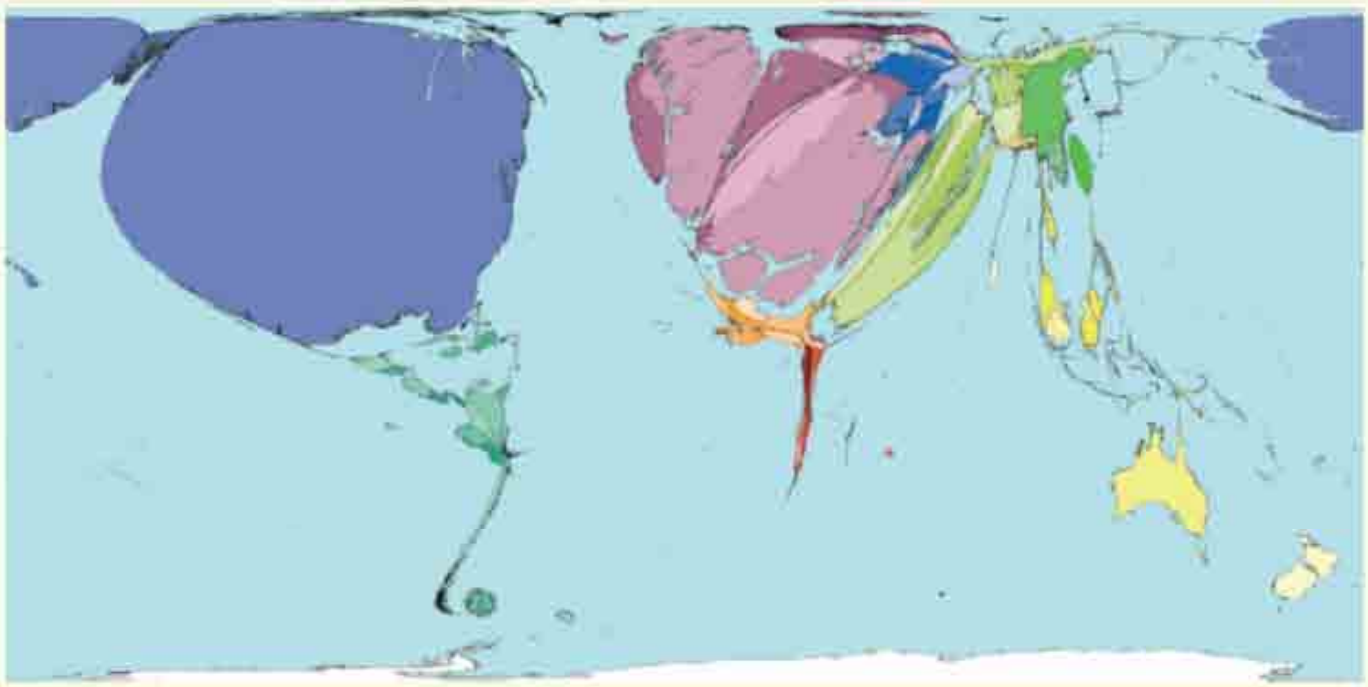
REGIONAL NET CAR EXPORTS



"The press shop at Wolfsburg processes 1500 metric tonnes of sheet metal every day ..." Volkswagen, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Car Imports(2006)



The United States alone buys (net US$) 55% of all international car imports. Italy and the United Kingdom, which are the second and third biggest net car importers, import less than a sixth of the United States import value each.

Territories located in Western Europe and the Middle East import (net US$) the highest value of cars per person living there. People in Luxembourg import the most per person.

Despite high importing territories, the region of Western Europe has net car exports. North America is the main importing region; the Middle East and Asia Pacific have imports over US$5 bn.

Territory size shows the proportion of worldwide net imports of cars (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net car imports recorded for 33 territories. There are no net imports or exports of cars from 5 territories.
- See website for further information.

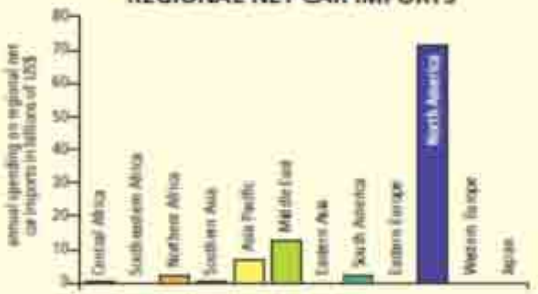
MOST AND LEAST US$ OF NET CAR IMPORTS

Rank	Territory	Value
1	Luxembourg	1599
2	Andorra	912
3	Switzerland	665
4	Kuwait	636
5	United Arab Emirates	538
6	Brunei Darussalam	504
7	Ireland	500
8	Bahrain	485
9	Qatar	430
10	Norway	386

Rank	Territory	Value
158	Kyrgyzstan	0.70
159	Burundi	0.61
160	Bangladesh	0.60
161	Indonesia	0.36
162	Comoros	0.33
163	Myanmar	0.25
164	Liberia	0.21
165	Central African Republic	0.19
166	Somalia	0.16
167	Islamic Republic of Iran	0.04

*US$ worth of net car imports per person living in that territory**

REGIONAL NET CAR IMPORTS



"Americans still buy cars by the millions, whether they are in gridlocked LA or in the middle of Kansas miles from the nearest town."

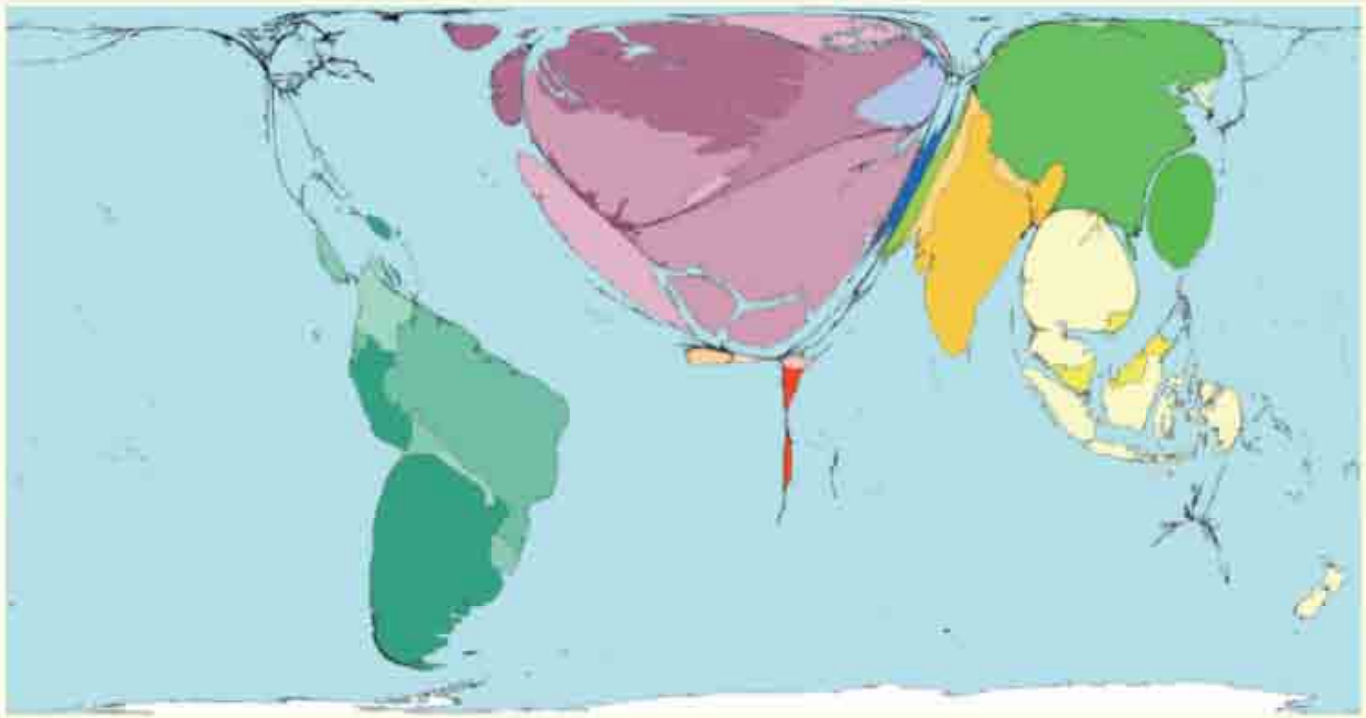
Paul Harris, 2006

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Motor Vehicle Production

Rank	Country/ Region	2011 [2][3]	2010 [4][3]	2005 [5]	2000 [6][7]	1995 [7][8]	1990 [9][10][11]	1980 [9][10][11][12]	1970 [9][10][11][12]	1960 [9][10][11][12]	1950 [9][10]	Peak's data [9][10][13][7][8][11]	Peak's year [9][10][13][7][8][11]
—	*World*	80,092,840	77,629,127	66,482,439	58,374,162	50,046,000	48,553,969	38,564,516	29,419,484	16,488,340	10,577,426	80,092,840	2011
01	China	18,418,876	18,264,667	5,708,421	2,069,069	1,434,772	509,242	222,288	87,166	22,574		18,418,876	2011
02	United States	8,653,560	7,761,443	11,946,653	12,799,857	11,985,457	9,782,997	8,009,841	8,283,949	7,905,119	8,005,859	13,024,978[14]	1999[15]
03	Japan	8,398,654	9,625,940	10,799,659	10,140,796	10,195,536	13,486,796	11,042,884	5,289,157	481,551	31,597	13,486,796	1990
04	Germany[16]	6,311,318	5,905,985	5,757,710	5,526,615	4,667,364	4,976,552	3,878,553	3,842,247	2,056,149	306,064	6,311,318	2011
05	South Korea	4,657,094	4,271,941	3,699,350	3,114,998	2,526,400	1,321,630	123,135	28,819			4,657,094	2011
06	India	3,936,448	3,536,783	1,638,674	801,360	636,000[17]	362,655	113,917	76,409	51,136	14,688	3,936,448	2011
07	Brazil	3,406,150	3,381,728[18]	2,530,840	1,681,517	1,629,008	914,466	1,165,174	416,089	133,041		3,406,150[18]	2011[19]
08	Mexico	2,680,037	2,345,124	1,624,238	1,935,527	935,017	820,558	490,006	192,841	49,807		2,680,037	2011
09	Spain	2,353,682	2,387,900	2,752,500	3,032,874	2,333,787	2,053,350	1,181,659	539,132	58,209	0,253	3,032,874	2000
10	France	2,294,889	2,227,742	3,549,008	3,348,361	3,474,705	3,768,993	3,378,433	2,750,086	1,369,210	357,512	3,919,776[20]	1989[21]

Natural Product Exports



Natural products includes mainly rubber, animal feed and leather. Pets and zoo animals are also in this category but do not make up a large part of the trade in natural products. Earnings from the export of natural products constitute 6.7% of the value of the earnings from all international exports.

South American territories, particularly Argentina and Brazil, are one source of high quantities of natural products. Together the net exports from Argentina and Brazil are 80% of the natural product exports from all South American territories. That exports from Western Europe are greater reflects price rather than quantity.

Territory size shows the proportion of worldwide net exports of natural products (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- * There were no net exports of natural products recorded for 148 territories. For 7 territories in Asia Pacific the regional average was used.
- See website for further information.

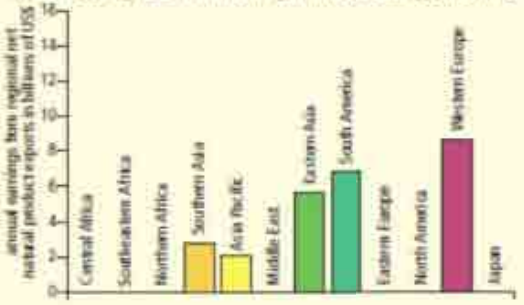
MOST AND LEAST US$ OF NET NATURAL PRODUCT EXPORTS

Rank	Territory	Value
1	Iceland	596
2	Luxembourg	307
3	Netherlands	272
4	Belgium	261
5	Denmark	151
6	Italy	95
7	Argentina	90
8	Ireland	86
9	Czech Republic	64
10	Taiwan	53

Rank	Territory	Value
37	DPR Korea	4.04
38	Nepal	3.79
...	Asia Pacific Average	3.62
46	Turkey	3.50
47	Kyrgyzstan	2.67
48	Kenya	2.57
49	India	2.42
50	Pakistan	2.36
51	Ethiopia	0.75
52	Liberia	0.38

*US$ worth of natural product exports per person living in that territory**

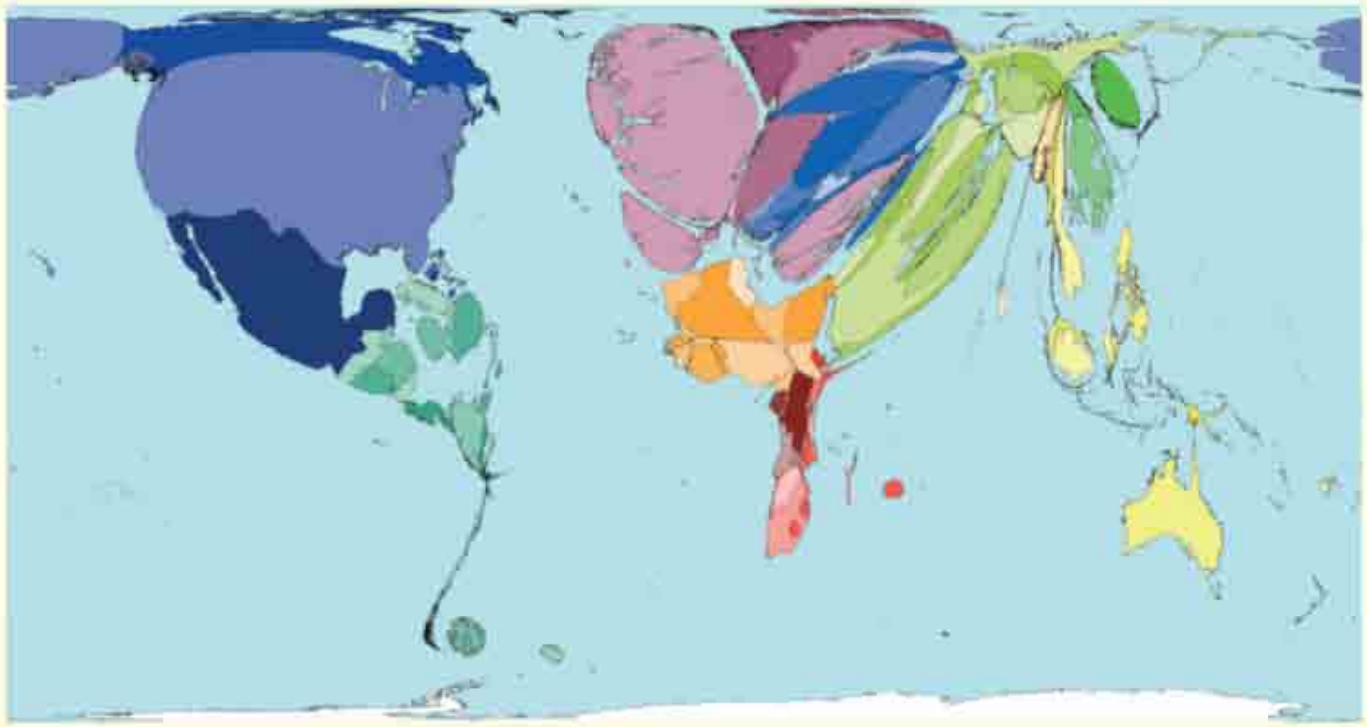
REGIONAL NET NATURAL PRODUCT EXPORTS



"Malaysia has a long history of internationally valued exports, being known from the early centuries A.D. as a source of … exotics such as birds' feathers, edible birds' nests, aromatic woods, tree resins etc." John Drabble, 2004

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Natural Product Imports



Three-quarters of all 200 territories are net importers of natural products.

The landlocked, mountainous Andorra imports (net) over US$600 more natural products per person than its neighbour, France. This difference in imports per person is due to exports from France almost balancing imports. Andorra produces almost no natural products to export.

The Central African Republic, another low net importer, receives low imports and generates low exports of natural products.

Territory size shows the proportion of worldwide net imports of natural products (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net natural produce imports recorded for 52 territories.
- Natural products include rubber, animal feed and leather.
- See website for further information.

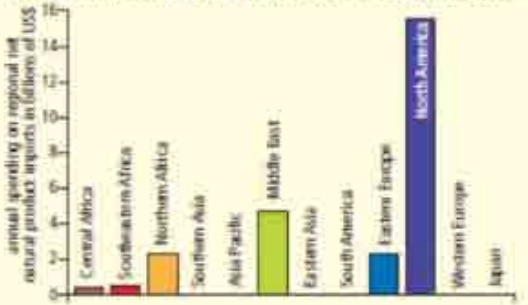
MOST AND LEAST US$ OF NET NATURAL PRODUCT IMPORTS

Rank	Territory	Value
1	Andorra	609
2	Greenland	359
3	Bahamas	314
4	Qatar	305
5	Tuvalu	260
6	United Arab Emirates	258
7	Bahrain	234
8	Cyprus	225
9	Norway	216
10	Saint Kitts & Nevis	208

Rank	Territory	Value
139	Uganda	1.32
140	Madagascar	1.01
141	Rwanda	0.94
142	Ukraine	0.71
143	United Republic Tanzania	0.63
144	Central African Republic	0.54
145	Bhutan	0.41
146	Mali	0.28
147	France	0.27
148	Japan	0.09

*US$ worth of natural produce imports per person living in that territory**

REGIONAL NET NATURAL PRODUCT IMPORTS

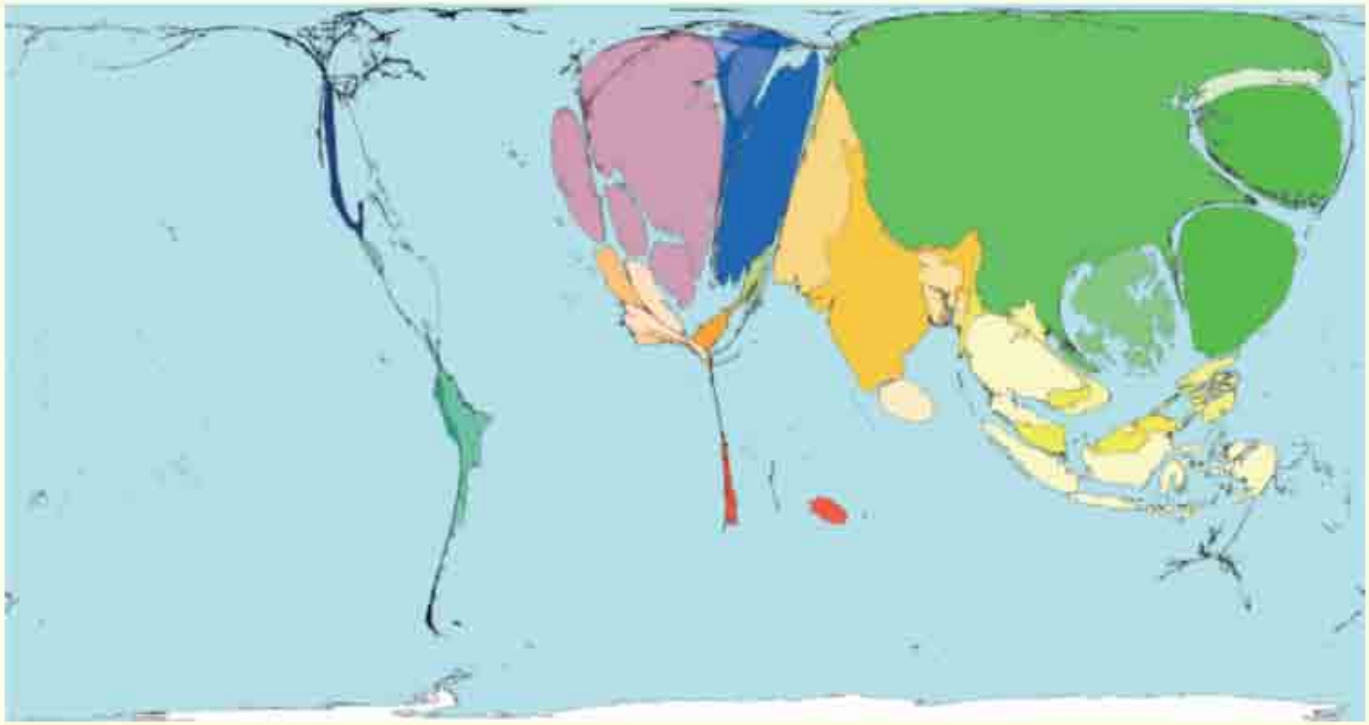


"Saudi Arabia has tightened restrictions on trading in wildlife animals in a renewed attempt to ensure protection of rare animal species"

M. Ghazanfar Ali Khan, 2004

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Clothes Exports



China exports more clothes that any other territory in the world. East Asia, the region in which China is located, exports over five times as many clothes (US$ net) as any other region.

Of all earnings from international trade, 7% is earned from clothing exports. This category includes cloth as well as clothes, footwear and bags. It is possible that cloth is imported from one territory, sewn into a garment in a second territory, and then exported for sale in a third territory. Throughout this process the materials will usually gain value.

Territory size shows the proportion of worldwide net exports of clothes (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net exports of clothing recorded for 122 territories.
- See website for further information.

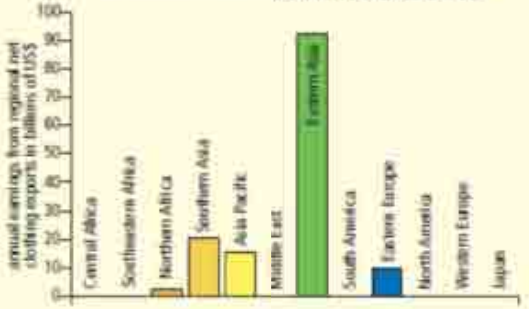
MOST AND LEAST US$ OF NET CLOTHING EXPORTS

Rank	Territory	Value
1	Hong Kong (China)	1377
2	Mauritius	525
3	Brunei Darussalam	492
4	Taiwan	476
5	Italy	299
6	Bahrain	287
7	Portugal	280
8	Republic of Korea	198
9	Macedonia FYR	175
10	Belgium	131

Rank	Territory	Value
69	Togo	2.77
70	Kazakhstan	2.20
71	Nepal	0.88
72	Cape Verde	0.84
73	Haiti	0.68
74	Colombia	0.59
75	Central African Republic	0.48
76	Ukraine	0.43
77	Bhutan	0.11
78	Malawi	0.10

*US$ worth of net clothing exports per person living in that territory**

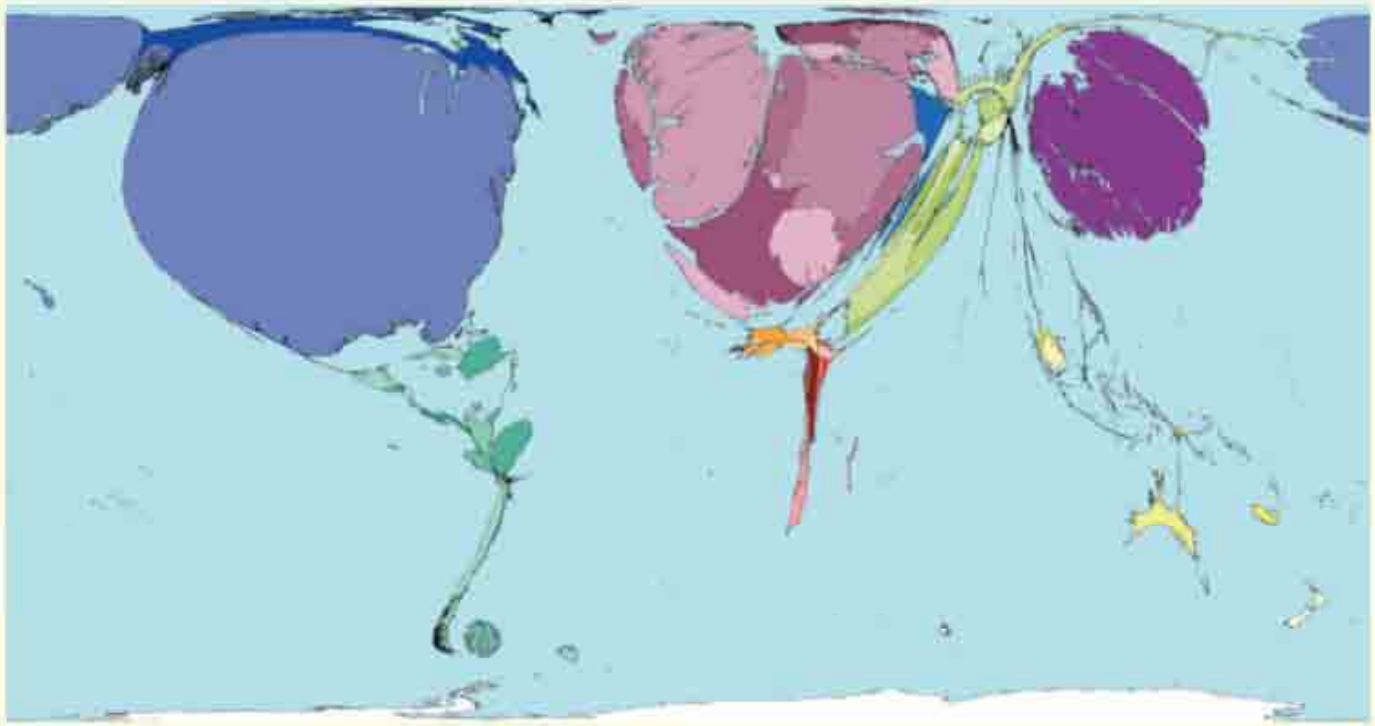
REGIONAL NET CLOTHING EXPORTS



"… Bangladesh … relies on garments for more than three-quarters of its exports." Roland Buerk, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Clothes Imports



Despite the vast range of clothing styles throughout the world, there is a large international trade in clothes. These clothes arrive, more often than not, in the United States, Western Europe and Japan.

Most clothes are made in territories where employers can pay low labour costs, which partially maintains low prices for the populations of importing territories.

Spending per person on imports (net US$) shows that some Western European territories have high import rates. There are particularly low net imports per person to some territories in Northern and Southeastern Africa.

Territory size shows the proportion of worldwide net imports of clothes (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net clothing imports recorded for 70 territories.
- See website for further information.

MOST AND LEAST US$ OF NET CLOTHING IMPORTS

Rank	Territory	Value	Rank	Territory	Value
1	Niue	3102	113	Paraguay	1.35
2	Andorra	2071	114	United Republic of Tanzania	1.22
3	United Arab Emirates	523	115	Azerbaijan	1.17
4	Switzerland	435	116	Burundi	0.98
5	Norway	410	117	Nigeria	0.87
6	Iceland	365	118	Zambia	0.68
7	Greenland	359	119	Liberia	0.60
8	Cyprus	346	120	Comoros	0.59
9	Ireland	318	121	Islamic Republic of Iran	0.56
10	United Kingdom	279	122	Mozambique	0.41

*US$ worth of clothing imports per person living in that territory**

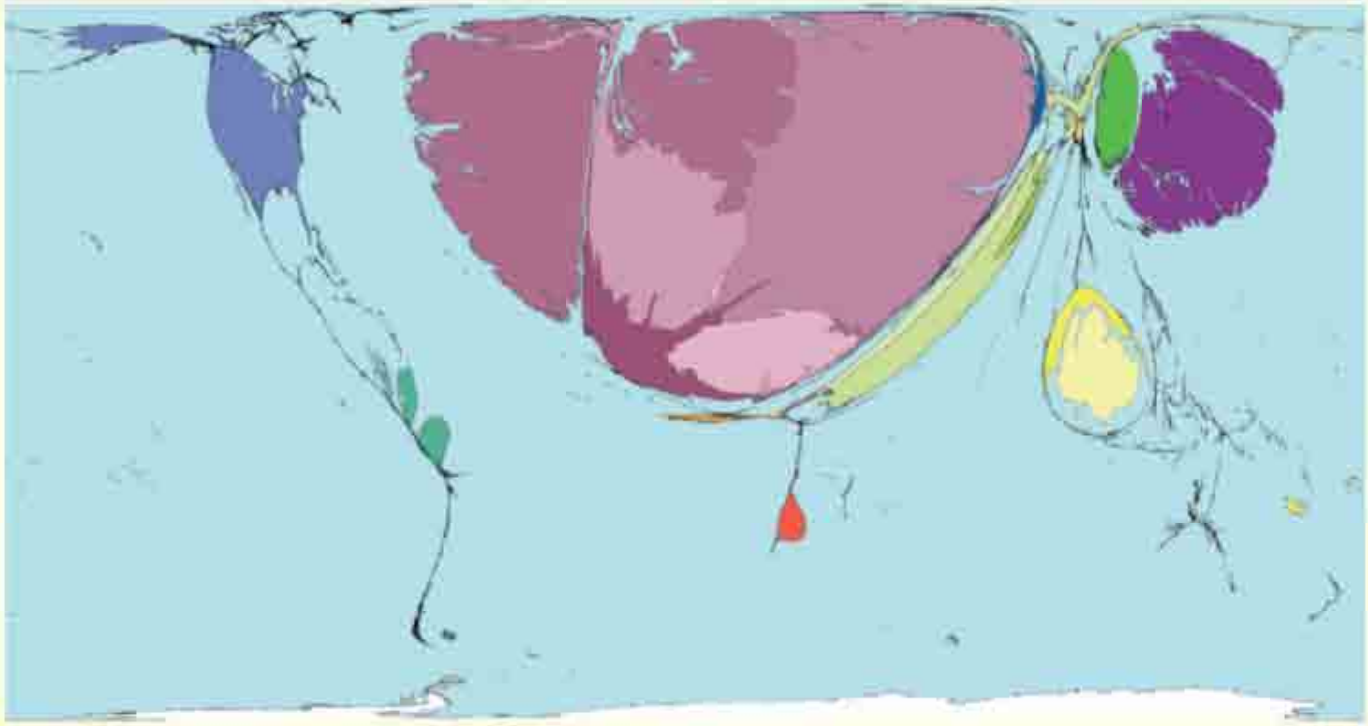
REGIONAL NET CLOTHING IMPORTS

"... we are trying to balance a number of interests here because obviously people want less expensive goods ..."

Tony Blair, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Chemical Exports



Chemicals exports include a huge variety of products, such as paints, perfumes, fertilisers, pesticides and soap. This category includes many items that if not used directly by us, are evident in our daily lives such as painted walls, or the chemicals used when growing much of the food eaten around the world. Thus it is no surprise that chemicals make up 8% of the earnings from all international exports.

Only three regions make net profits from the export of chemicals, and of these Western Europe earns six times more (US$ net) than Japan, the second highest net exporting region.

Territory size shows the proportion of worldwide net exports of chemicals (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net chemical exports recorded for 185 territories. For 4 territories in the Middle East the regional average was used.
- See website for further information.

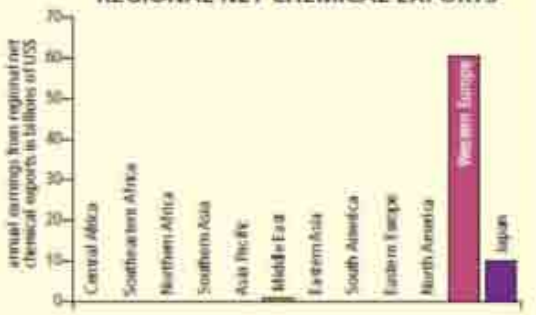
MOST AND LEAST US$ OF NET CHEMICAL EXPORTS

Rank	Territory	Value
1	Ireland	4552
2	Singapore	1106
3	Belgium	921
4	Netherlands	645
5	Switzerland	629
6	Qatar	426
7	Germany	344
8	Swaziland	337
9	Trinidad & Tobago	299
10	Tuvalu	183

Rank	Territory	Value
23	Bhutan	21.70
24	Belarus	17.81
25	United States	17.41
26	United Kingdom	9.93
27	Libyan Arab Jamahiriya	9.47
28	Senegal	9.34
29	Guinea	4.37
30	Russian Federation	4.35
	Middle East Average	1.88
35	Ukraine	0.11

*US$ worth of chemical exports per person living in that territory**

REGIONAL NET CHEMICAL EXPORTS

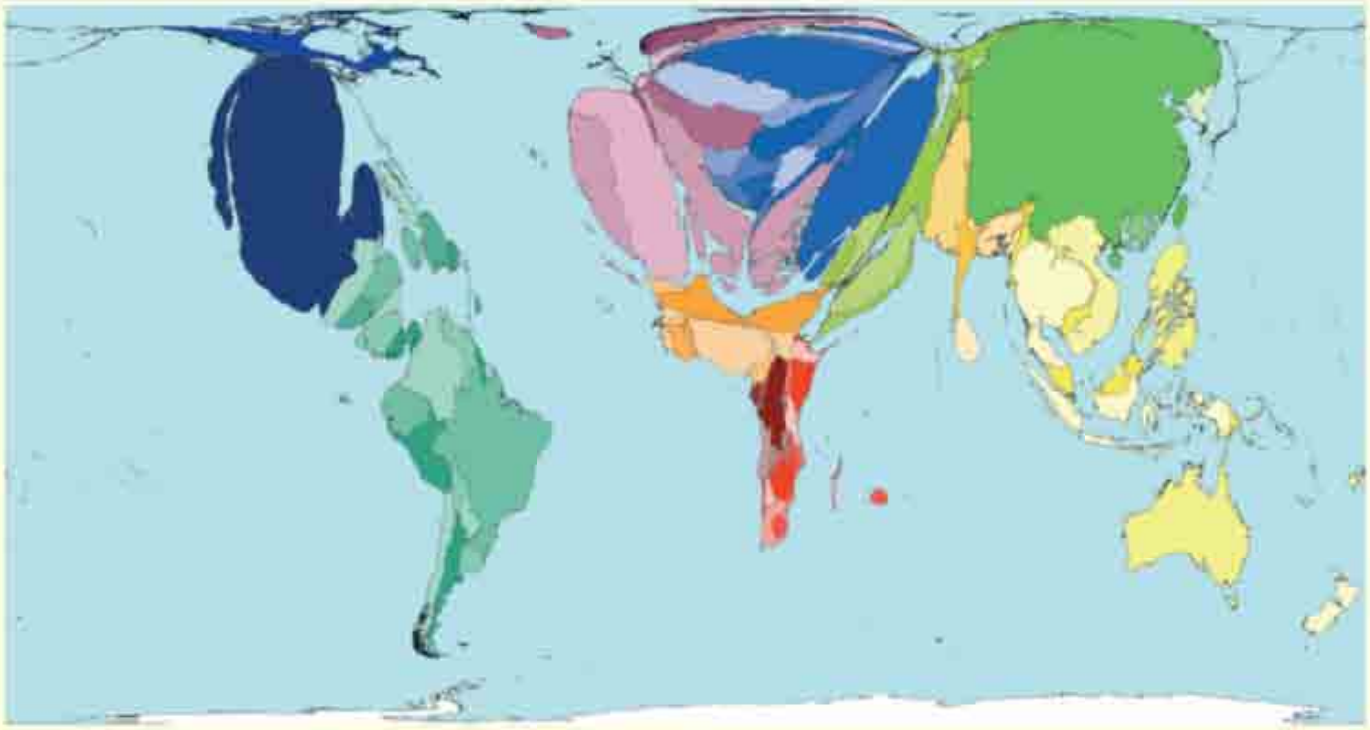


"Dutch chemical sales were up by 9% in 2004, but 8% of that rise was due to increased selling prices and only 1% to greater production output …"

Patricia L. Short, 2005

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Chemical Imports



Most territories in the world are net importers of chemicals. These imported chemicals are most likely to come from the Western European territories with no area on this map.

China and Mexico import the highest values of chemicals (US$ net). Together people living in these territories import 28% of all net imports. This percentage of worldwide imports received by the two highest importers is considerably lower than the same number for other products. For example the clothing imports to the United States and Japan are 58% of all net (US$) imports. The difference is partly because so many other territories also import chemicals.

Territory size shows the proportion of worldwide net imports of chemicals (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net imports of chemicals recorded for 35 territories.
- See website for further information.

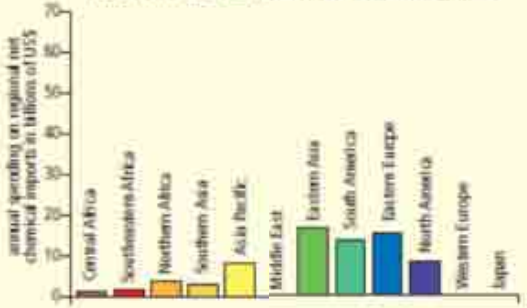
MOST AND LEAST US$ OF NET CHEMICAL IMPORTS

Rank	Territory	Value
1	Andorra	1467
2	Iceland	529
3	Niue	486
4	United Arab Emirates	449
5	Saint Kitts & Nevis	382
6	Malta	333
7	Cyprus	324
8	Greenland	302
9	Barbados	269
10	Saint Lucia	264

Rank	Territory	Value
156	Nepal	2.32
157	Ethiopia	2.30
158	Niger	2.11
159	Burundi	1.98
160	Jordan	1.95
161	Somalia	1.36
162	Central African Republic	1.10
163	Liberia	0.85
164	India	0.46
165	Comoros	0.10

*US$ worth of chemical imports per person living in that territory**

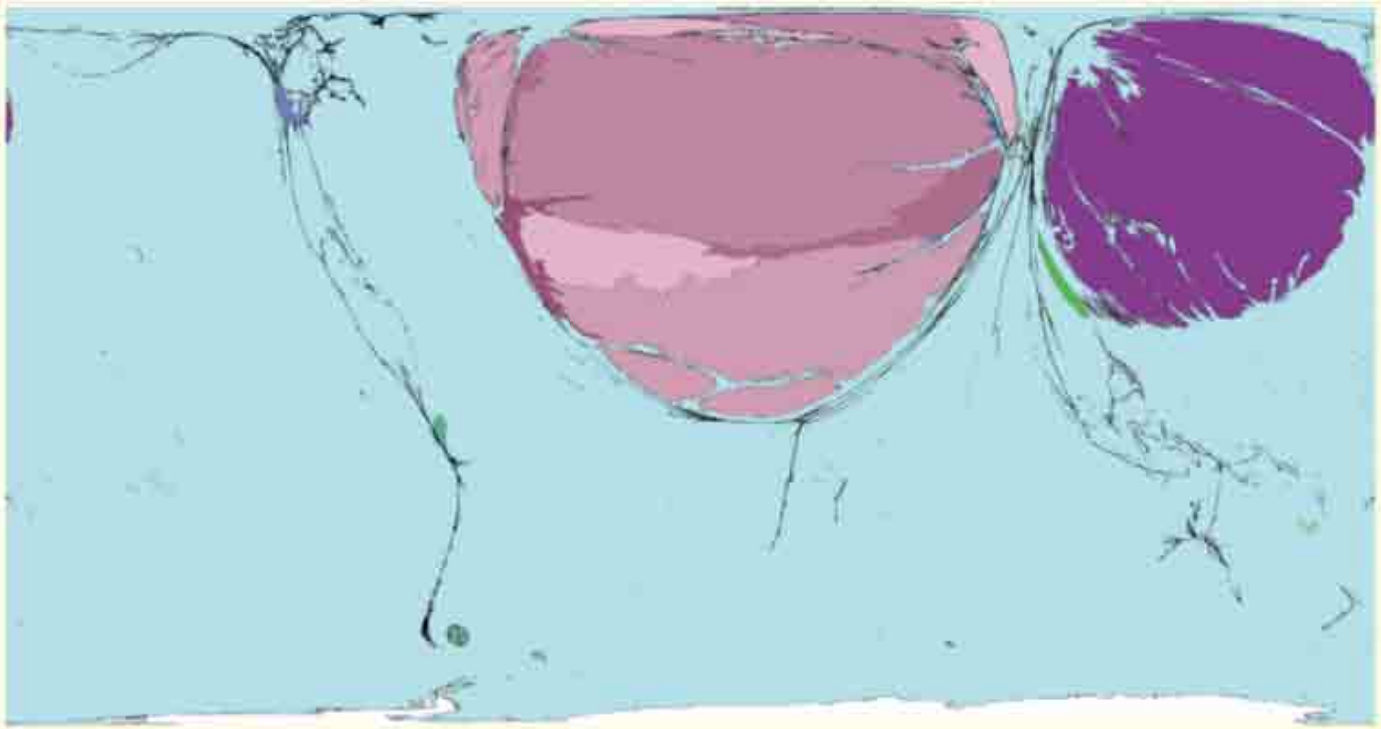
REGIONAL NET CHEMICAL IMPORTS



"... new chemicals come from our laboratories in an endless stream ..." Rachel Carson, 1962

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Machine Exports



Only 19 territories are primarily exporters (net US$) of machines; 181 territories are net importers of machines. Machines include engines, turbines and pumps. Also included are machines for making food, working metal and binding books.

Earnings from machines account for 10.5% of all earning from international exports worldwide. These earnings are almost exclusively made in Western Europe and Japan. Of all the net exporting territories, Switzerland earns the most per person from its machine exports (US$ net). No territories in 7 of the 12 world regions are net exporters of machines.

Territory size shows the proportion of worldwide net exports of machines (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net exports of machines recorded for 181 territories. For 4 territories in Western Europe the regional average was used.
- Only the top and bottom eight net exporters are shown in the table, because only 19 territories are net exporters of machines.
- See website for further information.

MOST AND LEAST US$ OF NET MACHINE EXPORTS

Rank	Territory	Value
1	Switzerland	1075
2	Germany	659
3	Denmark	506
4	Italy	502
5	Sweden	486
6	Austria	485
7	Finland	441
8	Japan	423

Rank	Territory	Value
	Western European Average	246.16
13	United Kingdom	83.51
14	Netherlands	46.89
15	Czech Republic	24.85
16	Taiwan	24.22
17	France	22.17
18	United States	1.51
19	Hungary	0.84

*US$ worth of machine exports per person living in that territory**

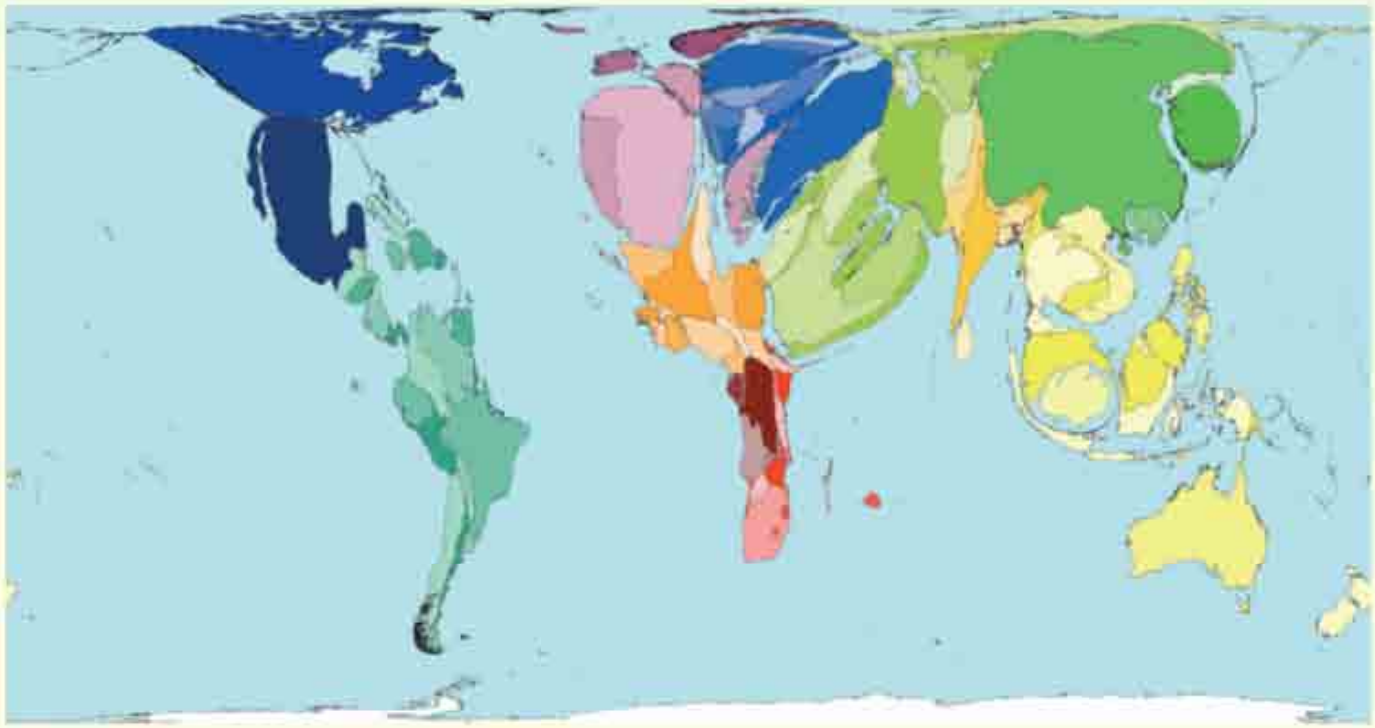
REGIONAL NET MACHINE EXPORTS

"There in the flickering light of the lamp was the machine sure enough, squat, ugly, and askew; a thing of brass, ebony, ivory, and translucent glimmering quartz."

H. G. Wells 1898

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Machine Imports



Machines are imported (net) to 90% of the territories in the world. The Middle Eastern territories of Qatar and the United Arab Emirates generate the highest per person US$ value of net imports. Imports to these two territories are the only per person net imports that exceed US$1000 a year.

The category of machines is so broad that items with many different uses are included, ranging from food production to firearms and ammunition. The biggest component of this category is non-electrical machinery parts. These may be imported then constructed in the receiving territory - or may be imported for repairs.

Territory size shows the proportion of worldwide net imports of machines (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

Data source: United Nations Conference on Trade and Development, 2002.

- *There were no net machine imports recorded for 19 territories.
- See website for further information.

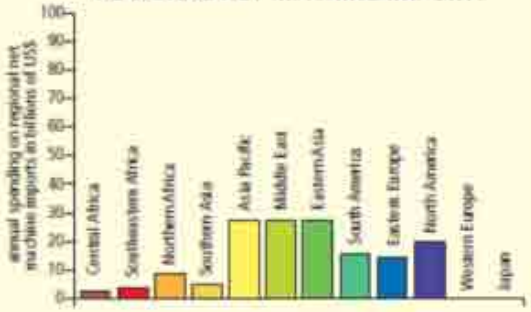
MOST AND LEAST US$ OF NET MACHINE IMPORTS

Rank	Territory	Value
1	Qatar	1317
2	United Arab Emirates	1026
3	Singapore	883
4	Andorra	861
5	Greenland	799
6	Cyprus	606
7	Brunei Darussalam	592
8	Bahrain	535
9	Trinidad & Tobago	478
10	Kuwait	448

Rank	Territory	Value
172	Burkina Faso	2.25
173	Tajikistan	2.09
174	Liberia	2.08
175	India	2.07
176	Rwanda	1.86
177	Niger	1.70
178	Central African Republic	1.55
179	Burundi	1.16
180	Comoros	0.96
181	Somalia	0.79

*US$ worth of machine imports per person living in that territory.**

REGIONAL NET MACHINE IMPORTS

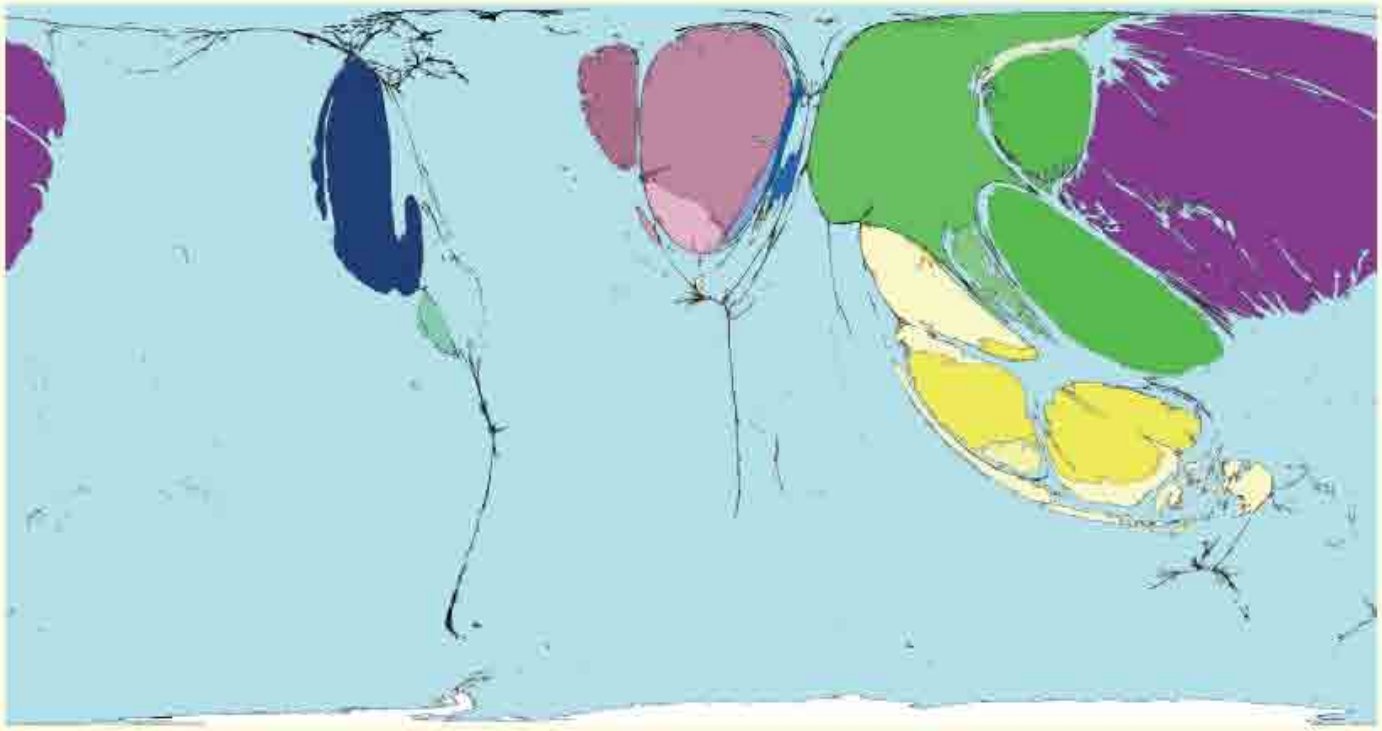


"It was not until some time after its arrival that mechanisation destroyed the need for handloom weavers and left them jobless ..."

The Science Museum, 2004

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Electronics Exports



Asian territories are the major world-supplier of electronics. In particular Japan, China, Taiwan and Malaysia. As 85% of territories import (net) electronic items, these exporting territories are from where these demands are met. These territories, with others, are sometimes referred to as Asian Tigers, or Tiger economies. This is claimed to be due to their high growth, rapid-industrialisation and export-driven trade strategies.

Worldwide, electronics exports generate 10.2% of all money earnt from trade in goods. Electronics include television and radio receivers, photography equipment, and electro-medical equipment.

Territory size shows the proportion of worldwide net exports of electronics (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net exports of electronics recorded for 169 territories. For 7 territories in Asia Pacific the regional average was used.
- See website for further information.

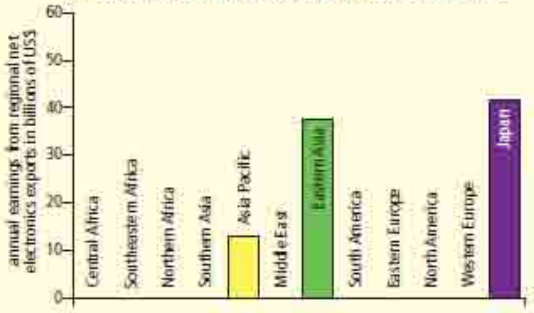
MOST AND LEAST US$ OF NET ELECTRONICS EXPORTS

Rank	Territory	Value
1	Ireland	716
2	Taiwan	535
3	Malaysia	404
4	Hong Kong (China)	342
5	Japan	326
6	Singapore	279
7	Slovenia	270
8	Switzerland	219
9	Saint Kitts & Nevis	203
10	Samoa	187

Rank	Territory	Value
16	DPR Korea	27.02
17	Hungary	26.27
...	Asia Pacific Average	22.64
25	Indonesia	18.24
26	China	13.88
27	Portugal	12.47
28	Belarus	6.48
29	Turkey	5.34
30	Tunisia	5.01
31	Belgium	2.60

*US$ worth of electronics exports per person living in that territory**

REGIONAL NET ELECTRONICS EXPORTS

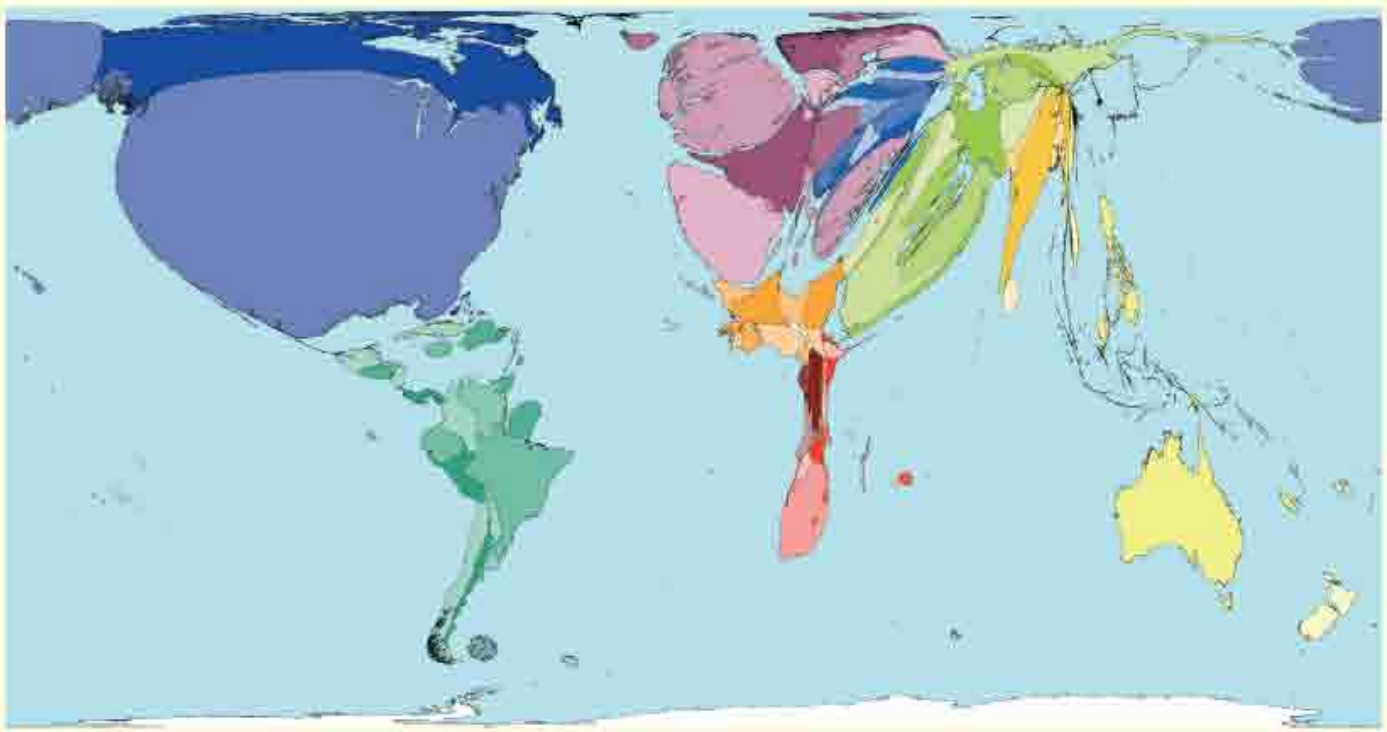


"The ability of nations to compete globally is not a function of size, as Korea, Taiwan, Singapore, Hong Kong, and Malaysia demonstrate."

Michael J. Kelly, 1997

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Electronics Imports



Whilst many people use electronic items as part of their day to day life, others have very little contact with electronics. This is particularly the case if someone has no electricity supply, or an insecure electricity supply.

The United States is a major net importer of electronics, people living there spend US$47 billion per year on imported electronics.

North American territories import (US$ net) almost half of all electronics traded worldwide. North African territories, with a similar total population size to that of North America, import only around 5% of the electronics imported (net) by North American territories.

Territory size shows the proportion of worldwide net imports of electronics (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net electronics imports recorded for 31 territories.
- See website for further information.

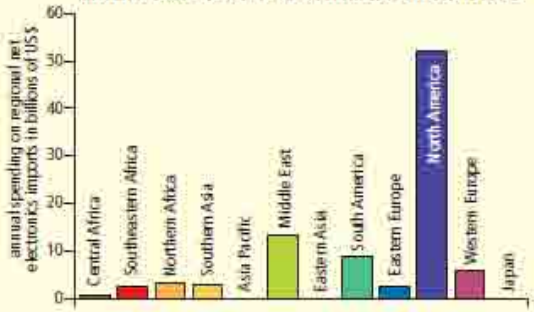
MOST AND LEAST US$ OF NET ELECTRONICS IMPORTS

Rank	Territory	Value
1	Andorra	1680
2	Qatar	658
3	Iceland	649
4	United Arab Emirates	611
5	Greenland	410
6	Bahrain	403
7	Norway	400
8	Canada	399
9	Brunei Darussalam	396
10	Estonia	306

Rank	Territory	Value
160	Comoros	1.35
161	Ukraine	1.08
162	Kyrgyzstan	1.07
163	Sierra Leone	1.06
164	Niger	1.02
165	Somalia	0.97
166	Burundi	0.85
167	Central African Republic	0.70
168	Mali	0.50
169	Liberia	0.37

*US$ worth of electronics imported per person living in that territory**

REGIONAL NET ELECTRONICS IMPORTS

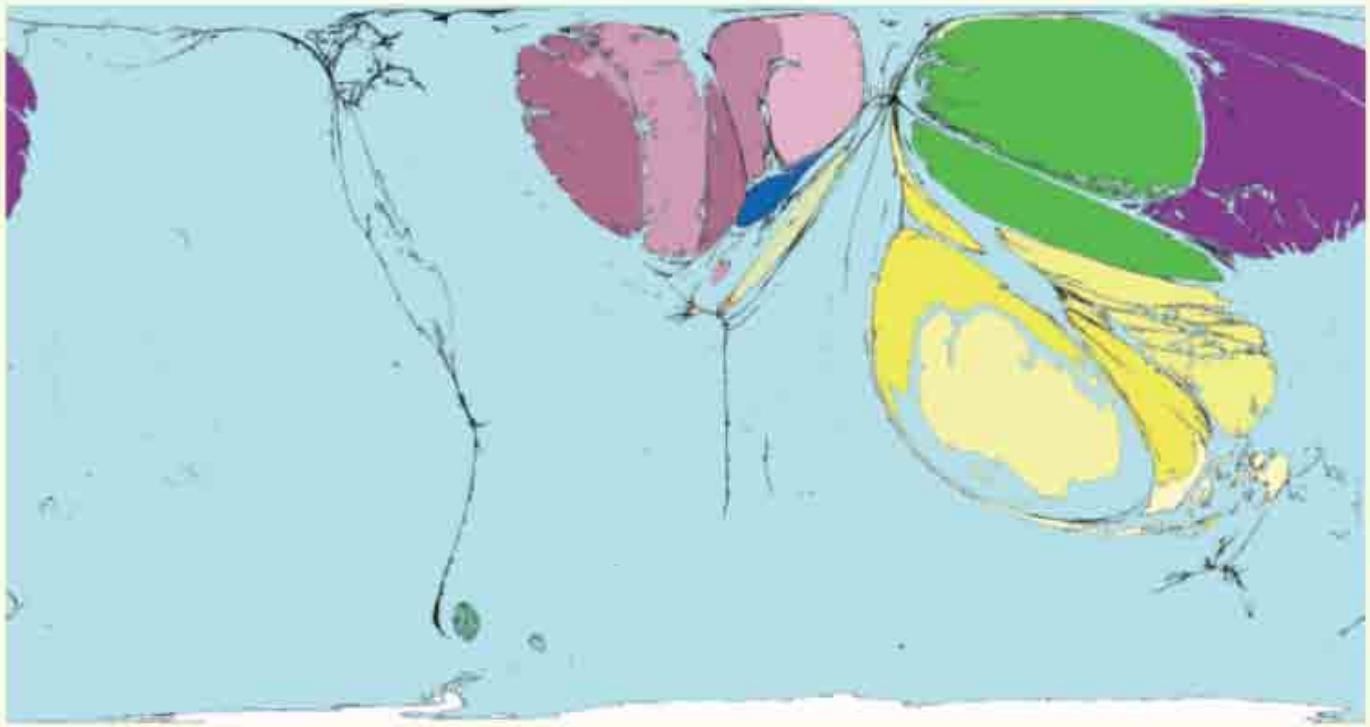


"Andorra was born of commerce and lives by commerce. It is a nation of merchants … people don't just come to ski, they come shopping."

Christian Perez, 1999

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Computer Exports



Computers control and facilitate many aspects of life: from the braking systems in some cars, to contacting people who live on the other side of the world. Of all export earnings, 10.6% are from computer exports.

Singapore is the highest per person earner from net computer exports, where earnings are two and a half times as much as Ireland, the second biggest per person earner.

The regions of Asia Pacific, East Asia and Japan have the highest net exports. Western European net exporting territories counter-balance the smaller flow of net computer imports into that region.

Territory size shows the proportion of worldwide net exports of computers (in US$) that come from there. Net exports are exports minus imports. When imports are larger than exports the territory is not shown.

Land area

Technical notes

- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net exports of computers recorded for 172 territories. One territory neither exports nor imports computers. Territories ranked 18-22 and 25-28 had no data so assumed the regional average.
- See website for further information.

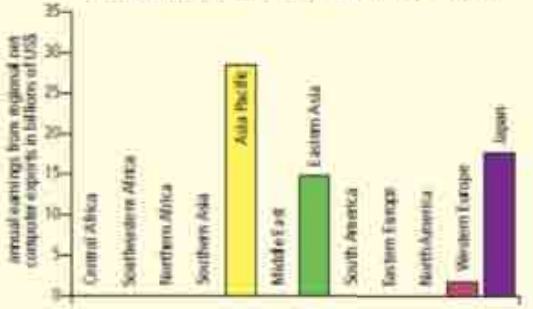
MOST US$ OF NET COMPUTER EXPORTS

Rank	Territory	Value
1	Singapore	4450
2	Ireland	1787
3	Finland	922
4	Malta	764
5	Republic of Korea	344
6	Taiwan	339
7	Sweden	316
8	Malaysia	238
9	Israel	208
10	Japan	137

Rank	Territory	Value
11	Netherlands	132
12	United Kingdom	122
13	Philippines	106
14	Estonia	73
15	Hungary	71
...	Asia Pacific Average	50
23	DPR Korea	11
24	Indonesia	10
...	Western European Average	5
29	Mali	2

*US$ worth of computer exports per person living in that territory**

REGIONAL NET COMPUTER EXPORTS

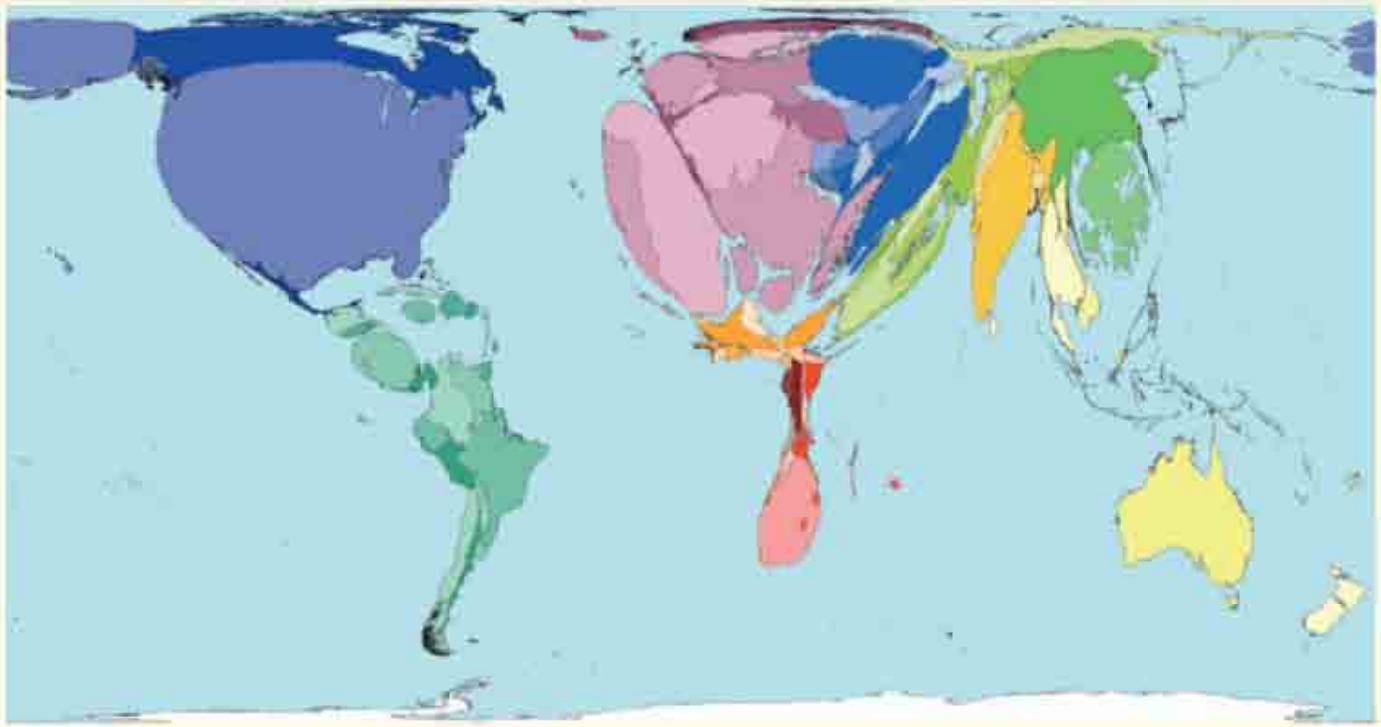


"Singapore is to be transformed into an intelligent island, where IT permeates every aspect of the society - at home, work, and play."

Chun Wei Choo, 1997

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Computer Imports



One of the earliest computers was the abacus - a counting device using beads. The first modern commercial computer was purchased only 55 years ago. Since, rapid reductions in the cost, physical size, and ever greater increases in speed and memory have heralded what is now a huge annual flow of computers around the world.

As with many imports, the United States imports more than any other territory. In this instance almost five times more net computer imports are received in the United States than in any other territory.

Territory size shows the proportion of worldwide net imports of computers (in US$) that are received there. Net imports are imports minus exports. When exports are larger than imports the territory is not shown.

Land area

Technical notes

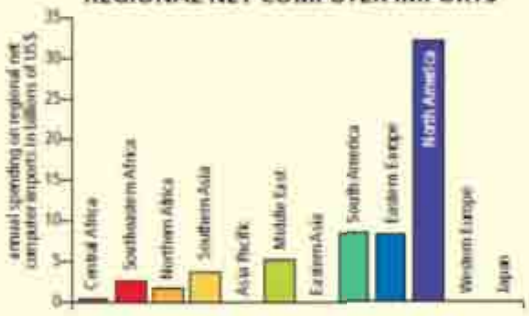
- Data source: United Nations Conference on Trade and Development, 2002.
- *There were no net electronics imports recorded for 28 territories. One territory neither exports nor imports computers.
- See website for further information.

MOST AND LEAST US$ OF NET COMPUTER IMPORTS

Rank	Territory	Value	Rank	Territory	Value
1	Andorra	722	162	Ethiopia	0·98
2	Hong Kong (China)	615	163	Somalia	0·92
3	Switzerland	476	164	Honduras	0·78
4	Luxembourg	437	165	Myanmar	0·76
5	Iceland	373	166	Burundi	0·75
6	Costa Rica	291	167	Tajikistan	0·74
7	Norway	270	168	Comoros	0·62
8	Australia	246	169	Central African Republic	0·23
9	Saint Lucia	231	170	Sierra Leone	0·18
10	Denmark	203	171	Liberia	0·16

*US$ worth of computer imports per person living in that territory**

REGIONAL NET COMPUTER IMPORTS



"... the short lifetime of today's IT equipment leads to mountains of waste ..." Tim Hirsch, 2004

Courtesy of www.worldmapper.org, 2006 SASI Group (U. of Sheffield) and Mark Newman (U. of Michigan)

Manufacturer Summary

- Manufacturing used to be the power index of our society. But manufacturing index becomes less attractive as China becomes world factory.
- China shift from world factory to world market might reverse manufacturing outsourcing thinking for many countries.
- How a society can survive with only white-collar-workers domination.
  - Hong Kong and Singapore are two typical examples
  - Sustainable for >100M population?
- Automation and Robot Impact!