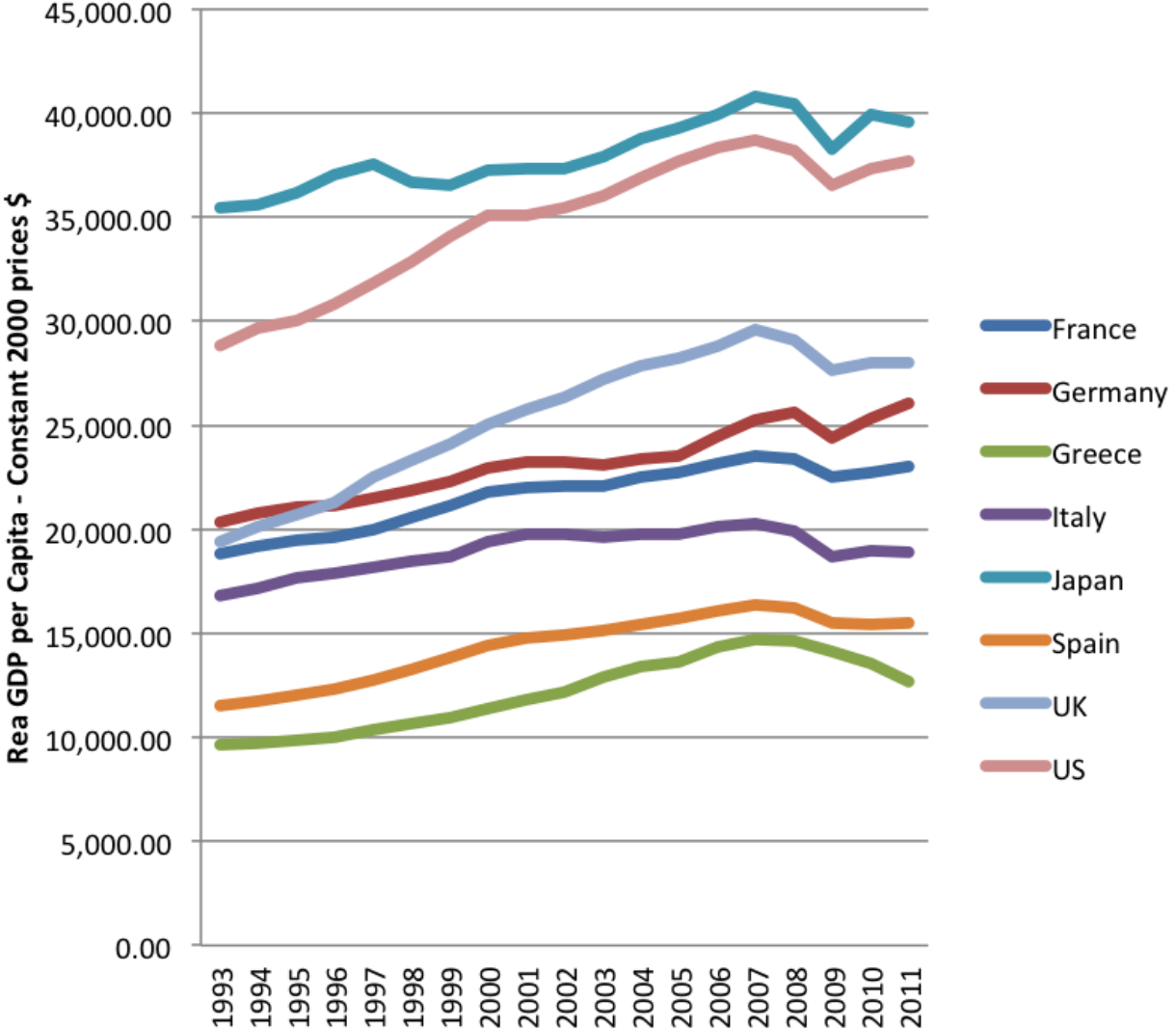


- Comparing GDP:
  - [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Beginners:GDP -  
\\_Comparing GDP: growth rate and per capita](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Beginners:GDP_-_Comparing_GDP:_growth_rate_and_per_capita)
- Purchasing Power Parity (PPP):
  - <https://www.investopedia.com/updates/purchasing-power-parity-ppp/>
- Gini index:
  - [https://it.m.wikipedia.org/wiki/Coefficiente\\_di\\_Gini](https://it.m.wikipedia.org/wiki/Coefficiente_di_Gini)

## Effects on the living condition of the world population

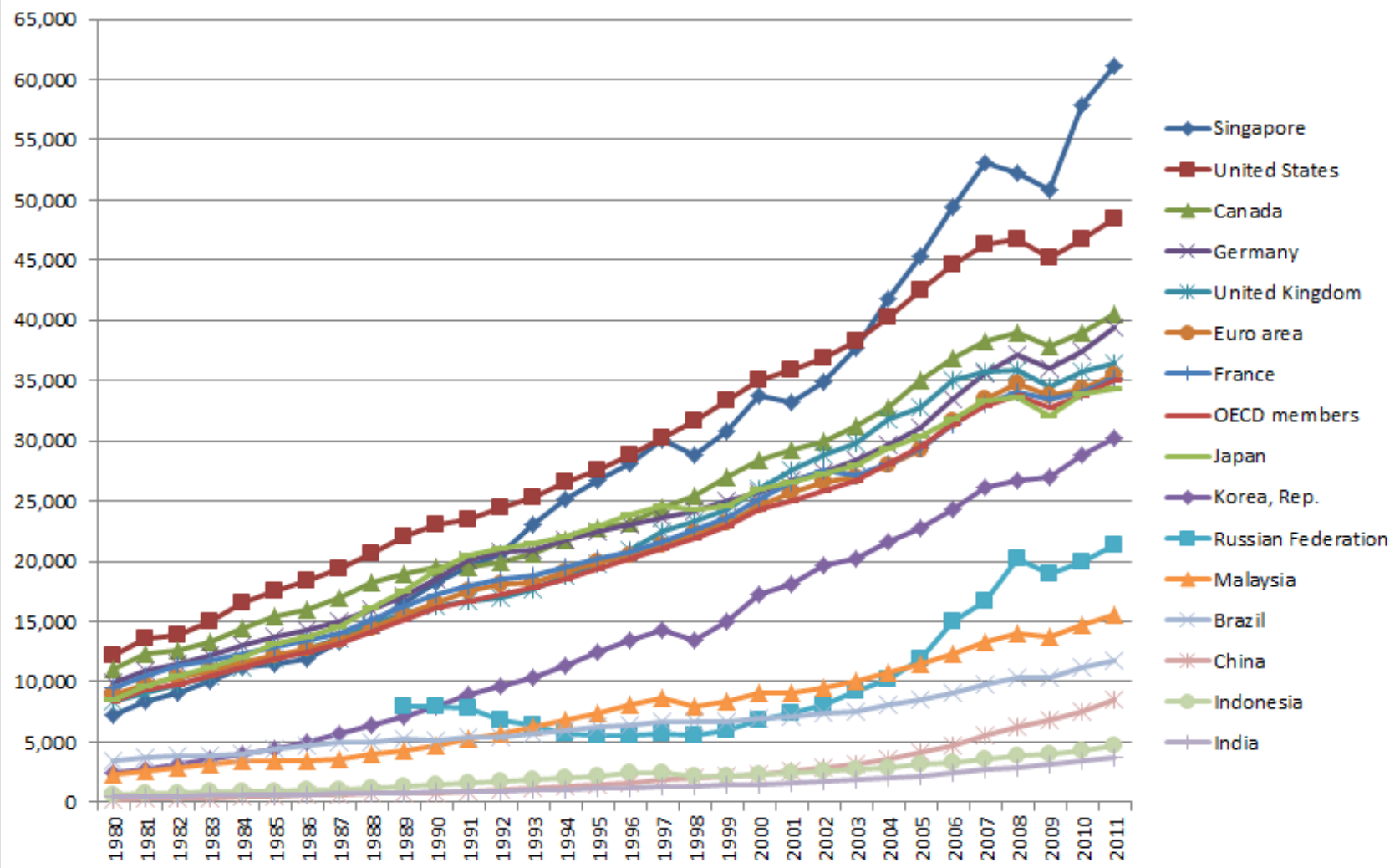
- Effects on the creation of wealth
- Effects on the reduction of poverty
- Effects on the distribution of wealth
- Effects on the environment
  - limits to growth
  - technological and behavioral progress

# Real GDP per capita

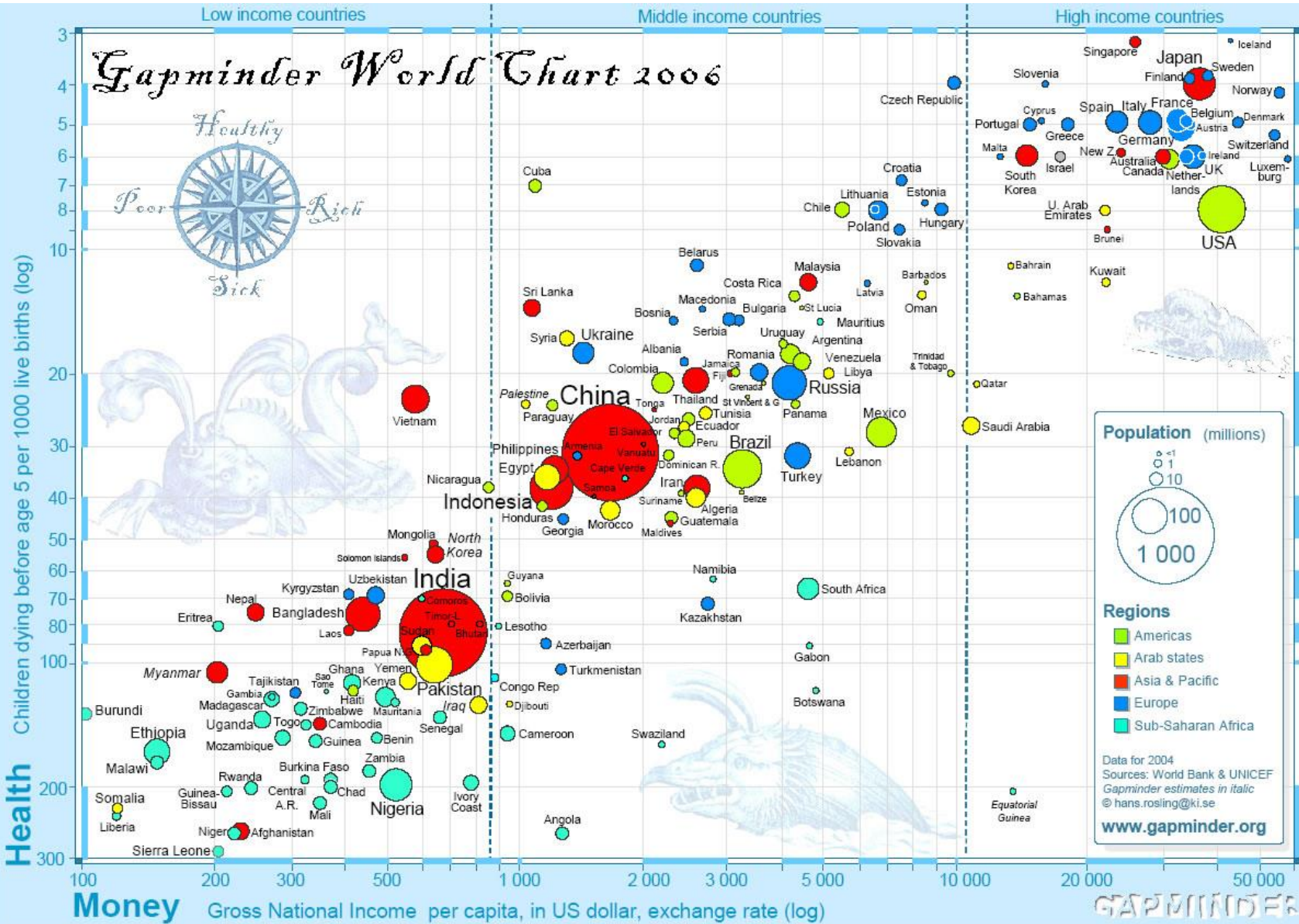


www.economicshelp.org | Source: World Bank - NY.GDP.PCAP.KD

## GDP per capita, PPP (current international \$)

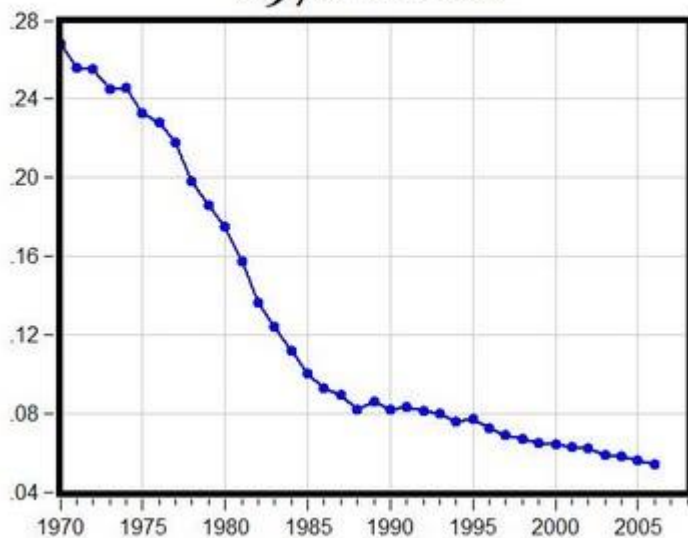


# Gapminder World Chart 2006

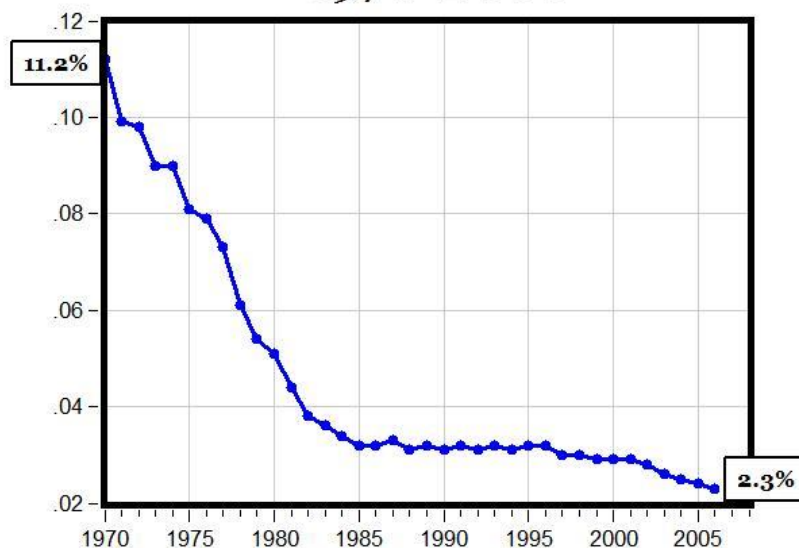


# World poverty statistics

**World \$1/Day Poverty Rate  
1970-2006**

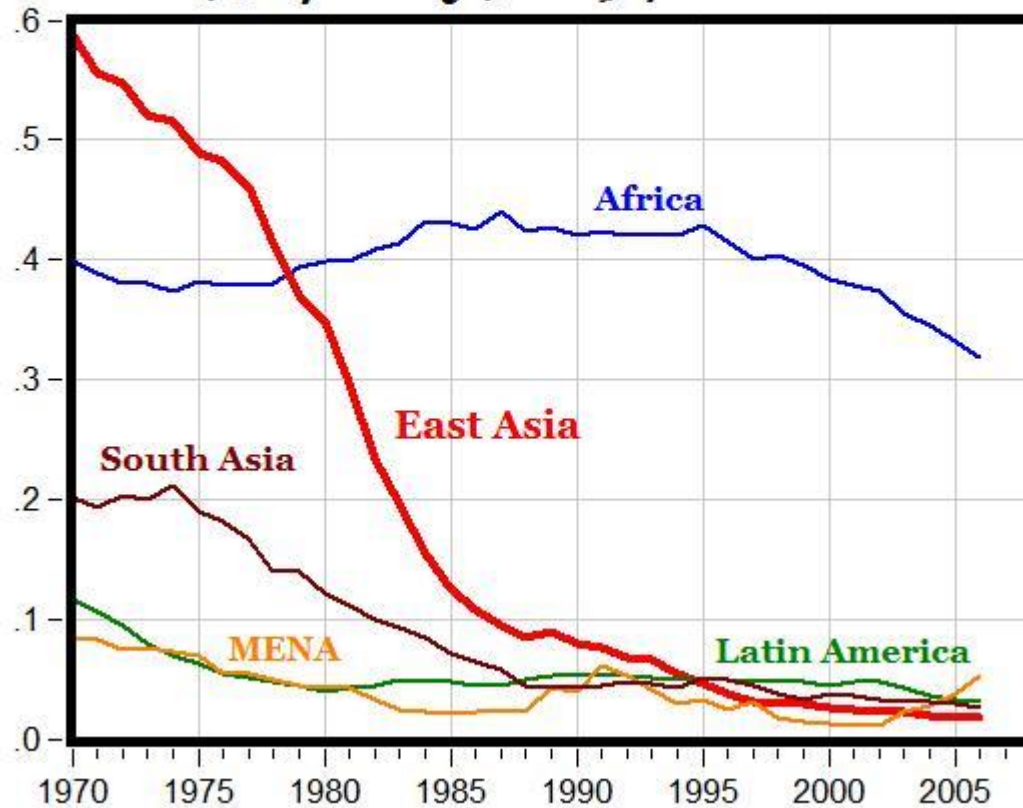


**World Poverty Rate  
One 2006 Dollar/Day  
1970-2006**



Source: Maxim Pinkovskiy, Xavier Sala-i-Martin, (2009), Parametric Estimations of the World Distribution of Income, NBER Working Paper No. 15433

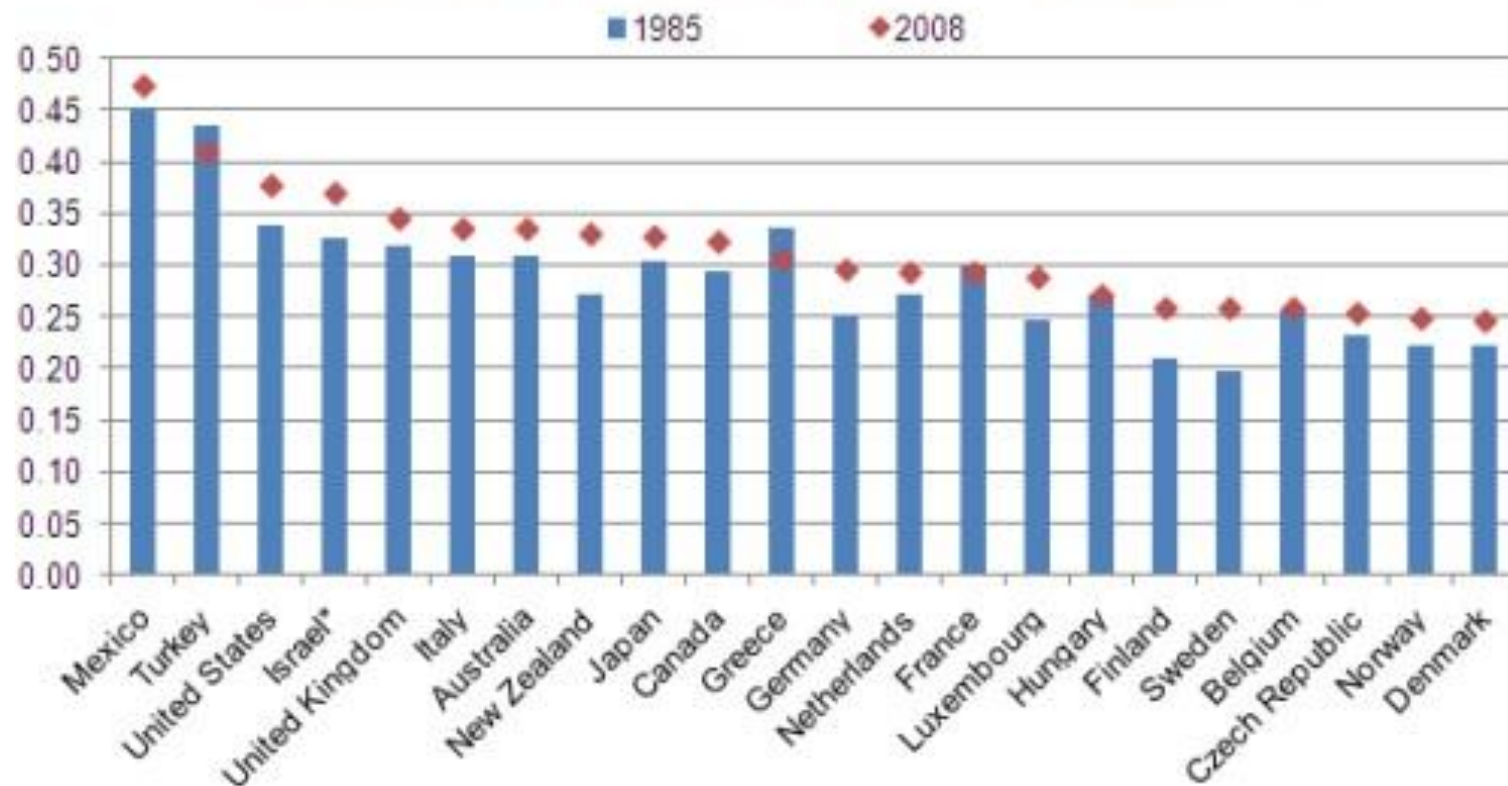
# Regional Poverty Rates (\$1/Day) 1970-2006



Source: Maxim Pinkovskiy, Xavier Sala-i-Martin, (2009), Parametric Estimations of the World Distribution of Income, NBER Working Paper No. 15433

## Income inequality increased in most, but not all OECD countries

Gini coefficients of income inequality, mid-1980s and late 2000s





## **DINAMICHE GEOGRAFICHE DELLA POVERTA' (I)**

**La percentuale dei poveri** nei Paesi in via di sviluppo è **scesa tra il 1981 e il 2005 dal 69,2% al 47%**, grazie soprattutto allo **spettacolare declino della povertà in Cina** (dal 97,8% al 36,3%), iniziato negli anni Ottanta del 20° secolo.

La minore incidenza della povertà in altre regioni, come l'Asia meridionale (dall'86,5% al 73,9%) o l'America Latina (dal 22,5% al 16,6%), non è stata tale da ridurre il numero totale dei poveri a fronte della crescita della popolazione.

Tra il 1981 e il 2005 il numero dei poverissimi è sceso di 519,5 milioni, grazie alla riduzione della povertà estrema in Cina; ma è quasi raddoppiato (da 639 milioni a 1,185 miliardi) il numero di coloro che, sebbene siano sfuggiti alla povertà estrema, si sono collocati nella fascia compresa tra 1,25 e 2 dollari al giorno, in condizioni comunque di persistente vulnerabilità (Chen, Ravallion 2008, p. 21).

**L'incidenza della povertà (meno di 2 dollari al giorno) è stagnante nell'Africa subsahariana** (dal 74% del 1981 al 73% del 2005), anche se con alcuni picchi di crescita nel corso degli anni Ottanta e Novanta. All'inizio del 21° sec., al progresso della Cina non corrisponde un miglioramento in altre regioni in via di sviluppo. Tra il 1999 e il 2005 l'Africa subsahariana non ha visto diminuire in assoluto il numero dei suoi poveri, che è anzi aumentato (+48,2 milioni).

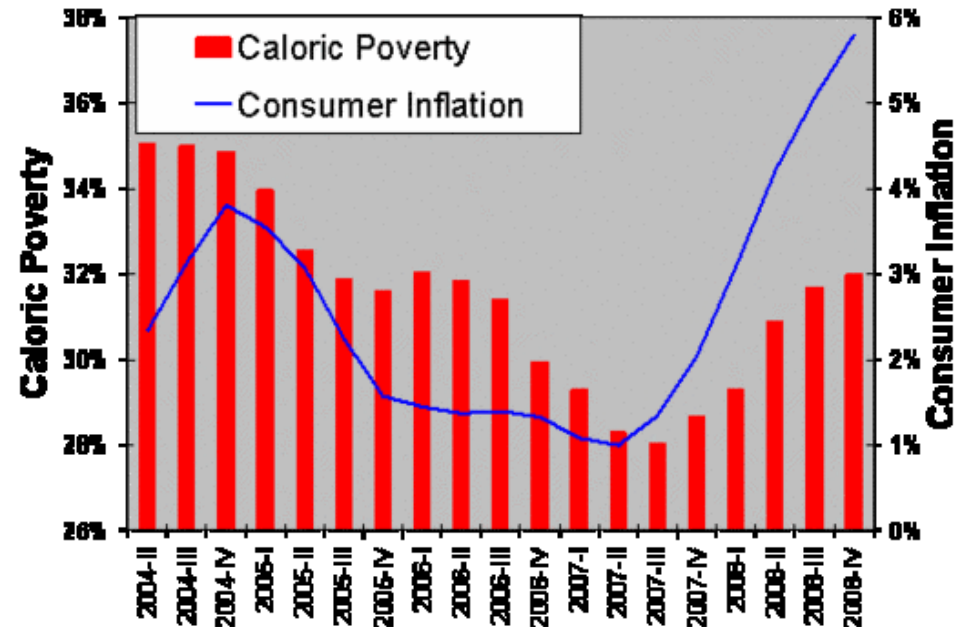
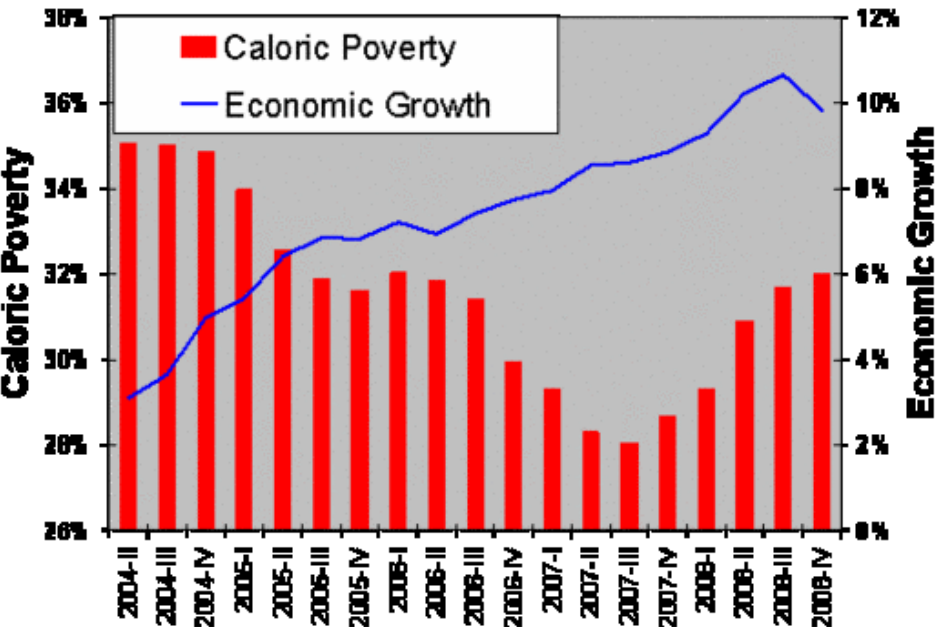
Anche in India l'incidenza di povertà è aumentata fino al 2005 (+44,9 milioni), per poi ridursi negli anni più recenti grazie alla forte crescita del paese.

## DINAMICHE GEOGRAFICHE DELLA POVERTÀ' (II)

Problemi di povertà che questi dati non segnalano vi sono in Europa, nell'America Settentrionale, in Giappone, in Australia, in società dove il reddito prodotto è sufficiente a garantire, in linea teorica, consumi pro capite ben sopra la linea della povertà assoluta.

Nel valutare il benessere, ci si rapporta alle condizioni prevalenti nell'ambiente in cui si vive, raggiungibili nell'orizzonte di un realistico miglioramento del tenore di vita. Le misure di povertà relativa indicano la distanza del paniere di consumo abituale dal tenore di vita prevalente nel contesto sociale, dove la persona o il nucleo familiare vivono, stimando in percentuale il reddito goduto da una persona, nel suo nucleo familiare, in rapporto al reddito medio del Paese. Con maggiore precisione, la soglia della povertà relativa è calcolata come un reddito pari al 50% del reddito mediano. Nelle società opulente l'indigenza colpisce fasce della popolazione in condizioni di marginalità o escluse dal circuito della produzione e della percezione del reddito. Nuovi poveri, in senso relativo, sono gli anziani con pensioni basse, i giovani con redditi volatili, le famiglie molto numerose, i disoccupati a lungo termine, le persone con basso grado di istruzione o confinate in ghetti urbani o aree a basso reddito, le minoranze emarginate. La povertà relativa può essere amaramente sofferta, anche se il reddito consente di appagare i bisogni primari, perché la percezione del benessere è rapportata ai consumi che le relazioni sociali indicano adatti a una vita dignitosa e soddisfacente. La povertà relativa è patita non solo come privazione oggettiva nell'accesso a più godibili esperienze vitali, ma come esclusione dallo status, che dà stima e riconoscimento nelle relazioni con gli altri. In tutte le società, i consumi sono segnali di status: indicano la posizione della persona nella gerarchia del valore, del potere, del riconoscimento pubblico. Vi è ampio spazio di controversia nel valutare le soglie della povertà relativa all'interno dei Paesi sviluppati, anche perché le opportunità offerte ai cittadini con redditi bassi dai servizi pubblici sono diverse da uno Stato all'altro o nelle regioni della stessa nazione, e tutelano con minore o maggior efficacia dalle privazioni dell'indigenza. È evidente, però, che la povertà assoluta, che mette a rischio la vita e la salute propria e delle persone care, impedisce la fruizione della cultura e dei diritti, espone alla prepotenza dei propri simili o delle autorità, risulta incommensurabile ai disagi di una sia pur dolorosa povertà relativa.

# But there are also outliers... (the case of Perú)



Source: <http://www.economonitor.com/blog/2009/03/growth-inflation-and-poverty/>

## 'United Colors of Benetton' clothes found at site of building collapse in Bangladesh

- Shirts with United Colors of Benetton labels seen in the rubble
- AFP have seen orders from UCB to suppliers at the plaza
- Company deny their suppliers were involved in the tragedy
- **Nine found alive in the rubble days after collapse**

Recommend Send 264 people recommend this. Be the first of your friends.

A shirt with a "United Colors of Benetton" tag  
Cranes called to Bangladesh factory



A shirt with a "United Colors of Benetton" tag lays in the rubble of a building that collapsed in Savar, near Dhaka, Bangladesh. The company say their suppliers weren't based in the building. Picture: AP Photo/Kevin Frayer Source: AP

### Main Buyers

#### SHIRT/ BLOUSE

01. TEXMAN I/S, DENMARK
02. ITD SRL, ITALY
03. PELLEGRINI AEC SRL, ITALY
04. SIPLEC, FRANCE
05. MATALAN RETAIL LTD, UK
06. M/S.LOBLAWS INC, CANADA
07. DE BLASIO SPA, ITALY
08. TRIMARK SPORTSWEAR GROUP LTD,CANADA
09. PREMIER CLOTHING LTD, UK
10. KT GROUP INC, USA
11. YVES DORSEY SA, FRANCE
12. THE CHILDREN'S PLACE (CANADA) INC,CANADA
13. QUELLE GMBH, GERMANY
14. MANGO (PUNTO FA ) , SPAIN
15. LOBLAWS INC , CANADA
16. BENETTON ASIA PACIFIC LTD , HONKONG

#### PANT/TROUSER

01. MATALAN RETAIL LTD, UK
02. M/S.LOBLAWS INC, CANADA
03. PRIMARK STORES LTD, IRELAND
04. POETICGEM LTD, UK
05. GRABAL ALOK (UK) LTD, UK
06. BON MARCH LTD. UK
07. MANGO (PUNTO FA ) , SPAIN
08. LOBLAWS INC ,CANADA
09. 2744651 CANADA INF/UFO ,CANADA
10. DRESS BARN INC ,USA
11. POETICGEM LTD, UK





© AFP/GETTY IMAGES

“The front-line responsibility is the government’s, but the real power lies with Western brands and retailers, beginning with the biggest players: Walmart, H & M, Inditex, Gap and others,” said Scott Nova, executive director of [Worker Rights Consortium](#), a labor rights organization. “The price pressure these buyers put on factories undermines any prospect that factories will undertake the costly repairs and renovations that are necessary to make these buildings safe.”

<http://www.ilpost.it/2014/01/04/le-proteste-degli-operai-tessili-cambogia/>

# Club Of Rome: Limits To Growth Model

1970

# What Is It?

- ***The Limits to Growth*** is a 1972 book modelling the consequences of a rapidly growing world population and finite resource supplies, commissioned by the Club of Rome.
- Five variables were examined in the original model, on the assumptions that exponential growth accurately described their patterns of increase, and that the ability of technology to increase the availability of resources grows only linearly.

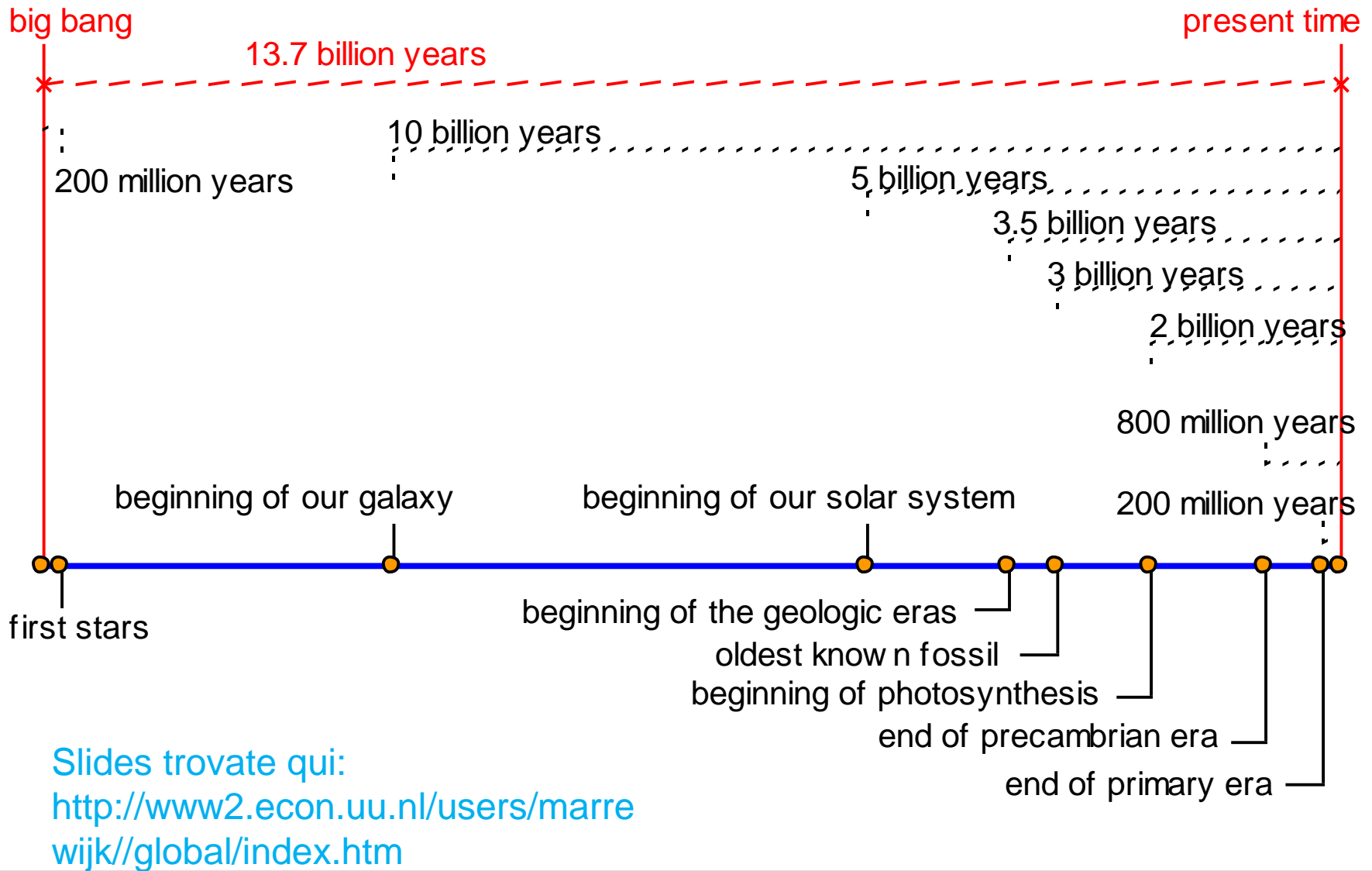


# The Variables

- World Population.
- Industrialization.
- Pollution.
- Food Production.
- Resource Depletion.

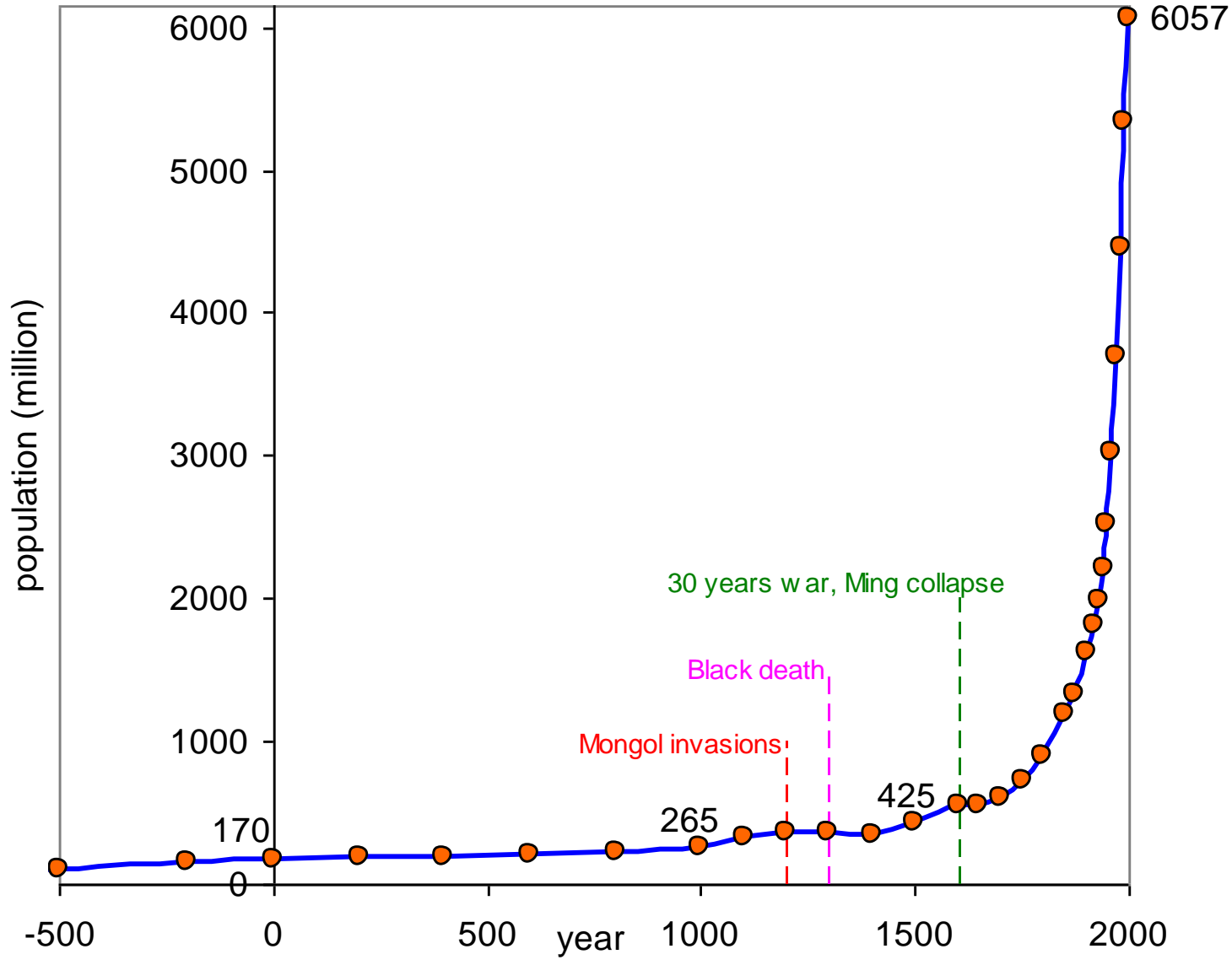
# Purpose

- To explore how exponential growth interacts with finite resources.
- The size of resources is not known, only the general behaviour can be explored.
- It is predicted that the limits to growth would be reached by 2070.



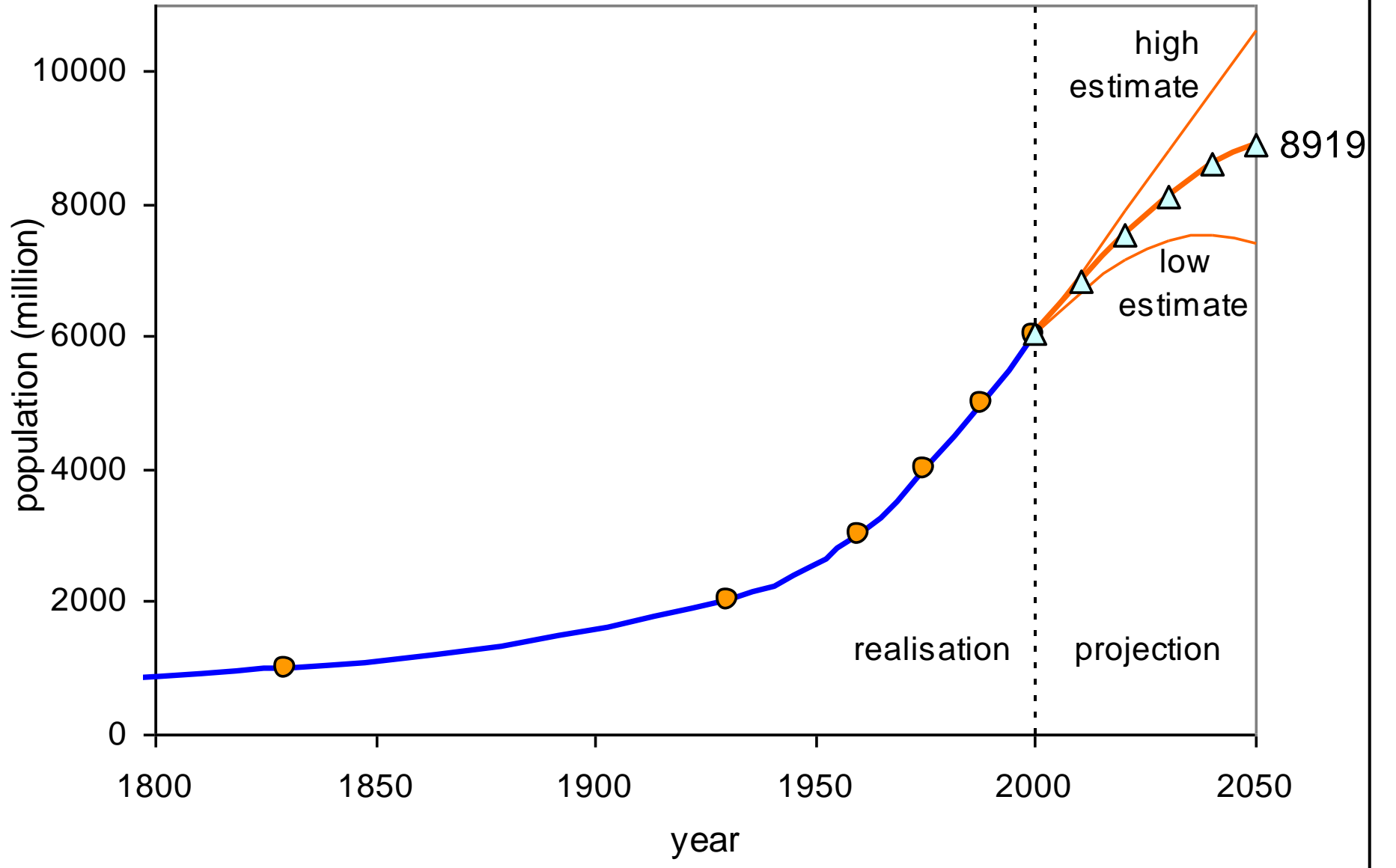
Data sources: Louis Henri Fournet (1998), "Diagrammatic chart of world history over the last 5000 years," SIDES, Fontenay-sous-Bois, France, and the website <http://www.nasa.gov> "A baby picture of the universe tells its age", 11 February 2003.

# World population in historic perspective



Data sources: Kremer (1993, table 1) and U.N. World Population Prospects: The 2000 Revision (for the estimate of the year 2000; see <http://www.un.org/popin.data.html> )

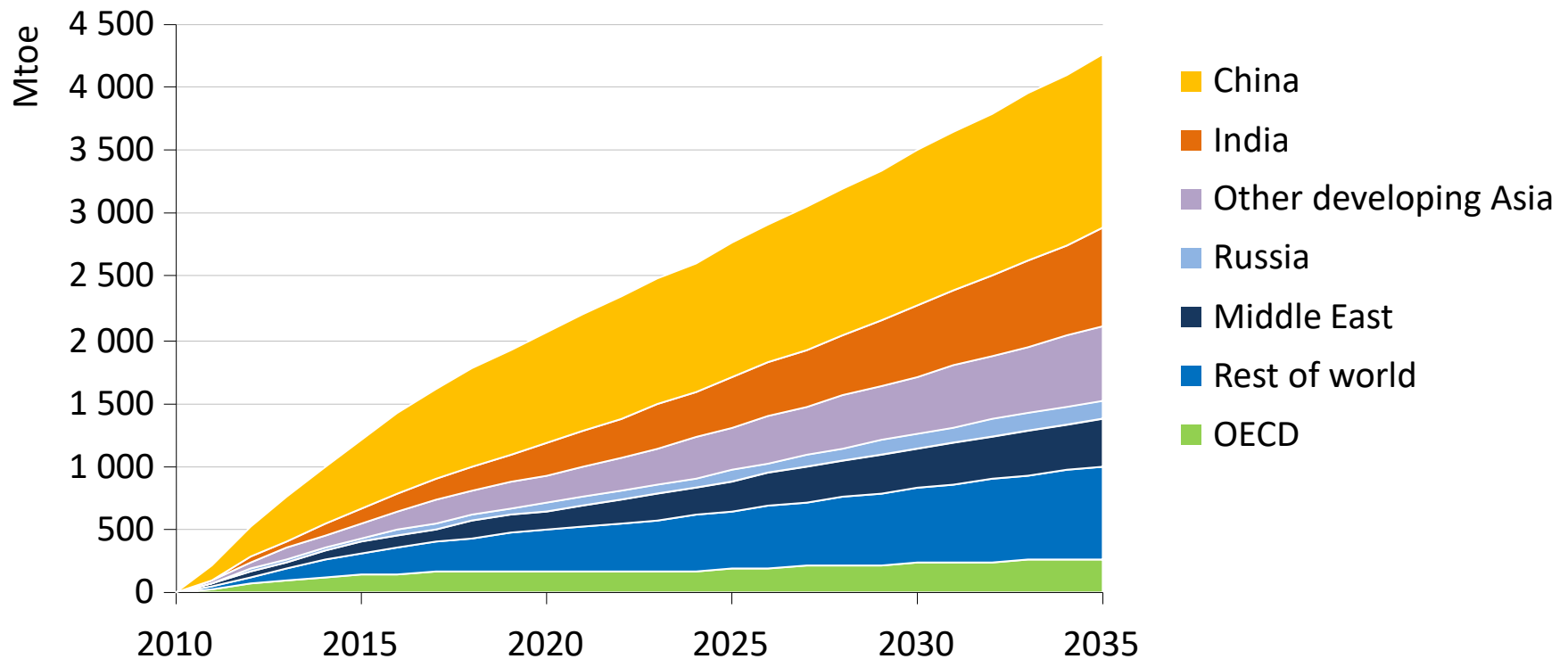
# World population; UN projection



Data sources: Kremer (1993, table 1) and U.N. World Population Prospects: The 2002 Revision, see <http://www.un.org/popin.data.html>

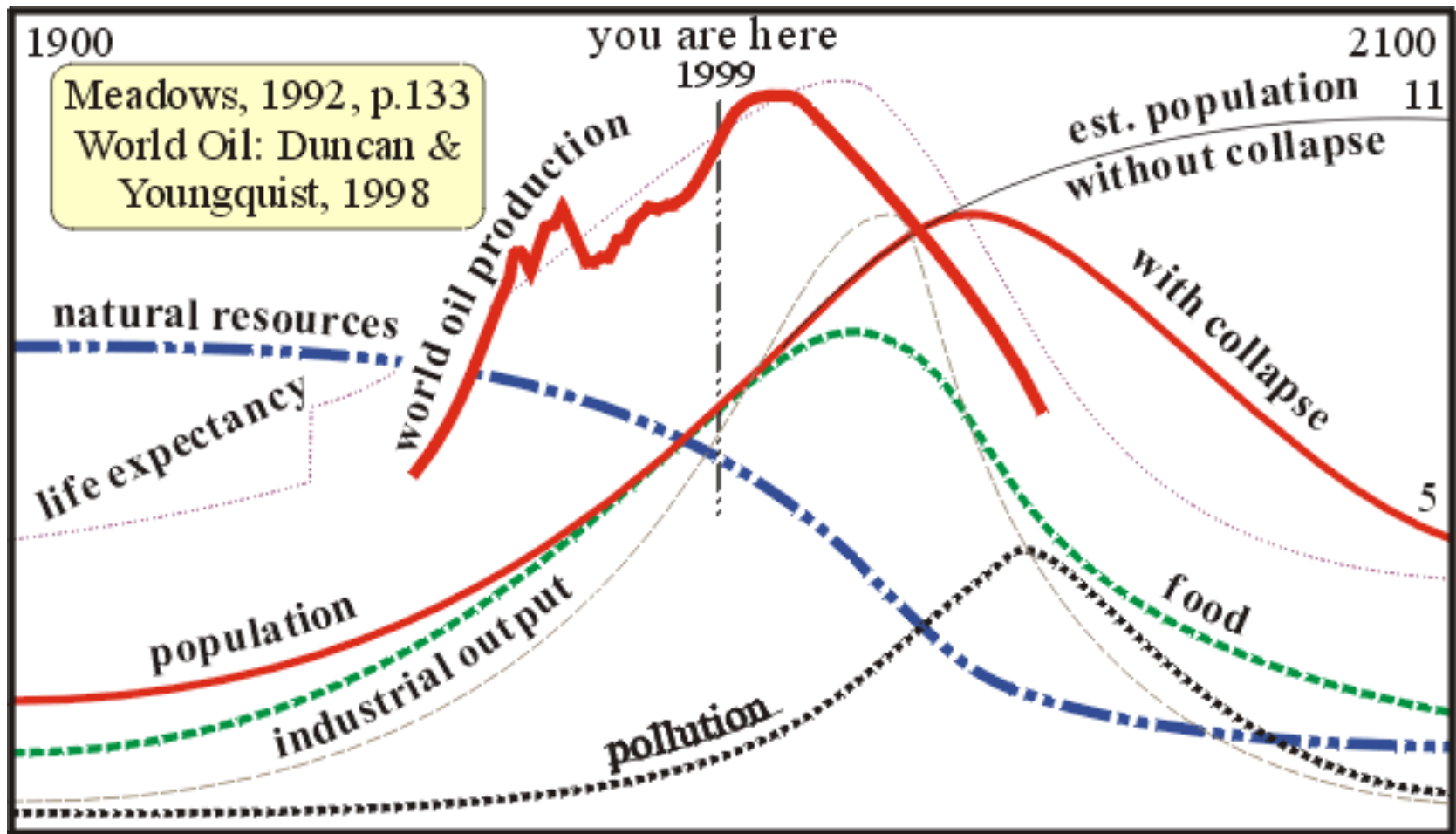
# Emerging economies continue to drive global energy demand

Growth in primary energy demand



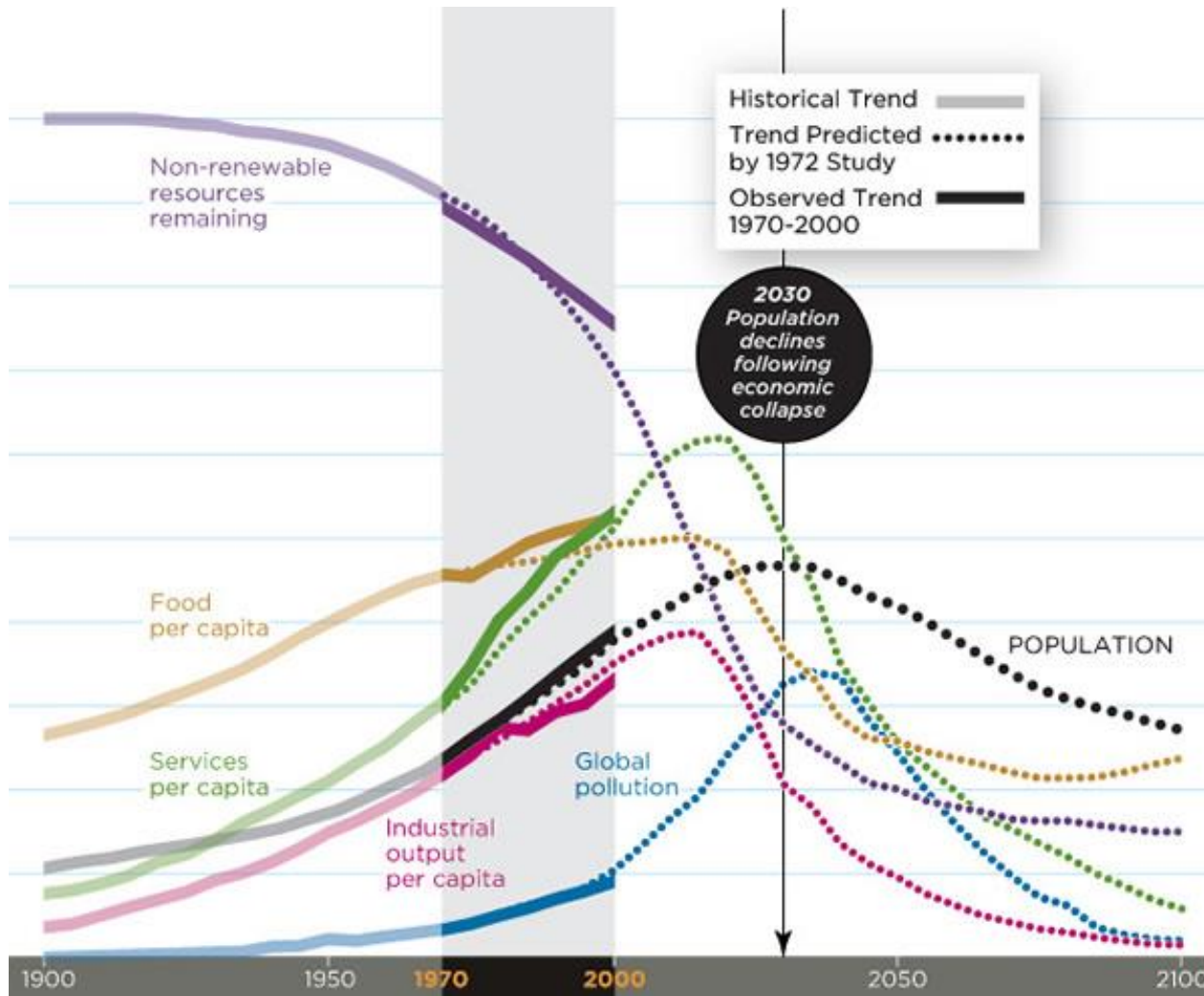
*Global energy demand increases by one-third from 2010 to 2035, with China & India accounting for 50% of the growth*

Source: World Energy Outlook 2011, OECD/IEA



These curves are drawn from the "business as usual" scenario on p. 133, Meadows et al., BEYOND THE LIMITS [see <http://www.unh.edu/ipssr/BTL.html> ] and from the 1997 Duncan & Youngquist's new World oil production model described in [THE WORLD PETROLEUM LIFE-CYCLE: Encircling the Production Peak](http://www.halcyon.com/duncanrc/). The model may be downloaded at <http://www.halcyon.com/duncanrc/> . To run this model one must download the free Stella Run-Time at <http://www.hps-inc.com/products/STELLA/runtime.html> .

# Are we still on track with the Club of Rome predictions?



Source: Graham Turner, (2008), "A Comparison of the Limits to Growth with Thirty Years of Reality", CSIRO Working Paper Series.



# LTG 1970 conclusions

- “If the present growth trends in world population, industrialization, pollution, food production, and resource depletion continue unchanged, the limits to growth will be reached sometime within the next 100 years. The most probably result will be a rather sudden and uncontrollable decline in both population and industrial capacity.”
- “It is possible to alter these growth trends and to establish a condition of ecological and economic stability that is sustainable far into the future.”
- “If the world’s people decide to strive for this second outcome rather than the first, the sooner they begin working to attain it, the greater will be their chances of success.”

# Criticisms

- “The authors load their case by letting some things grow exponentially and others not. Population, capital and pollution grow exponentially in all models, but technologies for expanding resources and controlling pollution are permitted to grow, if at all, only in discrete increments.”
- the then-known resources of minerals and energy could, and would, grow in the future, and consumption growth rates could also decline.

# Criticisms

- The theoretical expiry time for each resource would therefore need to be updated as new discoveries, technologies and trends came to light.
- Assuming continuation of the average rate of consumption growth, virtually all major minerals and energy resources would expire within 100 years of publication.
- Even if reserves were two times larger than expected, they state, ongoing growth in the consumption rate would still lead to the relatively rapid exhaustion of those reserves.
- On the other hand, reserves may continue to grow, considering the large amounts of minerals in the planet Earth.

With very few exceptions, the reaction to *The Limits to Growth* by **economists was dismissive and hostile.**

The judgement by one economist that the book was

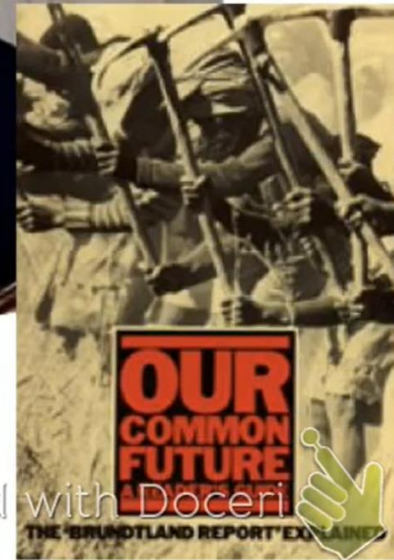
“a brazen, impudent piece of nonsense that nobody could possibly take seriously” (Beckerman 1972)

was representative of the substance of most economists' reaction, if expressed somewhat more robustly than was typical.



*Norwegian Prime Minister*

Created with Doceri



The **World Commission on Environment and Development** (WCED), was convened by the United Nations in 1983.

Chaired by Ms. Gro Harlem Brundtland (NOR prime minister) to address the growing concern

“about the **accelerating deterioration** of the human environment and natural resources and the **consequences** of that deterioration for **economic and social development.**”

The UN General Assembly recognized that environmental problems were **global** in nature and determined that it was in the **common interest of all nations** to establish policies for sustainable development.

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The different reactions by economists to the Brundtland Report and The Limits to Growth are interesting.

In both cases, environmental problems associated with growth are identified and discussed.

In both cases, it is argued that it is impossible to conceive that current trends can be continued far into the future without creating major economic problems.

WHY DIFFERENT REACTIONS? ...



## WHY DIFFERENT REACTIONS?

Limits to Growth (1972):

**sustainability**= a constant level of total world output which can be maintained into the indefinite future.

Implicit is the continuing existence of pressure for redistribution from rich to poor nations.

**In contrast**, the Brundtland Report offers **continuing growth, which remains the primary solution to the poverty problem.**

**“Far from requiring the cessation of economic growth,**

sustainable development recognises that

the problems of poverty and underdevelopment cannot be solved unless

we have a new era of growth in which developing countries play a large role and reap large benefits”

Created with Doceri 



**Sustainable development is economic growth, albeit of a kind which treats the environment properly.**

Some environmentalists regard it as an oxymoron.

Economists have discovered in sustainable development an idea and a political agenda

which leaves intact the status of the **growth objective**,

which **does not imply major redistribution** from rich to poor, and

which opens up lots of opportunities for advice, from economists among others, on how to make growth more environment friendly.

The advice that economists offer is that it is all a matter of

**correcting market failure**, making individuals and firms bear the costs of the environmental damage that they do, and

**changing obviously counterproductive government policies such as, for example, subsidising agriculture and coal production in Europe.**



Growth is **not to be confined to the developing countries**

industrialized countries can have an environmentally sustainable growth if

can continue

the recent shifts towards **less material- and energy-intensive activities** (!?! Pollution haven hypothesis)

and

**the improvement of their efficiency in using materials and energy** (!?! Jevons' Paradox/Rebound effect)

## Brundtland REPORT

- 1) It accepted the standard argument that **economic growth is necessary for improving the lot of the poor**,
- 2) ecosystems are already stressed,  
**more economic growth will further damage such systems,**  
undermining the base for future economic activity.

There is then a dilemma:

**alleviating current poverty carries the risk of creating future poverty**

Sustainable development is what the Brundtland Report offers as the way out of this dilemma

# Sviluppo sostenibile

1. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs

**(WCED 1987)**

# Misure alternative alla Crescita: Sviluppo e sviluppo sostenibile

## Economic development

Economic development, on the other hand is a process where there is **improvement in the lives of all people in the country**. This involves:

- **living standards**, such as greater availability of goods and services (and also the ability to purchase them)
- the promotion of attributes such as **self-esteem, dignity and respect**
- the **enlarging of people's freedom** to choose and to take control of their own lives

While a country may grow richer therefore, through the growth of its real output, it does not necessarily mean that it will experience development

As Dudley Seers says: "if one or two of the central problems (poverty, unemployment or equality) have been growing worse, especially if all three have, it would be strange to call the result 'development' even if per capita income doubled"(from D.Seers, 'The meaning of economic development').

## Economic development

According to Michael Todaro, development should involve the following objectives:

- To increase the **availability and widen the distribution of basic life-sustaining goods** such as food, shelter, health and protection
- To raise **levels of living** including, in addition to higher incomes, the provision of **more jobs, better education, and greater attention to cultural and humanistic values**, all of which will serve not only to enhance material well-being but also to generate greater individual and national self-esteem
- To **expand the range of economic and social choices available to individuals and nations** by freeing them from servitude and dependence not only in relation to other people and nation-states but also to the forces of ignorance and human misery.“

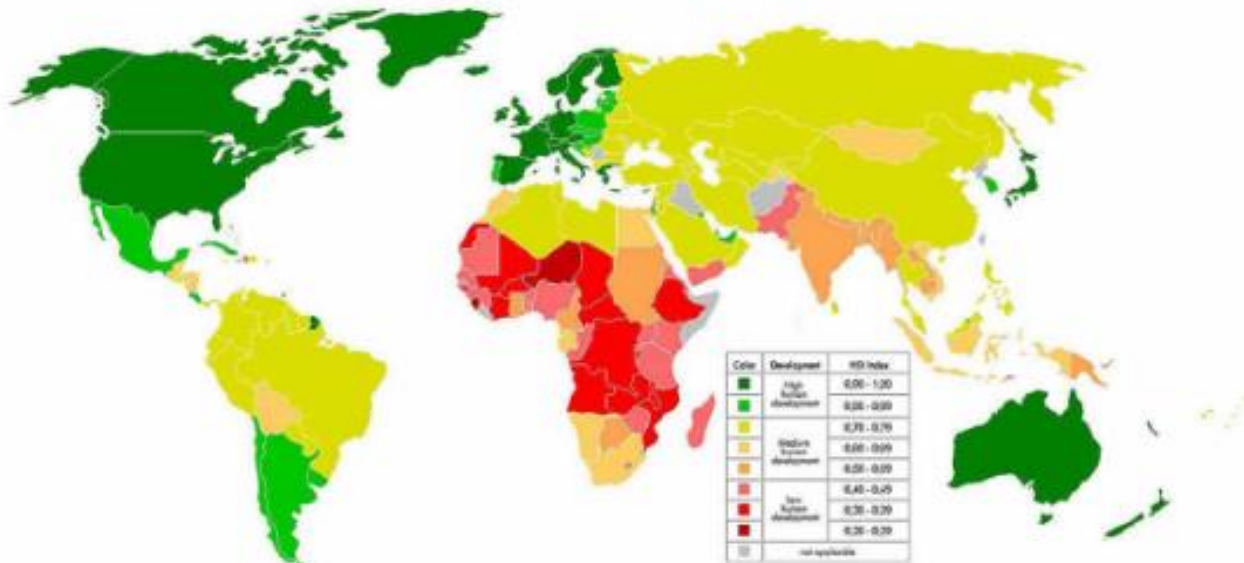
(from M.P. Todaro 'Economic development')

## Measure of Economic development

**Human Development Index** (Source: United Nations Development Programme)

HDI measures a nation's achievement in **three dimensions of human development**:

- long and healthy life (indicated by **life expectancy at birth**)
- knowledge (indicated by **literacy and school enrolment rates**)
- decent standard of living (indicated by **GDP per capita**)



## Measure of Economic development

### Genuine Progress Indicator (Source: Redefining Progress)

GPI is a refined version of the Index of Sustainable Economic Welfare developed by Herman Daly and John Cobb in the late 1980s. **GPI starts with the same personal consumption data as GDP**, but then makes some crucial distinctions. It adjusts for factors such as:

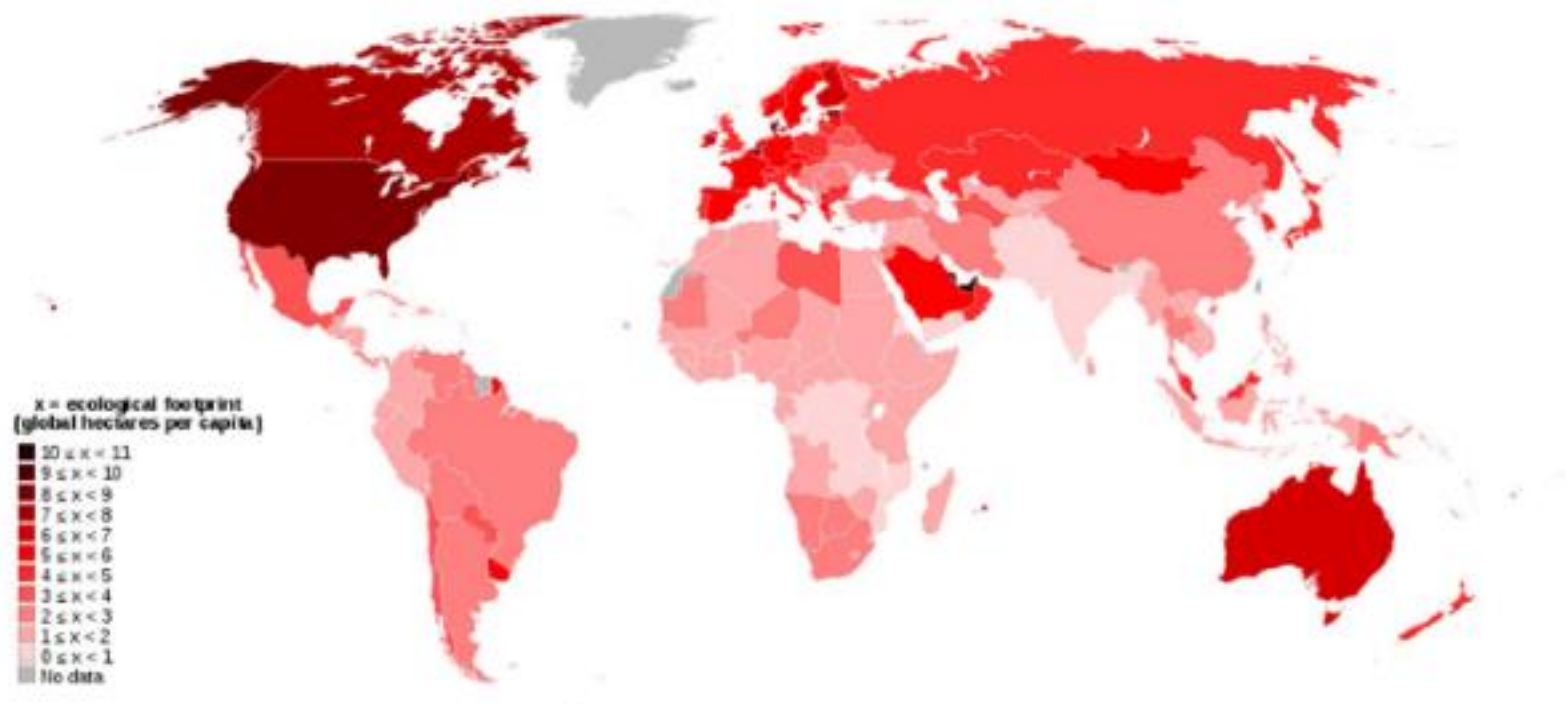
- **income distribution**
- adds factors such as the **value of household and volunteer work**
- **subtracts factors** such as the **costs of crime and pollution**



## Measure of Economic development

### Ecological Footprint (Source: Global Footprint Network)

The Ecological Footprint measures **how much land and water area a human population requires to produce the resources it consumes and to absorb its wastes under prevailing technology**. In the mid to late 1980s, the global Ecological Footprint surpassed the capacity of the planet.

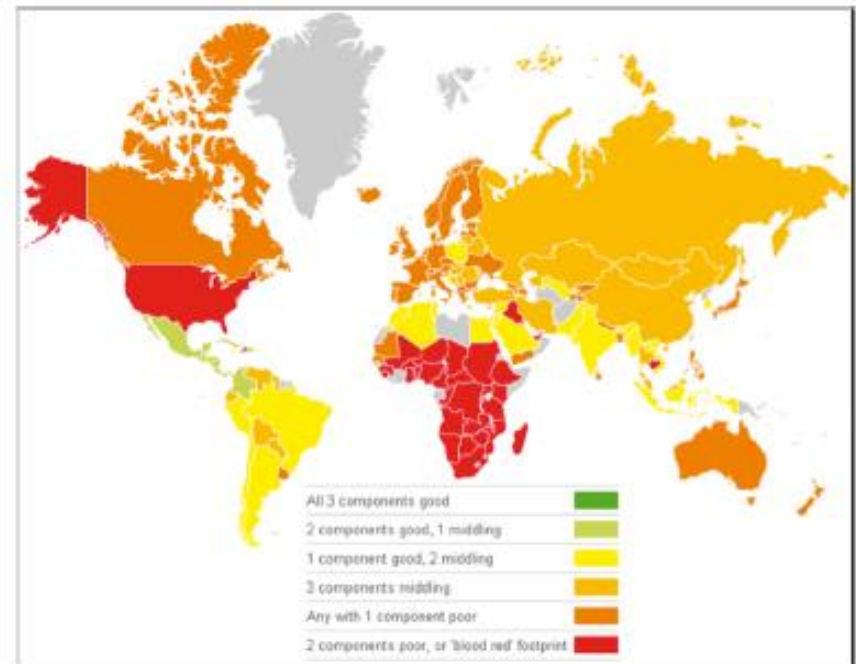


## Measure of Economic development

### Happy Planet Index (Source: New Economics Foundation)

HPI measures the ecological efficiency with which human wellbeing is delivered. It is calculated by multiplying **indices of life satisfaction** (estimated by compiling responses to international surveys), **life expectancy** and **dividing that product by ecological footprint**.

Nations score well when they achieve **high levels of satisfaction and health** while **impacting environmental resources lightly**.



# Esercitazione

Attraverso le banche dati che abbiamo studiato nella lezione di ieri si produca:

- 1) un grafico che rappresenti l'andamento del reddito pro capite delle 10 nazioni più ricche e 10 nazioni più povere negli ultimi dieci anni.
- 2) un grafico che rappresenti l'andamento di un indice di sviluppo delle stesse nazioni di cui sopra
- 3) Un grafico che rappresenti un indice di qualità ambientale delle stesse nazioni di cui sopra

Si riportino i grafici su un foglio word e si commenti con un massimo di 4 righe ognuno.

Inserite il vostro nome e cognome nel foglio, salvatelo in formato pdf e speditelo al mio indirizzo entro il 3 ottobre. Allo svolgimento corretto dell'analisi si assegneranno da 1 a 2 punti che verranno aggiunti alla votazione dell'esame finale.