International Economics

dr Wioletta Nowak

Lecture 7

Economic Development

Inequality in Income

Poverty

Development theories

- Paul Rosenstein-Rodan (1943, 1961) the bigpush theory,
- Ragnar Nurkse (1953) balanced growth theory,
- Walt W. Rostow (1956) stages of economic growth and "take-off" into sustained growth,
- Harvey Leibenstein (1957) critical minimum effort theory.

The big-push theory

- Rosenstein-Rodan P.N., Problems of Industrialisation of Eastern and South-Eastern Europe, Economic Journal 53, 210/211, 1943, 202-211.
- Rosenstein-Rodan P.N., *International aid for underdevelopment countries*, The Review of Economics and Statistics, 43, 2, 1961 (May), 107-138.

The big-push theory

- Industrialization could be regarded as the "initiator" of economic development
- Importance of economies of scale in overhead facilities and basic industries.
- Investment in one sector may increase profitability of other sectors.
- Only big amount of investment (big-push) can remove obstacles to start economic development in underdeveloped countries.
- Injections of small quantities of investment will merely lead to a wastage of resources.

Balanced growth theory

• Nurkse R., *Problems of Capital Formation in Underdeveloped Countries*, Oxford: Oxford University Press, 1953.

- Nurkse identifies the lack of capital as the main bottleneck in economic development.
- Stressed the role of external economies inherent on the demand side in expansion of a whole set of complementary production activities.

- Rostow argued that economic development can be described in terms of a series of steps through which all countries must proceed:
 - 1. The traditional society
 - 2. The pre-conditions for take-off into self-sustaining growth
 - 3. The take-off
 - 4. The drive to maturity
 - 5. The age of high mass consumption

- Traditional societies are marked by their pre-Newtonian understanding and use of technology.
- These are societies which have pre-scientific understandings of gadgets, and believe that gods or spirits facilitate the procurement of goods, rather than man and his own ingenuity.
- The norms of economic growth are completely absent from these societies.

The preconditions to take-off

- the society begins committing itself to secular education, that it enables a degree of capital mobilization,
- a few sectors are developed at this point.
- This leads to a take off in ten to fifty years.

- Take-off occurs when sector led growth becomes common and society is driven more by economic processes than traditions.
- The norms of economic growth are well established.

- The drive to maturity refers to the need for the economy itself to diversify.
- The sectors of the economy which lead initially begin to level off, while other sectors begin to take off.
- This diversity leads to greatly reduced rates of poverty and rising standards of living, as the society no longer needs to sacrifice its comfort in order to strengthen certain sectors.

- The age of high mass consumption refers to the period of contemporary comfort afforded many western nations, wherein consumers concentrate on durable goods, and hardly remember the subsistence concerns of previous stages.
- A society is able to choose between concentrating on military and security issues, on equality and welfare issues, or on developing great luxuries for its upper class.

Critical minimum effort theory

- Lebenstein H., Economic Backwardness and Economic Growth, Wiley, New York, 1957.
- Leibenstein called for a large discrete addition to investment to trigger cumulative process within which the induced income-growth forces dominate income-depressing forces
- Large doses of investments in economy can help the economy in development.
- A minimum amount of push is required to set an economy on the path of development. The minimum amount of effort is critical for the economy to move towards development.
- Initial level of investments are required above a minimum magnitude.

Sustainable development

Economic sustainability

Sociopolitical sustainability

Environmental sustainability

Sustainable development

• New paradigm (pattern) an alternative to present models for society and economy.

• What is needed is development of new concepts that will mould industrial, social, and environmental interests into an integrated, harmonious system.

The smog inversion of 1948, Donora, Pennsylvania

- In October, an air inversion prevented industrial plant smoke and fumes from rising into the atmosphere above Donora.
- 27-31 October 1948 20 people dead, a third to one half of the town's population of 14, 000 residents had been sickened.
- A federal investigation into the disaster paved the way for *the Clean Air Act of 1963*, and laid the groundwork for the Environmental Protection Agency.
- One of the worst air pollution disasters in US (The New York Times, November 2, 2008).
- October 2008, the Donora Smog Museum.

The Great Smog of London, 5-9 December 1952

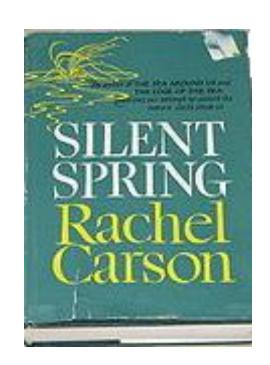
- Caused by pollution and extreme cold.
- A Ministry of Health report estimated that 4,075 more people had died than would have been expected to under normal conditions and 100,000 more were made ill because of the smog's effects on the human respiratory tract.
- Clean Air Act 1956
- The worst air pollution event in the history of UK



Source: www.museumoflondon.org.uk

Silent Spring (1962)

- Rachel Carson (1907-1964) an American marine biologist.
- The book documented detrimental effects of pesticides on the environment, particularly on birds.
- Silent Spring inspired widespread public concerns with pesticides and pollution of the environment.
- The book facilitated the ban of the synthetic pesticide DDT in 1972 in the United States.



DDT - dichlorodiphenyltrichloroethane

25 Greatest Science Books of All Time by Discover Magazine, Dec. 2006

- 1. The Voyage of the Beagle by Charles Darwin (1845)
- 2. The Origin of Species by Charles Darwin (1859)
- 3. Mathematical Principles of Natural Philosophy by Isaac Newton (1687)
- 4. Dialogue Concerning the Two Chief World Systems by Galileo Galilei (1632)
- 5. On the Revolutions of Heavenly Spheres by Nicolaus Copernicus (1543)
- 6. *Physica (Physics)* by Aristotle (circa 330 B.C.)
- 7. On the Fabric of the Human Body by Andreas Vesalius (1543)
- 8. Relativity: The Special and General Theory by Albert Einstein (1916)
- 9. The Selfish Gene by Richard Dawkins (1976)
- One Two Three . . . Infinity. Facts and Speculations of Science by George Gamow (1947)

25 Greatest Science Books of All Time by Discover Magazine, Dec. 2006

- 11. The Double Helix: A Personal Account of the Discovery of the Structure of DNA by James D. Watson (1968)
- 12. What Is Life? by Erwin Schrödinger (1944)
- 13. The Cosmic Connection by Carl Sagan (1973)
- 14. The Insect Societies by Edward O. Wilson (1971)
- 15. The First Three Minutes by Steven Weinberg (1977)
- 16. Silent Spring by Rachel Carson (1962)
- 17. The Mismeasure of Man by Stephen Jay Gould (1981)
- 18. The Man Who Mistook His Wife for a Hat and Other Clinical Tales by Oliver Sacks (1985)
- 19. The Journals of Lewis and Clark by Meriwether Lewis and William Clark (1814)
- 20. The Feynman Lectures on Physics by Richard P. Feynman (1963)

25 Greatest Science Books of All Time by Discover Magazine, Dec. 2006

- 21. Sexual Behavior in the Human Male by Alfred C. Kinsey et al. (1948)
- 22. Gorillas in the Mist by Dian Fossey (1983)
- 23. Under a Lucky Star by Roy Chapman Andrews (1943)
- 24. Micrographia by Robert Hooke (1665)
- 25. Gaia by James Lovelock (1979)

U Thant's Report – Problems of the Human Environment (1969)

- U Thant (1909-1974) the 3rd Secretary-General of the United Nations (1961-1971)
- Deterioration of human environment may be related to three basic causes:
- accelerated population growth,
- increased urbanization,
- an expanded and efficient new technology, with their associated increase in demands for space, food and natural resources.

The Club of Rome - The Limits to Growth (1972)

The Birth of the Club of Rome

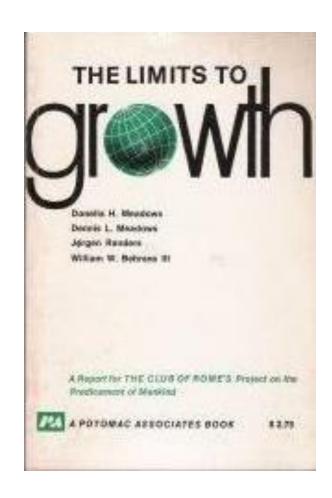
- In April 1968, a small international group of professionals from the fields of diplomacy, industry, academia and civil society met at a villa in Rome.
- Invited by Italian industrialist **Aurelio Peccei** and Scottish scientist **Alexander King**, they came together to discuss the dilemma of prevailing short-term thinking in international affairs and, in particular, the concerns regarding unlimited resource consumption in an increasingly interdependent world.

The Club of Rome

- The Club of Rome is a not-for-profit organisation, independent of any political, ideological or religious interests.
- Its essential mission is to act as a global catalyst for change through the identification and analysis of the crucial problems facing humanity and the communication of such problems to the most important public and private decision makers as well as to the general public.
- There can be up to 100 full members of the Club of Rome. Together, they currently represent over 30 countries in five continents.
- Fundamental principles: holistic thinking, taking a global approach, a long-term perspective.

The Limits to Growth (1972) – the First Report of the Club of Rome

- Authors: Donella H.
 Meadows, Dennis L.
 Meadows, Jorgen Randers,
 William W. Behrens III.
- The book was published in 30 languages and sold over 30 million copies.



The Limits to Growth (1972) – the First Report of the Club of Rome

- Authors used computer modeling to predict the consequences of a rapidly growing world population and finite resource supplies.
- The purpose to explore how exponential growth interacts with finite resources. A study of the future if present growth continues.
- Five variables: world population, industrialization, pollution, food production and resource depletion.
- Conclusions: Possibly within as little as 70 years, our social and economic system will collapse unless drastic changes are made very soon.

- 1972 Stockholm Conference Declaration on the Human Environment
- 1987 Brundtland Commission World Commission on Environment and Development: *Our Common Future*
- 1992 Rio de Janeiro, Brazil U.N. Conference on Environment & Development
- 2002 Johanesbourg Declaration on Sustainable Development

Report of the World Commission on Environment and Development: *Our Common Future* (Brundtland 1987)

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.

1992 United Nations Conference on Environment and Development

- The Rio conference was a significant milestone that set a new agenda for sustainable development.
- Human beings are at the center of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.
- The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.
- In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Convergence

- The widely-discussed issue in growth theory is convergence.
- Studies of convergence are very important because they address basic questions like:
- ➤ Is the degree of income inequality across countries increasing or falling over time?
- > Are poor economies catching up with the rich?
- > Are the rich getting richer and the poor poorer?

Types of convergence

- Convergence across-economies means convergence in per capita income levels (or growth rates).
- Convergence within an economy signifies convergence to the balanced growth path.
- the rate of convergence (the speed at which economy converges towards the long-run equilibrium),
 - half-life times.

Convergence across-economies

- The theoretical and empirical researches on convergence are extensive and multi-dimensional.
- During the last decades different concepts, interpretations and corresponding convergence measures have been proposed.
- There are many possibilities to answer the question whether the degree of income inequality across countries is falling over time. Different answers lead to different concepts of convergence across-economies.

Convergence across-economies

- For instance, convergence in per capita income levels means that
- 1. dispersion of per capita income across countries displays a tendency to decline through time (σ convergence);
- 2. poor countries grow faster than rich countries (absolute or unconditional convergence);
- 3. per capita income differentials between economies are stationary or the (log of) per capita income of one economy relative to a benchmark economy is stationary (stochastic convergence).

- The empirical evidence has been mixed and affected by the choice of countries that are analyzed.
- Alternative testing frameworks or datasets have led to different results.
- Studies that employ a cross-section method tend to favour international output convergence among small group of industrialized countries or regions. These countries form **convergence clubs**.
- Tests on the basic of time series analysis find little evidence of convergence even among similar countries.

- Generally, the hypothesis that cross-country disparities tend to decrease over time is not supported by evidence.
- The gap between richest and poorest countries increased extremely, especially after the post war era. This is due to the different growth experience of rich and poor countries.
- Relatively wealthy countries have grown faster than the mean, while relatively poor countries have grown more slowly.

Income gap among countries

Source: Human Development Report 1999 (http://hdr.undp.org)

- World inequalities have been rising steadily for last two centuries.
- An analysis of long-term trends shows the distance between the richest and poorest countries was about:
 - > 3 to 1 in 1820,
 - > 11 to 1 in 1913,
 - > 35 to 1 in 1950,
 - > 44 to 1 in 1973,
 - > 72 to 1 in 1992,
 - > 77 to 1 in 1997.

Income gap among countries

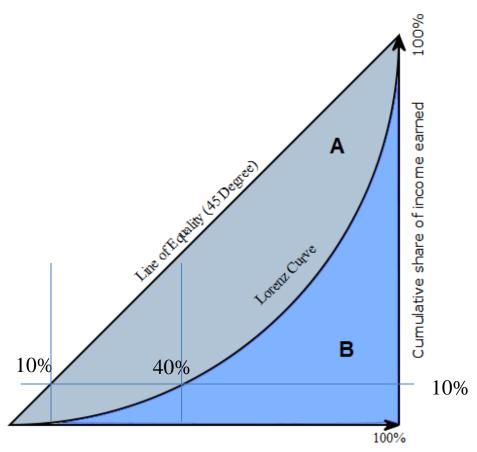
- 104 390 USD per capita (Luxembourg) : 177 (Burundi) = **590** in 2010 (World Economic Outlook Database-October 2010, IMF)
- 122 272 USD per capita (Luxembourg) : 197 (Burundi) = **620.7** in 2011 (http://www.imf.org)
- 115 809 USD per capita (Luxembourg) : 217 (Congo (Dem. Rep. of)) = **533.7** in 2012 (http://www.imf.org)
- 137 162 USD per capita (Qatar): 609 Central African Republic = 225.22 in 2014 (http://www.imf.org)
- 101 994 USD per capita (Luxembourg) : 306 (Burundi) = 333.3 in 2015 (http://www.imf.org)
- 105 863 USD per capita (Luxembourg) : 243 (South Sudan) = **435.65** in 2017

Inequality in Income – the Lorenz Curve

• A curve is showing the proportion of national income earned by a given percentage of population.

• E.g. What proportion of national income is earned by the top 10% of the population.

The Lorenz Curve of Income Distribution



Cumulative share of people from lowest to highest incomes

Inequality in Income – Gini Coefficient

- Gini coefficient the proportion of the area taken up by the Lorenz Curve (A) in relation to the overall area under the line of equality (A+B).
- The measure of income distribution inequality.
- It ranges between 0 and 1 (or if multiplied by 100 between 0 and 100%).

Inequality in Income – Gini Coefficient

- A low Gini coefficient indicates more equal income or wealth distribution, while a high Gini coefficient indicates more unequal distribution.
- 0 corresponds to perfect equality (everyone having exactly the same income) and 1 corresponds to perfect inequality (where one person has all the income, while everyone else has zero income).
- The Gini coefficient requires that no one have a negative net income or wealth.

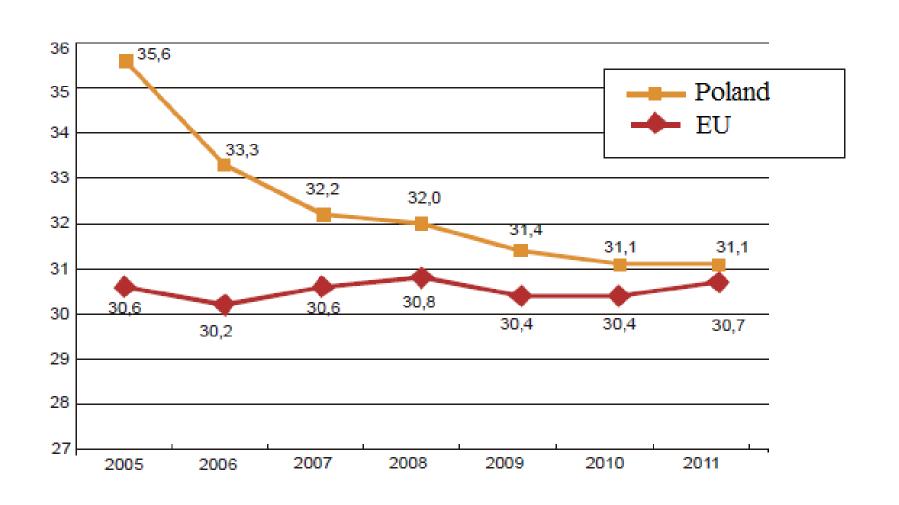
Income Gini Coefficient, 2010-2015

Source: Human Development Report 2016 (http://hdr.undp.org)

Azerbaijan	31.8	Italy	35.2
Brazil	51.5	Poland	32.1
China	42.2	Portugal	36.0
Georgia	40.1	Spain	35.9
Germany	30.1	Turkey	40.2
Greece	36.7	Ukraine	24.1
India	35.2		

Income Gini Coefficient, 2005-2012, Poland and EU

http://www.stat.gov.pl (Central Statistical Office of Poland)



Poverty

• Poverty is the worst form of violence (Mahatma Gandhi)

• Poverty is the lack of basic necessities that all human beings must have: food, water, shelter, education, medical care, security, etc.

• **Absolute poverty** – a situation where individuals do not have access to basic requirements of life – food, shelter, clothing.

• Relative poverty — a situation where individuals are excluded from being able to take a part in what are considered the normal, acceptable standards of living in society.

Common characteristic of the poor

Globally, the poor tend to share several characteristic

- They suffer from malnutrition, poor health, low levels of education.
- They live in environmentally stressed areas, have poor access to technology and markets.
- They are more likely to be rural, agricultural, and have little or no land.
- Most poor come from large families with few income earners.
- They lack personal and political power.

- Natural disasters destroy homes, businesses and crops, people looses their homes and their jobs.
- Diseases spreads very quickly, people die, cannot work, infrastructure (road and railways) are damaged making recovery of homes and businesses very difficult.
- Some developing countries are particularly prone to natural disasters due to the geography of the country e.g. floods in Bangladesh.

- War and civil unrest
- Government spending is on weapons and army wages.
- Family wage-earners are killed. Farms and businesses are destroyed.
- Basic services like education are disrupted. People leave their homes as refugees.
- Works are killed or disabled by loss of limbs. They cannot work and pay tax.
- Without tax from individuals and businesses government cannot pay for hospitals, schools and roads.

• Unfair trade and cash crops

- Many developing countries employ all their land and people in producing just one kind of crop that is sold for cash to the rest of the world for example tea, coffee, bananas, cocoa, nuts (these are cash crops).
- When supermarkets in rich countries want to buy these goods they insist on only paying a low price so they can make large profit. The farmers do not make a fair price for their crops.
- The governments of less economically developed nations producing these crops does not earn enough tax to pay for schools hospitals and roads.

- National debt many less economically developed nations have borrowed large sums of money from wealthier governments.
- The countries have to pay interest on their debts.
- This means they cannot afford to spend enough on basic services like health and education; nor on things like transport or communications that might attract investment.

- **Food and education** affordable, secure food supplies are vital. Malnutrition causes severe health problems, and can also affect education. Without education it is difficult to escape from poverty. This becomes a vicious circle people who live in poverty cannot afford to send their children to school.
- **Diseases** such as HIV/AIDS and malaria causes great suffering and poverty in many less economically developed nations.

Measures of Poverty

- The most widely used measure of poverty is income poverty, using either a national poverty line or an international standard.
- The PPP \$1.90 (2015) (\$1.25, 2008) a day poverty line.

Measures of Poverty in Poland

- The subsistence minimum, regarded as the extreme poverty threshold, sets the level of the satisfaction of needs below which there is a biological threat to life or psychophysical human development.
- It is estimated by the <u>Institute of Labour and</u> Social Studies.
- The social minimum the bundle of resources that a person needs in order to lead a minimally decent life in their society.

Measures of Poverty in Poland

- "Legal" poverty line is the amount, which, according to the social assistance act, provides eligibility for a monetary benefit from social assistance.
- Relative poverty line is 50% of the mean monthly expenditure determined at the level of all households estimated with the use of the original OECD equivalence scale.

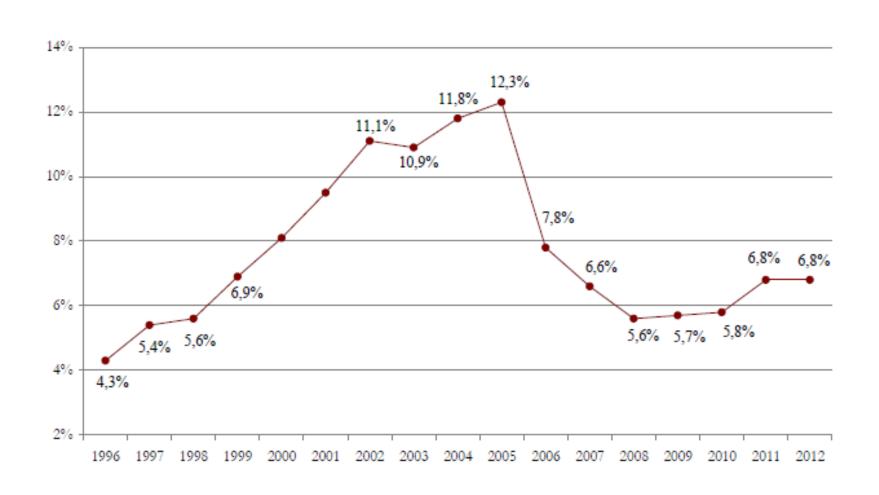
Poverty Lines, Poland, 2015-2017

http://www.ipiss.com.pl (Institute of Labour and Social Studies)

Specification	Subs (per	Social minimum (per 1 person in PLN)		
	2015	2016	2017	2017 (XII)
1-person employees' household	545.76	555.02	574.01	1146.36
2 adults	457.79	467.27	483.40	948.08
2 adults, 2 children	464.11	472.04	488.60	918.99
1-person retirees' household	518.00	527.30	544.03	1132.21

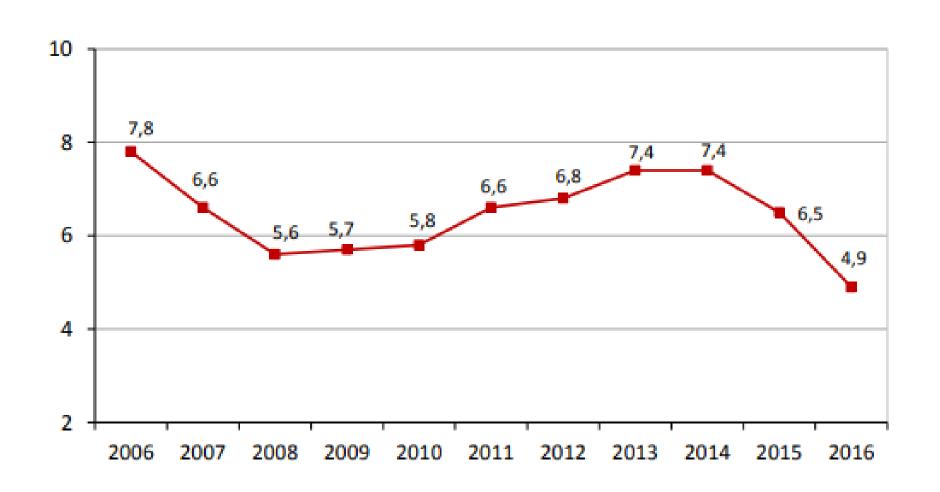
At-risk of Poverty Rates in Households - Subsistence minimum (%), Poland, 1996-2012,

http://www.stat.gov.pl (Central Statistical Office of Poland)



At-risk of Poverty Rates in Households - Subsistence minimum (%), Poland, 2006-2016,

http://www.stat.gov.pl (Central Statistical Office of Poland)



At-risk of Poverty Rates in Households, Poland, 2012

http://www.stat.gov.pl

Subsistence minimum (%)

"Legal" poverty line (%)





Multidimensional Poverty Index (MPI)

- The dimensions of poverty go far beyond inadequate income to poor health and nutrition, low education and skills, inadequate livelihoods, bad housing conditions, social exclusion and lack of participation.
- The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the individual level in health, education and standard of living.
- MPI replaces the Human Poverty Index (HPI), published since 1997.

Multidimensional Poverty Index

- MPI shows how many people experience overlapping deprivations and how many deprivations they face on average.
- The MPI is the product of the multidimensional **poverty headcount** (the share of people who are multidimensionally poor) and **the average number of deprivations** each multidimensionally poor household experiences (the intensity of their poverty).

Dimensions of poverty	Idicator	Deprived if living in the household where	
Health	Nutrition	An adult under 70 years of age or a child is undernourished	
	Child mortality	Any child has died in the family in the five-year period preceding the survey	
Education	Years of schooling	No household member aged 10 years or older has completed six years of schooling	
	School attendance	Any school-aged child is not attending school up to the age at which he/she would complete class 8	
Standard of living	Cooking Fuel	The household cooks with dung, wood, charcoal or coal	
	Sanitation	The household's sanitation facility is not improved or it is improved but shared with other households	
	Drinking Water	The household does not have access to improved drinking water or safe drinking water is at least a 30-minute walk from home, round trip	
	Electricity	The household has no electricity	
	Housing	Housing materials for at least one of roof, walls and floor are inadequate	
	Assets	The household does not own more than one of these assets radio, TV, telephone, computer, animal cart, bicycle, motorb or refrigerator, and does not own a car or truck.	

Population in multidimensional poverty, 2006-2017

Source: Human Development Report 2018 (http://hdr.undp.org)

Country	MPI	Headcount (%)	Intensity of deprivation (%)	Population below poverty line (PPP \$1.9 a day) 2006-2016
Niger	0.591	90.59	65.29	44.50
South Sudan	0.581	91.92	63.20	42.70
Chad	0.531	85.86	62.28	38.40
Burkina Faso	0.520	84.01	61.92	43.70
Somalia	0.518	82.22	62.95	n.a

Definition of foreign aid

- Foreign aid is a transfer of resources from governments or public institutions of developed countries to governments of developing ones.
- Foreign capital flows can be divided into official and private.
- Official are divided into bilateral and multilateral flows.

Definition of foreign aid

- Official bilateral flows consist of capital provided by government of donor to government of recipient countries.
- Multilateral flows consist of capital flows from multilateral organisations such as OECD (Organisation for Economic Cooperation and Development), the International Monetary Fund (IMF), the World Bank.
- The official flows can take mainly form of grants or loans.

Main developments in the history of foreign aid

- 1940s Marshall Plan and UN system (including World Bank). Reconstruction.
- 1950s United States with Soviet Union. Food aid and projects.
- 1960s Establishment of bilateral programmes. Technical assistance and budget support.
- 1970s Expansion of multilaterals especially World Bank, IMF and Arab-funded agencies. Fall in food aid and start of import support.

Main developments in the history of foreign aid

- 1980s Rise of NGOs from mid-1980s. Macroeconomic reform. Financial programme aid and debt relief.
- 1990s Eastern Europe become recipients rather than donors; emergence of corresponding institutions. Move toward sector support.

Official Development Assistance (ODA)

• In 1970, the world's rich countries agreed to give 0.7% of their gross national income as official international development aid, annually.

• Official development assistance (ODA) is a statistic compiled by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD) to measure aid.

Official Development Assistance (ODA)

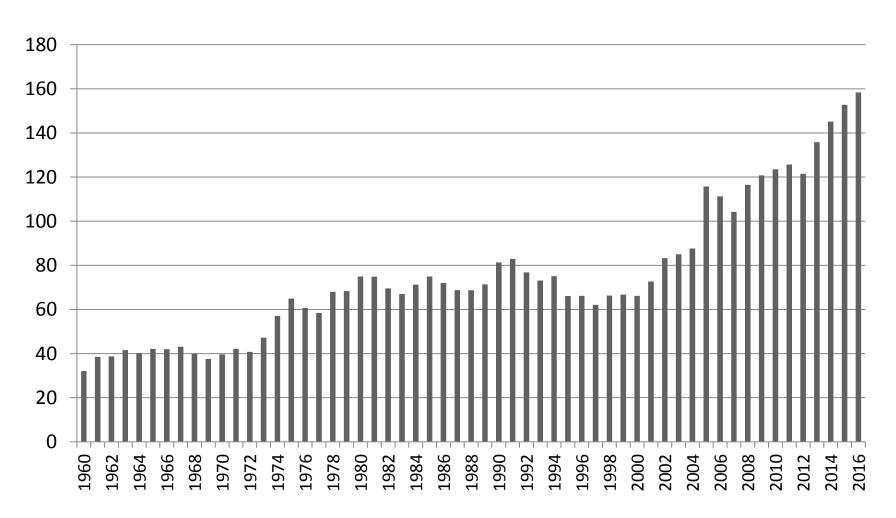
- DAC members (30): Australia, Austria, Belgium, Canada, Czech Rep., Denmark, EU, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Rep., Spain, Sweden, Switzerland, United Kingdom, United States.
- Other OECD donors: Mexico, Turkey.
- OECD members from 2010: Chile, Estonia, Israel, Slovenia

- Development Assistance Committee defines foreign aid as official development assistance (ODA) and technical aid.
- ODA flows must satisfy all three of the following criteria
- their primary objective must be development, thus it excludes military aid and private investment,
- the terms and conditions of the financial package must be softer than those available on a commercial basis,
- the flows should come from governmental agencies and go to governments of developing countries.

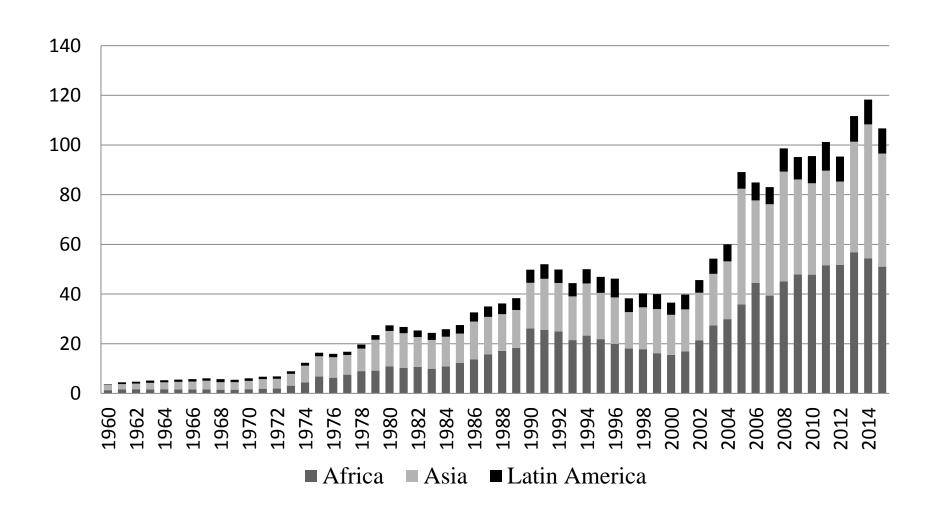
- Since the 1960s a huge increase in the volume of foreign aid for developing countries has been observed.
- Developed countries have spent more than 3 trillion USD (at constant 2010 prices) on official development assistance (ODA).
- Total ODA have been more than 100 billion USD per year from 2005.

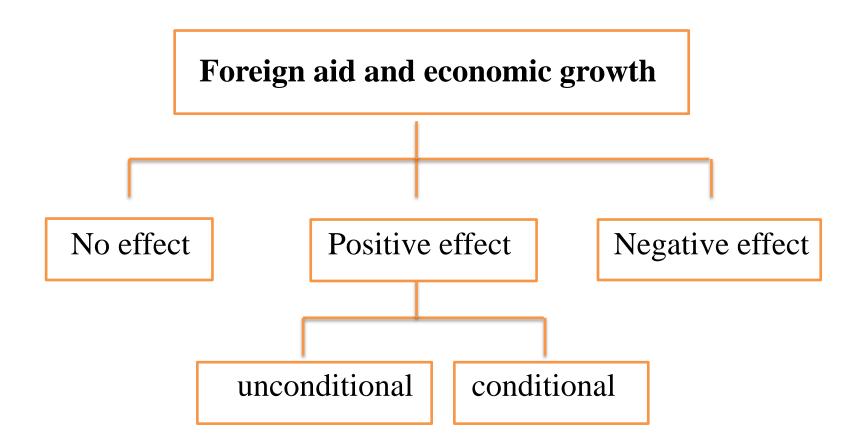
Net ODA disbursement, Total DAC countries, 1960-2016, (constant prices 2010 USD, billion)

Source: http://www.oecd.org



Net ODA received by developing countries, 1960-2015, (current prices, USD billion)





Positive effect (unconditional)

- Papanek (1973) 34 developing countries for the 1950s and 51 for the 1960s.
- Dowling and Hiemenz (1982) 14 Asian countries for the 1970s.
- Mosley (1980) the poorest countries (UK-aided countries in Africa) for the period 1970 to 1977.
- Levy (1988) 28 Sub-Saharan countries in the years 1968-1982.

Positive effect (conditional)

Factors	Studies
stable macroeconomic policy (good fiscal, monetary and trade policies)	The World Bank Report (1998) Durbarry at al. (1998) Burnside and Dollar (2000) Hansen and Tarp (2000, 2001) Collier and Dollar (2002) Ali and Isse (2005)
terms of trade, the extent of export instability and climatic shocks	Guillaumont and Chauvet (2001)
geographic location	Dalgaard et al. (2004)
the size of the aid flows (optimal level 5%-45% of GDP)	McGillivray at al. (2006)
the type of aid (project aid financing (+), financial programme aid (-), technical assistance and food aid (0 or +))	Ouattara and Strobl (2008)

- The first studies argue that the positive relationship between the foreign assistance and economic growth exists.
- The aid is necessary for economic development and poverty reduction in less developed countries.
- It supplements domestic savings and/or allows the access to foreign markets.

- Very often the relationship between foreign aid and economic growth is conditional and depends on many different factors:
- > specific condition in a recipient country,
- macroeconomic policy,
- > geographical location,
- > levels of aid allocation,
- > aid modalities.

Negative effect

- Milton (1958),
- Griffin and Enos (1970), Weisskopf (1970),
- Paldam (1997) excessive aid distorts the economy and leads to a low growth,
- Djankov et al. (2006) aid reduces the level of democracy in the recipient countries,
- Rajan and Subramanian (2011) aid inflows cause the real exchange rate appreciation and reduce the competitiveness of the exports.

• A number of researchers concluded that the foreign assistance is negatively correlated with economic growth.

• Aid is wasted, increases public consumption, removes private savings, rises corruption and aid-dependency of recipient countries.

No relationship between foreign aid and economic growth

- Mosley et al. (1987) is impossible to establish any statistically significant correlation between aid and economic growth.
- Boone (1996) aid has insignificant impact on poverty indicators such as the improvement of infant mortality or primary schooling ratios.
- Doucouliagos and Paldam (2008) there are over one hundred papers supporting the view that the foreign assistance generates development in recipient countries but their results mostly are not statistically significant.

- The Grameen Bank was set up in 1976
- Dr. Muhammad Yunus founder of the GB
- 2006 Nobel Peace Prize
- The GB offers small loans (microcredit) to the impoverished without requiring collateral.

- It promotes credit as a human right.
- Its mission is to help the poor families to help themselves to overcome poverty. It is targeted to the poor, particularly poor women.
- Most distinctive feature of Grameencredit is that it is not based on any collateral, or legally enforceable contracts. It is based on "trust", not on legal procedures and system.
- It is offered for creating self-employment for income-generating activities and housing for the poor, as opposed to consumption.

- It was initiated as a challenge to the conventional banking which rejected the poor by classifying them to be "not creditworthy". As a result it rejected the basic methodology of the conventional banking and created its own methodology.
- It provides service at the door-step of the poor based on the principle that the people should not go to the bank, bank should go to the people.

- In order to obtain loans a borrower must join a group of borrowers.
- Loans can be received in a continuous sequence. New loan becomes available to a borrower if her previous loan is repaid.
- All loans are to be paid back in instalments (weekly, or bi-weekly).
- Simultaneously more than one loan can be received by a borrower
- It comes with both obligatory and voluntary savings programmes for the borrowers.

- Grameencredit gives high priority on building social capital. It is promoted through formation of groups and centres, developing leadership quality through annual election of group and centre leaders, electing board members when the institution is owned by the borrowers.
- The "sixteen decisions".

- We shall follow and advance the four principles of Discipline, Unity, Courage, and Hard work in all walks of our lives.
- We shall bring prosperity to our families.
- We shall repair our homes and work towards constructing new houses.
- We shall grow vegetables all year round. We shall eat plenty of them and sell the surplus.

- We shall plant as many seedlings as possible during the plantation seasons.
- We shall plan to keep our families small, minimize our expenditures, and look after our health.
- We shall educate our children and ensure that they can earn to pay for their education.
- We shall keep our children and our environment clean.

- We shall build and use latrines.
- We shall drink water from tubewells. If they are not available, we shall boil water or use alum.
- We shall not take any dowry at our sons' weddings, nor shall we give any dowry at our daughters wedding. We shall not practice child marriage.
- We shall not inflict any injustice on anyone, nor shall we allow anyone to do so

- We shall collectively undertake bigger investments for higher incomes.
- We shall always be ready to help each other. If anyone is experiencing difficulty, we shall all help him or her.
- If we come to know of any breach of discipline in any centre, we shall all go there and help restore discipline.
- We shall take part in all social activities collectively.

• In 2015, countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals.

- Goal 1: End poverty in all its forms everywhere
- Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 4: Ensure inclusive and quality education for all and promote lifelong learning
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure access to water and sanitation for all

- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all
- Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns

- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources
- Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss
- Goal 16: Promote just, peaceful and inclusive societies
- Goal 17: Revitalize the global partnership for sustainable development