

ENTREPRENEUR

memo:

Utopia



Handbook



Memo: Utopia

Everywhere in the world and at all times people have worked, gathered and produced food, they have traded and cooperated with each other. They have had to make do with the available resources as cleverly as possible, in other words they have had 'to manage' and 'economize'

In the course of the centuries, the way people have managed and economized has changed considerably. People have always had new ideas about how the economy should be organized.

Throughout history, many ideas concepts and economic theories have sprung up. Some were put into practice, others have remained utopias. There is an animated discourse going on in the field of economics about possible models in the context of new issues and social developments.

New ideas will be needed for the challenges of the 21st century. It is the aim of Utopia to facilitate easy access to economic ideas and stimulate thought-provoking discussions.

Johannes Lindner, Werner Holzheu

Sounding Board

Our special thanks goes to our group of advisors, who provided valuable feedback concerning the selection of the group of economists. They are (in alphabetical order): PD Dr. Andreas Exenberger, Universität Innsbruck; KPH-Prof. MMag. Gerald Fröhlich, KPH Wien/Krems; KPH-Prof. Heide Huber, KPH Wien/Krems; Mag. Gottfried Kögler, Wirtschaftsuniversität Wien; Univ.-Prof. Dr. Josef Nussbaumer, Universität Innsbruck; Dr. Giles Pope, Wirtschaftsuniversität Wien; Univ.-Prof. Dr. Thomas Retzmann, Universität Duisburg-Essen; Mag. Michael Zimmermann, WKÖ and the members of Gesellschaft Plurale Ökonomik Wien.

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Playing Instructions:

Simple Twin Game (Memo)

Shuffle the little memo cards and place them on a table face down. The aim is to find matching pairs of images. One after the other, players turn over two memo cards, show them to the others and put them back on the table face down. All players try to remember the position of the cards. If a player chooses two matching cards, they can keep them and are allowed to turn over two more cards (no more than two). The number of cards lying face down on the table continues to decrease. When there are no more cards left, players count the number of pairs they have acquired. Whoever has the most cards is the winner of the game.

Expert Version of Twin Game

Players are only allowed to turn over a second card if they are able to interpret the symbol accompanying the economist shown on the first card, name their main work and/or describe important ideas related to them.

Context Game

Step 1 / Form Groups –research Economic Schools and Ideas

- 36 cards (1 set of economists) are distributed on a table face upwards and sorted according to their background colour. Some background colours only have one card, others several.
- Players get together in pairs, with each pair responsible for a certain background colour. The background colours symbolize similarities in ideas on society and the economy of the figures shown on the cards. The respective teams research their similarities (economic school in history of ideas) with the help of the accompanying booklet (and/or online at www.ifte.at). They note down the name of the school of economic thought, its most important representatives and two or three central ideas.
- The teams discuss the possible historical origins of their respective schools and record it on their piece of paper.

Step 2 / Connect Ideas to Historical Events

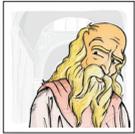
Using the IFTE website (www.ifte.at) players can compare their suggestions with the key. The events are presented in tables that refer to the Family Tree of Economic Theories from Antiquity to the Challenges of the 21st Century. The events are arranged from the bottom up. The winners (in this version more than one winner is possible) are those teams who have identified the correct historical events.

Ideas and Utopias for the Future

The upper part of the key shows important issues and challenges of the 21st century (players are welcome to add more). Players form groups; each group chooses a challenge and comes up with 3-4 ideas for dealing with it. Are the economists' ideas helpful for developing new ideas? Did the group have a particular economic school in mind when working out their ideas?

An Overview of Economic Theories

Behavioural Economics	Analysis of human behaviour when faced with economic decisions (questions the concept of homo economicus), cross-connection to game theory.
Institutionalism, Welfare Economics	Study of the economy and social institutions. Linked to Keynesianism, questions concerning welfare and happiness.
Environmental Economics	The environment and the fact that resources are limited are issues which are still underrepresented in mainstream economics.
Game Theory	Simulates decision-making situations, a method economists have used since the 1940s.
Ordoliberalism	Constitutes the basis for the social market economy.
Schumpeter and Kondratiev	While Schumpeter sees the entrepreneur as the driver of economic growth, Kondratiev focuses on basic innovation.
Keynsianism, Post- and Neo-Keynesianism	As possible solutions for the great depression, Keynes theorizes that the state can stimulate economic growth by introducing appropriate tax policies as well as policies on public spending. His ideas are relevant even today. (Post-Keynesianism and Neo-Keynesianism, equilibrium models are considered unrealistic).
Neoclassical Economics, Monetarism, Supply Side Economics	Since the second half of the 19th century, liberal ideas have become fashionable again. Rise of supply and demand theories. Further development of liberal models reach down to the present (Monetarism or Supply Side-Economics).
School of Marginal-Utility, Austrian School	Method dispute with Historical School, origin of Marginal Utility School and particularly liberal theories aimed at discrediting totalitarian regimes (Hayek).
Marx / Socialism	Counter-movement to the liberalism of Classical Economics and discussion of the social question.
Historical Schools	Originating in Germany, the Historical Schools had a critical attitude towards Classical and later Neo-Classical theories.
Classical Economics	Economics established as a separate discipline; economic theories determined by liberalism.
Physiocratism	For the first time the economy is understood as a cycle that functions like the circulation of blood in humans.
Mercantilism	The background is absolutist monarchies; the purpose of economic policy is to strengthen both the home economy and exports.
Utopians	Socio-political critique characterized by ideal models.
Middle Ages (Christianity / Islam)	The Middle Ages are dominated by religious ideas.
Antiquity	Ideas focus on the state, the common good, ethics and happiness.



Plato

(427 – 347 BC)

Life:

Plato comes from an aristocratic family in Athens. Initially interested in politics, the execution of his teacher Socrates and his disappointment about the corruption reigning in Athens made him turn to philosophy. He travelled to Egypt, Sicily – where he was the advisor to the tyrant of Syracuse, and Asia Minor.

He founded the Academy, the first institution of higher learning in the world. Plato set important standards for all areas of philosophy.

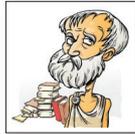
Central Ideas:

In his main work, *The Republic*, Plato develops his vision of a utopian society that stands in stark contrast to the corrupt city state of the Athens of his time. The aim is to enable people to live a 'good life'.

His model of the state is not a democracy. Based on three classes, it consists of workers (craftsmen, artisans, farmers etc.), auxiliaries (warriors) and, above them, the guardians (rulers). Rulers or kings should be philosophers. Plato is against any kind of private property.

Plato's Allegory of the Cave illustrates how philosophers manage to escape from ignorance to gain true knowledge and see the 'idea' of the good.

Theory of Ideas: For Plato, reality consists of two realms: the physical world and, superior to that, the non-material world of perfect and eternal ideas and forms which are unchangeable. The highest idea is the idea of 'the good'. Later thinkers considered Plato's political ideas as too totalitarian and elitist (e.g. Sir Karl Popper).



Aristotle

(384-322 BC)

Life:

Aristotle was born into a doctor's family in Stagira in Chalcidike. As a young man he moves to Athens to become Plato's best and most critical disciple. When he is not put in charge of the Academy he leaves Athens disappointed.

He becomes the teacher of Alexander (later the Great), the Macedonian heir to the throne. On his return he founds his own academy (Lykeion).

Central Ideas:

Aristotle was arguably the most influential philosopher in history. His works have had a considerable influence on European thought, but also Islamic and Jewish philosophy.

His writings on logic are paradigmatic up to the 18th century.

For Aristotle, the central ethical and economic questions (*Nicomachean Ethics*) concern the good life, happiness or the best possible order of the community.

His writing about home economics, called 'Oeconomia', is the origin of the word 'economics'. In contrast to Plato, Aristotle is for private property.

In the field of politics, Aristotle looks at different types of government: single ruler, rule by a small elite and rule by the masses.



Thomas Aquinas

(1225-1274)

Life:

Born into a Sicilian aristocratic family, Thomas Aquinas decided to give away all his worldly possessions at the age of 17. Neither his abduction nor a two-year imprisonment by his family could change his mind.

Thomas Aquinas travelled to Paris and became the assistant of Albertus Magnus, one of the most important scholars of his time. He dedicated his time there to an in-depth study of Aristotle's philosophy. After his studies he taught in France, Germany and Italy. His philosophical works are considered revolutionary down to the present day.

Central Ideas:

Thomas Aquinas was one of the most important medieval scholars.

His main work, *Summa Theologica*, is the second most quoted theological source after the Bible. In his book he discusses questions concerning the common good and justice, and reflects, for example, on the question of fair prices.

While he considers greed a mortal sin, he is aware of the fact that the community will only be able to get hold of the goods it needs if there is an incentive for trading in the form of profit.

The conclusion that Thomas Aquinas draws from this is that traders are justified to ask for a 'fair price' without resorting to usury, which he considers a sin. The fair price is the price agreed on voluntarily by buyer and seller, so that the transaction is mutually beneficial.



Ibn Khaldun

(1332-1406)

Life:

Ibn Khaldun comes from an aristocratic family with roots in North Africa and the south of Spain. He received a classic Arabic education which provided the basis for understanding the Koran.

His life, which led him to the highest political office, into jail and exile, reads like an adventure novel.

He is the author of a universal history of mankind.

Central Ideas:

Ibn Khaldun counts as an early enlightened thinker in the Arab world. In his main work, the *Muqaddimah*, a kind of universal history, which is more than 1000 pages long, he analyses causes for the rise and fall of civilisations.

The book contains basic ideas on science and the economy. His explanations concerning the volatility of wealth and power can be interpreted as the first description of long economic cycles.

He occupies himself with the role of arable and cattle farming and trade as a means of livelihood.

He discusses the division of labour by describing how bread is made.

He comments on the effect of taxes.

With his interdisciplinary writings Khaldun counts as a precursor of sociology.



Thomas More

(1478-1535)

Life:

The son of a London judge, More's own law career was crowned when he became Lord Chancellor to the King of England, Henry VIII.

A devout Catholic, More opposed the King's divorce and the founding of the Church of England with the King as its head. In 1532 he resigned from office and refused to swear the oath of allegiance to the King, upon which he was sentenced to death. In 1935 he was canonized by the Catholic church.

Main Ideas:

In his main work *Utopia* More develops his blueprint for an ideal state.

The book is set on an island whose social system is diametrically opposed to the one in England at the time. In fact, it is a satirical alternative to More's England.

The island state is a republic, modelled on the religious order of the Dominicans. The individual is subordinate to a relatively democratic community. Everybody contributes with their work, has access to education and enjoys religious tolerance. Everything is commonly owned (e.g. land) and money is unknown. The aim is to work little and have a lot of time for one's spiritual development.

Utopia is a forerunner of utopian novels.



Jean-Baptiste Colbert

(1619-1683)

Life:

Jean-Baptiste Colbert was born into a family of cloth merchants.

Initially hired by Cardinal Mazarin to look after his financial affairs, Colbert later became finance minister under the Sun King, Louis XIV. A successful minister, he put the king's financial affairs in order and financed his battles. He founded the basis for French colonial power.

Central Ideas:

Colbert is the founder of mercantilism, the economic counterpart of political absolutism.

The aim is to strengthen the power of the nation by increasing state revenue and the King's treasure.

Growing international trade is seen as cut-throat competition, in which one state's gains can only be made at the expense of its rivals.

In order to maximize state revenue, exports were promoted and imports kept to a minimum.

As there was hardly any private enterprise, the state exerted great influence on the economy. Royal manufacturing industries were set up (among other things for china, lace or tapestries). Road infrastructure was improved, domestic customs duties abolished and countries colonized in order to have access to cheap raw materials and cheap labour.



Francois Quesnay

(1694-1774)

Life:

Francois Quesnay grew up in the countryside in a family of thirteen. His father was a farmer.

During his apprenticeship as a copperplate engraver he developed an interest in medicine. In this context he criticized the then widely practiced method of 'bleeding'. As a surgeon he became the personal physician of Louis XV and his mistress, Madame de Pompadour. Only in his old age did he become interested in economics.

Central Ideas:

Quesnay developed the physiocratic school (natural law) as a counter-movement to mercantilism. Rather than trade and state-subsidized exports, Quesnay sees agricultural production as the prime source of wealth.

As a representative of liberalism, Quesnay assumed that the economy worked according to the principles of natural processes. If the economy is left to work according to natural law, an economic equilibrium and the best-possible results will be achieved.

At a methodical level Quesnay's contribution was the model of the economic cycle (*Tableau économique*), which was based on the circulation of blood in humans.



Adam Smith

(1723-1790)

Life:

Adam Smith was born in Kirkcaldy, Scotland. As his father died before his birth, Smith had a very close relationship with his mother as long as he lived.

He studied in Oxford and later became Professor of logic and, later, moral philosophy. As the private tutor of Henry Scott, Duke of Buccleuch, he travelled to France, where he met Quesnay, and to Switzerland. On his return he was appointed commissioner of customs and wrote his main work.

Central Ideas:

Adam Smith is one of the most eminent economists and moral philosophers. He is the founder of both classical and modern economics. In his main work, *The Wealth of Nations* he stresses the significance of the individual.

A representative of liberalism, Smith opposes the absolutist state. Each individual who acts freely and out of self-interest serves the common good (e.g. the baker). The most important factor which contributes to the wealth of nations is rooted in the division of labour (example of pin production). The economy should be regulated by the market while the state should limit itself to providing the legal framework, education as well as internal and external security.

Smith uses the metaphor of 'the invisible hand' for the self-regulating forces of the market.



Thomas R. Malthus

(1766-1834)

Life:

Thomas Robert Malthus had a very liberal upbringing. His godparents were David Hume and Jean-Jacques Rousseau. Malthus studied in Cambridge where his supervisor was a religious dissident. In 1788 he became a minister of the church. In 1805 he became professor of economics. In 1834 he died of a heart disease.

Central Ideas:

In the 18th century, enlightened thinkers thought about economic reforms to improve humans and society. Malthus was very pessimistic in this respect and, on account of this, became one of the most hated people of his time.

In 1798 Malthus published his most important work, *An Essay on the Principle of Population as it affects the Future Improvement of Society*. In it he argues that the sex drive of humans leads to population growth. Food production cannot keep up with growing demand, leading to food shortages and starvation. This leads to a population decrease and enough food for the remaining population. He was against welfare for the poor as this led to a population increase and therefore was counterproductive.

In reality technical progress managed to overcome the limitations of land availability and increasing population, which Malthus could not foresee.



Robert Owen

(1771-1858)

Life:

Robert was the youngest son of 7 children of a saddler. He only attended school up to the age of ten, after which he started an apprenticeship in a drapery shop. He worked his way up, became the manager of a factory and, later, an entrepreneur. He counts as the founder of the cooperative movement.

Central Ideas:

Owen was interested in social reforms (*The Social System*) and carried out an experiment to create humane working conditions in his spinning factory including the abolition of child labour, promotion of schooling, limitation of working hours, motivation of workers, clean work places and the formation of trade unions. The experiment was successful, production increased and the number of thefts declined.

When his agitation for social reforms met with little interest, he developed his utopia for cooperative working - and model housing for workers. He developed models for 'producer cooperatives', where workers lived in self-contained communities to counter the poor living conditions of industrial society.

Owen's work anticipated modern social policies of the 20th century.



David Ricardo

(1772-1823)

Life:

Ricardo was born into a Dutch-Jewish family of stockbrokers, who had emigrated to England shortly before his birth. When he married a Quaker woman, he was disinherited, whereupon he decided to set up his own business as a stockbroker and, within a short time, made a fortune. As of 1814, he had accumulated so much wealth that he no longer needed to work but could dedicate all his time to his studies. In 1823, aged 51, he died from the consequences of an inner ear infection.

Central Ideas:

A follower of Smith, Ricardo developed the classical theory of distribution, a closed system based on economic freedom.

In his main work, *On the Principles of Political Economy and Taxation*, he explains how, above all, landowners who own fertile land become rich at the expense of all the other economic stakeholders (land rent).

His theory of comparative advantage became a cornerstone of foreign trade theory. He explains why the exchange of goods between two countries (England and Portugal trading wine and wool) can be advantageous even if one country can produce the goods more cheaply than the other.



Friedrich List

(1789-1846)

Life:

Friedrich List was the son of a tanner, a trade List learned, too, before making a career in public service. On account of his political services he became the first professor for political economy without holding a university degree himself. However, he proved to be difficult to get on with and quickly lost his professorship and his seat in the provincial assembly. After being imprisoned for insulting the king, he emigrated to the USA where he became a wealthy railway pioneer. Back in Europe he had to live in exile for many years, as rehabilitation in Germany had been denied to him. In Paris he wrote his most important work. Many of his projects failed and, finally, in 1846, he committed suicide in Kufstein.

Central Ideas:

In Friedrich List's main work, *The National System of Political Economy*, he considers the question how Germany can achieve economic wealth and power. With his economic theory he counts as a precursor of the historical school.

He opposes the classical theory of international free trade with economic nationalism (protectionism). 'Protective tariffs' to nurture infant industries are supposed to protect and strengthen the national economy.

As a political reformer he argued for industrialization, a German customs union, and a countrywide railway network.

As for the social question, it was more or less ignored by List.



John Stuart Mill

(1806-1873)

Life:

Mill's father was a utilitarian, economist and friend of Riccardo's. He taught and educated his son himself. As a child, John had to read the Greek philosophers in the original and, as a youngster, listen to lectures about political economy. There were no holidays. At the age of twenty, he had a nervous breakdown and started distancing himself from his father. In addition to his father, Mill was influenced by his wife, Harriet Taylor Mill, and his daughter. Apart from his economic and political writings, he published a book on the subjection of women, among other things. He died in 1873 in Avignon.

Central Ideas:

John Stuart Mill was a philosopher and economist and one of the most influential liberal thinkers of the 19th century. His work includes logic, practical philosophy and economics.

In 1848, Mill published his *Principles of Political Economy*. In it he deals with the power of the market both in terms of goods and jobs. He also develops a theory of distribution.

He basically is a supporter of the free market and competition, but at the same time, demands more social equality through state intervention, for example in the form of taxes on land rent or the nationalization of farmland rented out to Irish peasants.



Karl Marx

(1818-1883)

Life:

Marx was the son of a Jewish lawyer from Trier. He, too, studied law and, in the course of his studies, came across Hegel's work. Influenced by the 1848 Revolution, he was forced to go to exile in London in 1849. Here he worked on his critique of capitalism. His lifelong friendship with the Friedrich Engels, the son of an entrepreneur, proved formative.

Central Ideas:

The economist and philosopher Karl Marx was a critic of bourgeois society. The industrial revolution in the 19th century led to sweeping changes in methods of production and the living conditions of workers. Their precarious situation became the breeding ground for socialist models of society. Marx became the most influential theoretician of socialism. His main work, *Capital*, is a critical discussion of the capitalist system.

Marx demands that ownership of the means of production be transferred to society while satisfying demand should be the central concern. The market should be replaced by a central plan. Labour is the only factor creating new value. All people should be equal in society.

After Marx's death, socialism split into the radical form of communism, on the one hand, and revisionism (towards social democracy), on the other. The fall of the 'iron curtain' in 1989 led to the so-called 'change' or 'turn' that marked the end of communism as a system of government. Some industrial nations have social democratic governments today.



Carl Menger

(1840-1921)

Life:

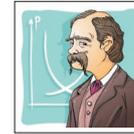
Carl Menger was born in Galicia, today Poland. As his father died early, Menger grew up on his grandfather's estate. Already as a youngster he was interested in the writings of classical economists. He studied in Vienna, Prague and Krakow. His post-doctoral thesis paper, *Principles of Economics*, was published. After a short political career he got a professorship for Economics in Vienna in 1873. From 1876 onwards he became private tutor for Crown Prince Rudolf.

Central Ideas:

Carl Menger is the founder of the Austrian school of economics and co-founder of marginal utility theory. He has influenced many other economists.

In his *Principles of Economics*, he sketched the theory of marginal utility (the amount of additional utility provided by the consumption of an additional unit of an economic good or service). His book was fundamental for the Austrian school.

His *Investigations into the Method of the Social Sciences* led to the so-called 'Methodenstreit' (methodical conflict) with the historical school. Menger believed that the study of the actions of the individual should be the starting point for economic science. Based on the principle of utility maximization, universal laws of human action could be deduced (deduction = the inference of particular instances by reference to a general law or principle).



Alfred Marshall

(1840-1924)

Life:

Alfred Marshall had a very strict father who had planned for him to enter the clergy. Thanks to his uncle, however, he could study in Cambridge. Later he was offered his first professorship there, which he had to give up when he married one of his students. (At that time professors in Oxford and Cambridge had to remain celibate.) When after a few years he was again offered a chair in Cambridge, he introduced economics as a new course. Keynes and Pigou were among his students.

Central Ideas:

Alfred Marshall was one of the most important economists of his time and co-founder of the neoclassical school. He systematized classical economic theories and developed them further.

In 1890 he published his main work, *Principles of Economics*. His writing is characterized by his precise mathematical reasoning and his concise writing style. His main contribution is the further development of the general theory of economic equilibrium. He combined Menger's marginal utility theory and the economic equilibrium theory of Walras. By taking into account the time factor, the price is determined by demand in the short run, while production costs are decisive in the long run.



Rosa Luxemburg

(1871-1919)

Life:

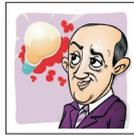
Rosa Luxemburg came from a Jewish lower middle-class family, who lived in Zamocs, Russia (today Poland). While still in high school, where Jewish girls were discriminated against, she became a member of the underground Marxist group 'Proletariat'. There she got to know the illegal writings of Karl Marx. In 1888 she fled to Switzerland, as her membership in the underground group had been revealed. In Switzerland she studied philosophy, law and economics among other things.

During the turmoil of World War I, Luxemburg, was both politically active and active as a writer in Germany. Among other things she was a co-founder of the Spartacus League, an association of Marxist socialists who were dedicated to overthrowing capitalism and imperialism. She fought for a proletarian republic in Germany. Rosa Luxemburg was arrested several times and after her release, in 1919, was murdered together with Karl Liebknecht by their political opponents.

Central Ideas:

Rosa Luxemburg was an important representative of the European labour movement and a Marxist theoretician. She strongly believed in the ideas expressed in the Communist Manifesto (Marx & Engels). In her main work, *The Accumulation of Capital*, she develops the theory that imperialism was the final stage of capitalism.

In 1918, together with Liebknecht, she founded the newspaper *The Red Flag*, the mouthpiece of the German communist party.



Joseph A. Schumpeter

(1883-1950)

Life:

Josef Alois Schumpeter was born into a Moravian family who owned a textile factory. As early as 1910 he became professor at the University of Chernivtsi. Here he wrote his *Theory of Economic Development*. In 1911, Schumpeter took a professorship for political economy at Graz University. In 1919 he became minister of finance in Austria and, in 1921, president of a bank, which went bankrupt during the economic crisis. After a professorship in Bonn he transferred to Harvard in 1932. There are many anecdotes about Schumpeter. According to one of them, he wanted to become the best lover, best horse rider and the best economist in the world. If we are to believe him, he achieved two of these goals, without ever revealing which two.

Central Ideas:

In his main work, *Theory of Economic Development* Schumpeter draws attention to the central challenge of capitalism. For him, the problem in the economy is not the equilibrium but structural change, the disequilibrium. The true cornerstone of the economy is the entrepreneur as the dynamic force in the economy. The process of 'creative destruction' gives rise to new technologies, thereby destroying old structures, e.g. the invention of railways changed the transport system and ruined stagecoach entrepreneurs. For Schumpeter, the rise and fall of businesses was "economic evolution".

In his late work, *Capitalism, Socialism and Democracy*, he saw socialism as a likely result of capitalism.



John Maynard Keynes

(1883-1946)

Life:

John Maynard Keynes came from a wealthy English family. His father was professor of political economy. He went to Eaton and studied at King's College Cambridge where he was lecturing from 1920 onwards. He was a member of the Bloomsbury Group (a group of artists and intellectuals around Virginia Woolf). He criticized the Allies' treatment of Germany after World War I. His ideas prepared the way for the New Deal (Roosevelt) and he represented Britain at the Bretton Woods conference. In 1942 he was knighted and got a seat in the House of Lords of the British Parliament.

Central Ideas:

John Maynard Keynes is one of the most important economists of all time with far-reaching influence on economics and politics.

In his main work, *The General Theory of Employment, Interest and Money*, he criticized the classical economists and their theory that the market is self-regulating. Beginning in 1929, the economy contracted severely and showed no signs of recovering, leading to the Great Depression in Europe and the USA. His demand-side economic theory blames unstable demand for recessions.

Keynes believed that the state should intervene in the economy and lessen the effect of economic downturns by anti-cyclical measures (fiscal and monetary policy).



Karl Polanyi

(1886-1964)

Life:

Karl Polanyi was born in Vienna and studied philosophy and law in Budapest. Towards the end of World War I he moved to Vienna for political reasons and worked as an editor of economics journals. As he gave away all his money, he lived in poverty. In 1933, on account of his Jewish origins, he had to emigrate, first to Great Britain, later to the USA.

In the USA he became visiting professor at Columbia University from 1947-1953.

From 1953 onwards he was in charge of a research project about the economic aspects of institutions in the course of history. He lived in Canada because his wife, an outspoken socialist, was not granted a visa for the USA. He died in Canada in 1964.

Central Ideas:

Polanyi's theory is very different from mainstream economics.

In his main work, *The Great Transformation*, Polanyi showed the disastrous consequences which exclusively market-oriented policies can have on the majority of people. For Polanyi, the self-regulating market is an illusion that destroys the human and natural essence of society.

A rampant materialism, according to Polanyi, runs counter to the nature of society and poses an existential threat.

The economy should serve society and not the other way round.



Walter Eucken

(1891-1950)

Life:

Walter Eucken grew up in a family of artists; his mother was the painter Irene Eucken and his father the Nobel Prize laureate for literature, Rudolf Eucken. Walter Eucken studied history, political science, law and political economy. In 1933, at the university of Freiburg, he became the leader the group opposing the then vice-chancellor, Martin Heidegger, who wanted to implement National Socialist principles of leadership.

Central Ideas:

Walter Eucken was a pioneer of the social market economy in Germany. He was the founder of Ordoliberalism (Freiburg School). Ordoliberalism was born from the experience of rampant capitalism in the inter-war period and the political repressions of National Socialism.

Eucken demands for citizens to be able to live in freedom and humane conditions.

As the so-called 'third way', Ordoliberalism became the template for the kind of social market economy that has successfully been practiced in Austria and Germany. According to his main work, *Grundlagen der Nationalökonomie (Principles of Macroeconomics)*, politics has to provide a stable framework for the economy without randomly interfering in market processes. Eucken demands a stable economic policy to guarantee growth. The economy is to be subordinated to the legal and social system.



Nikolai Kondratieff

(1892-1938)

Life:

Nikolai Kondratieff was born in Russia into a family of farmers. He studied law at Saint Petersburg and showed particular interest in political economy. Eventually he was offered a professorship for economics. In 1917, he took part in the revolution and, after that, he continued his research in the agrarian academy in Moscow where he founded a research institute for the economy. He was one of the people who worked out the first five-year-plan for agriculture in the Soviet Union.

In contrast to socialist dogma, Kondratieff does not foresee the collapse of capitalism but believes that, thanks to its innovative power, it can regenerate itself during a period of economic upswing. For Stalin these views are counter-revolutionary, this is why, in 1930 he is arrested and, in 1938, in the course of the great purge (terror campaign against political dissidents under Stalin) sentenced to death and executed.

Central Ideas:

In his work, Kondratieff did an empirical study of economic indicators in various countries over a period of 100-150 years. This is when he discovered the 'long waves' or 'long economic cycles', which can last up to 60 years.

He predicted the beginning of the world economic crisis in the 1920s and characterized it as the end of the third long economic cycle. One year after his death, Joseph Schumpeter coined the term 'Kondratieff cycles' for long economic cycles.



Friedrich August von Hayek

(1889 – 1962)

Life:

Friedrich August von Hayek came from an upper-middle class family in Vienna. He studied law and political economy at Vienna University and got his doctorate there. He ran the department for the research of economic cycles and, in 1931, he became a professor at the London School of Economics where he became the opponent of Keynes. In 1974 he was awarded the Nobel Prize.

Central Ideas:

Hayek was the most famous representative of the Austrian school of political economy. Influenced by Ludwig von Mises, its most radical representative and Hayek's experiences in the inter-war period, the idea of freedom is at the centre of his theory.

His book, *The Road to Serfdom*, is a passionate account assessment of socialism and National Socialism. According to Hayek, central economic production and distribution of goods requires ideological indoctrination and the establishment of totalitarianism. This leads to the abolition of democracy and the rule of law. Hayek believed there should be no state intervention; even well intended corrections of the market (e.g. the strengthening of the welfare state) were not compatible with a liberal society. This is why he was for a completely unregulated market economy. In order to spread his neo-liberal ideas, Hayek founded the Mont Pelerin Society in 1947. To this day it is a kind of international, neo-liberal stronghold.



Oskar Morgenstern

(1902-1977)

Life:

Oskar Morgenstern was born in Görlitz in Silesia. At Vienna university he attended lectures by Ludwig von Mises and became the successor of Friedrich A. Hayek at the department for the research of economic cycles.

In 1938 he emigrated to the USA and was offered a professorship in Princeton, where he also became the director of the Economic Research Program.

Together with the eminent mathematician, John von Neuman, Morgenstern developed game theory.

In 1963, he and Paul Lazarsfeld founded the Institute for Higher Studies in Vienna. In 1965 he returned to the USA. Since 2013 the Oscar Morgenstern Medal has been awarded in Vienna.

Central Ideas:

Morgenstern's most important work, which he published in 1944 together with John von Neumann, is called *Theory of Games and Economic Behaviour*. It is based on Neuman's 'MinMax theorem' of 1928 and applies mathematical theories to economics. (e.g. zero-sum games with two persons – one winner and one loser).

Morgenstern and Neuman's work was further developed by John Nash (Nobel Prize winner 1994). Nash contradicts Adam Smith's hypothesis of individual ambition always serving the common good.



Joan Robinson

(1903-1983)

Life:

Joan Violet Robinson was the daughter of a general in Surrey (England). In 1922 she went to Cambridge to study economics. In 1925 she married the economist Austin Robinson. After several years in India, Robinson returned to Cambridge where she started teaching.

Central Ideas:

In her book, *The Economics of Imperfect Competition*, Robinson revealed the restrictions of neoclassical theory and proved Marshall's theory of complete transference wrong.

Robinson develops a theory of enterprises in monopolistic markets and describes the enterprises' struggle for power, both in the goods as well as in the labour market, and the negative consequences thereof for consumers and workers.

She belonged to the 'Cambridge Circus', a group around Keynes, which discussed 'The General Theory'.

Robinson developed Keynes' theory thereby initiating a post-Keynesian reconstruction of political economy.



Nicholas Georgescu-Roegen

(1906-1994)

Life:

Nicholas Georgescu-Roegen was born in the Romanian town of Constanta, on the Black Sea. He was an extraordinarily talented mathematician and won scholarships for Paris and London. In 1934 he went to Harvard where he studied under Schumpeter. In 1936 he returned to Romania, in 1944 he became general secretary of the Romanian armistice commission. In 1948 he emigrated to the USA. From 1949-1976 he was professor for economics at the Vanderbilt University in Nashville, but also lectured in Geneva and Strasbourg.

Central Ideas:

Georgescu-Roegen is considered the father of bioeconomics. He was the first economist to link thermodynamics to economics. According to the two main laws of thermodynamics, energy can neither be created nor destroyed. However, the use of a certain amount of energy constantly decreases. Entropy measures the share of dispersed energy that can no longer be used. Economic processes represent a continuous transformation of low into high entropy (e.g. crude oil is transformed into plastic).

According to Georgescu-Roegen zero growth is not enough, he argues for negative growth as the important thing is not to increase wealth but to minimize the damage done. His *La Decroissance* made him a pioneer of ecological economics and the anti-growth movement.



John Kenneth Galbraith

(1908-2006)

Life:

John Kenneth Galbraith was born in Iona (Canada) as the son of Scottish immigrants. He studied agricultural science first in Ontario and later in Berkeley, California. He was offered a professorship in Harvard and, after that, in Princeton. Galbraith was one of the critical economists who helped spread Keynes' ideas. In 1960 he became advisor to presidential candidate John F. Kennedy and after the latter had won the election, Galbraith became American ambassador in India. On his return he dedicated his time to teaching and research.

Central Ideas:

Galbraith's work revolved around the hypothesis that capitalism produced both wealth in the private sector and poverty in the public one.

In his best known work, *The Affluent Society*, he criticizes the surplus offer of consumer goods and contrasts them with insufficient infrastructures and public services.

A follower of Keynes and left-wing liberal, Galbraith argued for the strengthening of public institutions and the strengthening of demand.

As early as 1956 he warned of the catastrophic environmental consequences of uncontrolled economic growth.



Milton Friedman

(1912-2006)

Life:

Milton Friedman was born in New York into a family of immigrants from what is today's Ukraine. He studied in New Jersey, Chicago and New York. From 1946 to his retirement, he was teaching in Chicago and from 1977 onwards in Stanford. In 1976 he was awarded the Nobel Prize.

Central Ideas:

Milton Friedman is one of the most influential economists of the 20th century. He founded monetarism and considered himself a representative of classical liberalism. His main work, *Capitalism and Freedom*, is a modernized version of Hayek's *Road to Serfdom*.

In contrast to Keynes, Friedman was of the opinion that wages and prices were relatively flexible while the private economy is stable in principle. Free markets guarantee economic efficiency and as far as consumer behavior is concerned, it is determined by long-term expectations of earnings rather than real wages.

Friedman is against state intervention regulating economy for the reason that – among other things – the effect of political decisions often sets in too late, namely after the crisis has ended. This way, rather than weakening the blow of a recession, an economic upswing is artificially strengthened leading the economy to overheat. Friedman is concerned about inflation. What counts for him is stable prices. The money in circulation should grow by a fixed percentage of 3-5% per year.



Hyman P. Minsky

(1919-1996)

Life:

Hyman Philip Minsky was born in 1919 in Chicago as the son of Belarusian emigrants. He studied economics at Harvard where he was taught by Schumpeter. Minsky's work was influenced by Keynes. Before the financial crisis in 2008, he was relatively unknown. In the search for the origins of the crisis, Minsky's work became relevant.

Central Ideas:

Central to Minsky's analysis, *Can it happen again?*, is the financial structure of capitalist enterprises and financial institutions (which he considered ruinous). In economic boom times, enterprises tend to take higher risks (in the form of borrowed capital – leverage effect). As soon as the boom ends, the construction collapses. This is the so-called 'Minsky moment'. What follows is a recession. The longer the economic boom before the cyclical swing, the more severe the downturn.

Apart from studying their causes, Minsky also makes suggestions as to how economic crises can be prevented. He recommends a strong public sector, the regulation of financial markets and an active, anti-cyclical budget policy. Minsky's analysis of Keynes and his 'Animal Spirits' have influenced economists like Charles Kindleberger (*Manias, Panics, and Crashes: A History of Financial Crises*) or the Nobel Prize laureates Alkerlof and Shiller (*Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*).



Robert Solow

(born 1924)

Life:

Born in New York in 1924 Solow lived through the world economic crisis as a child. This experience led to his interest in the economy and the question of how economies grow and how people's living standard can be improved. In 1940, he started studying economics in Harvard, which he had to leave in 1942 to fight in World War 2. After his return to Harvard, Wassily Leontief became his mentor. His doctoral thesis won the Wells Prize and in 1987 he was awarded the Nobel Prize.

Central Ideas:

Robert Solow is mainly concerned with economic growth. His main work is called *A Contribution to the Theory of Economic Growth*.

Solow developed a growth model in which he predicted that general living standards would become more alike. Capital in developed countries was dependent on declining growth in income. Poorer countries, as a rule, offered higher income growth, which attracted investors. Poorer countries invested this capital into new technologies, which were able to generate faster growth, thereby enabling the countries to catch up. The conclusion Solow draws from this is that, with time, all countries will become rich.



Robert Mundell

(born 1932)

Life:

Robert Alexander Mundell was born in Ontario. He studied in Vancouver, in London and at MIT, where he received his doctorate in 1956 (supervisor: Charles Kindleberger).

Mundell was a consultant to the International Monetary Fund, the World Bank and the European Commission.

He is professor for economics at Columbia University, New York and at the University of Hong Kong. In 1999 he was awarded the Nobel Prize for his main work, *The Theory of Optimal Currency Areas*.

Central Ideas:

At the end of the 1970s economic data in the USA were bad. What was called for was a new sense of optimism in order to strengthen the economy. Supply-side economics, which was co-founded by Mundell is a neo-classical political economic model opposed to demand-side economics. It is based on the assumption that employment and growth are determined by the supply-side, as entrepreneurs decide on investments and/or job creation on the basis of expected cost and returns. The aim is to improve the investment climate for entrepreneurs by lowering taxes, in order to boost private investment and make state intervention unnecessary.

The core of Mundell's theory is the Laffer Curve which shows that there are always two tax rates, which despite a different assessment basis, result in the same amount of tax revenue.



Amartya Sen

(born 1933)

Life:

Amartya Kumar Sen was born in India. He comes from a wealthy family. His father was professor of chemistry. As the family lived on campus, Sen got used to university life early on. His experience of violence against religious minorities and the 1943 famine in Bengal provoked his interest in economics, ethics and political philosophy.

Sen studied economics in Calcutta and Cambridge and, after 1960, did research work and teaching at the most prestigious universities in Europe, India and the USA, e.g. at MIT, the LSE, Oxford, Cambridge and Harvard. He received many awards, among them the Nobel Prize in 1998.

Central Ideas:

Inspired by K. Arrow's impossibility theorem, Sen developed a sweeping criticism of classical and neo-classical theories (*Collective Choice and Social Welfare*): "Traditional economics must take into account that human actions are also determined by values other than egotistical self-interest".

His research focus is problems related to poverty, and human wellbeing. The capability theory he developed is used to measure individual and social welfare. It is used as the basis for the HDI (Human Development Index) of the UN.

In addition, since 2009, Sen, together with Joseph Stiglitz and Jean Paul Fitoussy, have worked on alternatives to GDP to measure a country's status.



Elinor Ostrom

(1933-2012)

Life:

Elinor Ostrom was born in Los Angeles and studied political science in California. Together with her husband she founded the Bloomington School of Public Choice. Rather than propagating a Third Way other than capitalism and socialism, this economic school of emphasizes the multiple forms the relationship between market and state can assume. Instead of all the decision-making power emanating from the state, Ostrom believes in polycentrism and forms of self-organization at different levels.

She founded several research institutes in Europe and the USA.

Central Ideas:

Ostrom was one of the leading researchers in the field of environmental economics. She was interested in the sustainable use of eco-systems.

For her research on the commons (*Governing the Commons*) and the successful administration of common property by user-associations, Ostrom was the first woman to be awarded the Nobel Prize in Economic Sciences in 2009.

She wrote about fisheries, irrigation systems, forestry and pastoralism and, later on, the problems related to intellectual property.



Joseph Stiglitz

(born 1943)

Life:

Joseph Eugene Stiglitz came from a Jewish family. He studied mathematics and economics at Amherst College and MIT. During a research period in Nairobi, he became interested in the problems of developing countries. He taught in Yale, Stanford, Oxford and Princeton and, since 1988, has been teaching at Columbia University in New York. Advisor to Presidents Clinton and Obama, Stiglitz was also chief economist at the World Bank.

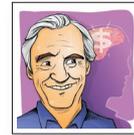
In 2001, Stiglitz was awarded the Nobel prize together with George Akerlof and Michael Spence.

In 2008, Stiglitz became President of the Stiglitz-Sen-Fitoussi Kommission for working out alternatives to GDP. He is also a co-founder of the Institute of New Economic Thinking, whose aim it is to develop new ideas for the economy.

Central Ideas:

Stiglitz is one of the most influential economists of our time. His research on asymmetric information (*The Contributions of the Economics of Information to Twentieth Century Economics*), carried out together with George Akerlof and Michael Spence, led to a change in paradigm in economics. According to the theory, an imbalance of information between buyers and sellers can lead to failed contracts and market failures.

Stiglitz is known to a wider public on account of his anti-globalisation stance.



Ernst Fehr

(born 1956)

Life:

Ernst Fehr was born in Vorarlberg. He studied in Vienna and London. He was head of the Boltzmann Institute for Economic Research. Since 1994 he has been teaching at Zürich University.

Central Ideas:

Ernst Fehr is one of the most important representatives of behavioral economics. What he introduced to economics was experiments with human characteristics that, for a long time, had been neglected: trust, fairness, cooperation, altruism (*Psychologische Grundlagen der Ökonomie*). Behavioral economics could prove that humans have a sense of justice and hold on to it even if it is against their economic interest. People are prepared to share. On account of Fehr's research, the simplified picture of the "homo oeconomicus" who is always after his own gains is beginning to crumble.

Behavioral economics studies the way people take decisions about mundane things. Our decision-making process is often not based on rational, logical calculations on how to achieve maximum gains; we often use rules of the thumb, follow our emotions and sometimes show inconsistent behavior in the course of time. Behavioral economics supplements neo-classical economics. Originally only concerned with microeconomics, new ideas from behavioral economics eventually became relevant in macroeconomics as well (e.g. herd instinct, group behavior).



Thomas Piketty

(born 1971)

Life:

Thomas Piketty was born in Clichy. He studied economics in Paris and at the LSE in London.

After teaching at MIT, Piketty has been lecturing at the Paris School of Economics.

During the presidential election campaign in 2007 he was economic advisor to the socialist candidate Segolène Royale.

Central Ideas:

Thomas Piketty is a shooting star among economists. His book *Capital in the Twenty-First Century*, published in 2004 and widely discussed both in Europe and the USA, made him known to the wider public.

Piketty's central research questions are the unequal distribution of income and wealth, in short, social inequality, which often causes crises.

According to his analyses wealth grows faster than the economy in general ($r > g$), which leads to people living on their capital.

In order to prevent economic crises Piketty demands progressive taxation of wealth and a global re-distribution of wealth.

In connection with the euro crisis and increasing state indebtedness, Piketty argues for a strong, social and democratic Europe.

