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**New Thinking in Economics - from Neoclassical Theory to Behavioral Economics and Happiness Research**

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Introduction to

"Foundations of Economics", MBA-Course, Management Institute, TH Nürnberg

"Wirtschaftspolitik" (Economic Policy), MA-Course, Faculty of Business Administration, TH Nürnberg

**Content**

"**Economics** is a science which studies [**human behaviour**](https://en.wikipedia.org/wiki/Human_behaviour) as a **relationship** between **ends** and **scarce means** which have **alternative uses**." [[1]](#footnote-1)

[Lionel Robbins](https://en.wikipedia.org/wiki/Lionel_Robbins), 1932

„Economics may borrow some methodology from the **hard sciences** but as a science of **human behavior** some of these methods are **built on ever shifting sand**”. [[2]](#footnote-2)

N. Gregory Mankiw, Mark P. Taylor, 2010

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„But what ultimately matters is the well-being of citizens.“

OECD, HOW`S LIFE - Measuring Well-Being, Paris 2011, p. 16

„**Get ready to change the way you think about economics**” [[4]](#footnote-4)

Richard H. Thaler, 2015

President of the American Economic Association 2015

„The **theories economists typically put** forth about how the whole economy works are **too simplistic**.”[[5]](#footnote-5)

George A. Akerlof, 2009 (Nobel Prize for Economics 2001)

Robert J. Shiller, 2009 (Nobel Prize for Economics 2013)

So what`s this course about? I would say this course simply has to do with what people want (goals) and how they decide (about the allocation of their scare resources) in order to get what they want. This follows the commonly accepted definition of the subject economics deals with which was coined by [Lionel Robbins](https://en.wikipedia.org/wiki/Lionel_Robbins) in 1932:

"**Economics** is a science which studies [**human behaviour**](https://en.wikipedia.org/wiki/Human_behaviour) as a **relationship** between **ends** and **scarce means** which have **alternative uses**." [[6]](#footnote-6)

So this course is about the core of economics: It is about the allocation of scare resources (input) in order to reach some given goals (output).

But there is a radical change of thinking about it at the moment in economics. We are going to be talking about in some organized way I hope.

So first we are interested in the basic ideas of **old** **thinking** in economics the so called N**eoclassical Theory**. Then we are going to be studying the **new thinking** in economics - **Behavioral Economics** on the one hand and H**appiness Research** on the other hand.

Once we understand the nature of neoclassical theory we can then go on to the subject of the new way of thinking in economics: behavioral economics and happiness research.

So let`s go through in more detail:

**1. Standard Economic Model - the Foundation of Neoclassical Theory**[[7]](#footnote-7)

“The core theory used in economics builds on a simple but powerful model of behavior. Individuals make choices so as to **maximize a utility function**, **using the information available**, and **processing this information appropriately**. **Individuals`preferences** are assumed to be **time-consistent**, affected only **by own payoffs**, and **independent** of the **framing** of the decision. Laboratory experiments in both the psychology and the economics literature **raise serious questions** about this assumptions.”

Stefano DellaVigna, Psychology and Economics: Evidence from the Field, in: Journal of Economic Literature, Vol. 47/2, June 2009, S. 315

„Economics may borrow some methodology from the **hard sciences** but as a science of **human behavior** some of these methods are **built on ever shifting sand**”. [[8]](#footnote-8)

N. Gregory Mankiw, Mark P. Taylor, 2010

Neoclassical theory is simply based on the assumption that human behavior could be modeled on the basis of the **homo oeconomicus** assumption **and** the additional assumption that **more material goods/ money is always better then less**. The **goal** is to **maximize utility**.[[9]](#footnote-9)

Following the **homo oeconomicus** assumption people act **rationally**, **selfishly** and **time consistent**, which means they **don`t change their preferences**.

The **homo oeconomicus** assumption was introduced by Leon Walras in economics in the second half of the 19th century to create/get an **artificial "hard science"** like physics is in reality to be able to **make use of mathematics in economics**.[[10]](#footnote-10) „Optimization mathematics forced economists to make very ambitious assumptions about the intellectual capacity of its agents – the controversial assumption of perfect rationality.“[[11]](#footnote-11)

Taking all assumptions together N. Gregory Mankiw (Harvard University) and Mark P. Taylor (Warwick Business School, UK) speak about the so-called "**Standard Economic Model**" (**SEM**) in the 3th Edition of their textbook "Economics" from 2014 (p. 102 and 274). Using the term "Standard Economic Model" for the assumptions which are the basis of the neoclassical theory is "brand" new in the 3th Edition. In the 2th Edition from 2011 it isn`t mentioned. But it is very interesting that Mankiw/Taylor explicitly say some pages later:

"Research has suggested that this (the Standard Economic Model / SEM, KR) is far from the case" (p. 126, 3th Edition).

Mankiw`s textbooks in economics are widespread worldwide.

Another worldwide very widespread used textbook is Hal R. Varian`s "Intermediate Microeconomics: A Modern Approach".

"The field of behavioral economics is devoted to studying how consumers **actually** make choices. It uses some of the insights from psychology to develop predictions about choices people will make and many of these predictions **are at odds** with conventional economic model of "rational" consumers."[[12]](#footnote-12)

Hal R. Varian, 2010

But the interesting question is: Why does Varian explain neoclassical theory/ thinking on more than 720 pages from around 740 pages in his textbook if this is - following his one words - "**are at odds**" with "**how consumers actually make choices**"? What is the deeper sense of teaching students a content which is not able to explain reality? What should be modern on this approach? And neoclassical theory is not only "at odds" with consumers decision making but also very often with decision making in companies.[[13]](#footnote-13)

Robert S Pindyck and Daniel L. Rubinfeld are even less critical: As some basic assumptions about preferences they assume simply "**completeness**, **transitivity** and **more is better than less**" and they conclude "Building on these assumptions, we will now explore consumer behavior in greater detail."[[14]](#footnote-14)

But the even still more tricky thing is that most of (nearly all) textbooks in economics in the past normally did not even mention that all of the neoclassical theory which was shown in the textbook was based only on the simply SEM assumptions.

Only the discussion following the great recession/ financial crises (starting in 2007) has changed this (partly).

So students especially in economics and business administration were - and often are still -indoctrinated by the SEM assumption and step by step (slowly) they believed in this assumptions. So wrong imprints were coined about the human behavior which also influenced the behavior of those students towards others - concretely spoken often they got more selfish and they expected others to be selfish too. And this coined often their behavior as managers in companies in later years.

"In truth, however, nothing could be more ad hoc than the standard microfoundations; as economists such as Pareto, Hicks, and Koopmans have made clear. The assumptions we make about individuals in microeconomics are based on introspection, not on any mass of coherent empirical evidence or even on any intuitive plausibility criteria. The only justification of the hyper-rational, self-interested agent typically used in standard macro models was that it was consistent with the characterization used in micro theorizing. And even that justification is now disappearing with the rise of behavioral economics."

David Colander, Peter Howitt, Alan Kirman, Axel Leijonhufvud, Perry Mehrling, Beyond DSGE Models: Toward an Empirically Based Macrooeconomics, American Economic Review: Papers and Proceedings, Vol. 98, p. 236.[[15]](#footnote-15)

Or to quote Vilfredo Pareto directly:

"The **foundation of political economy** and, in general, of every social science, is **evidently psychology**. A **day may come** when we shall be able to deduce the laws of social sciences from the **principles of psychology**." [[16]](#footnote-16)

Vilfredo Pareto, 1906

Now let us come to the new thinking in economics: It has two new directions that lie at different levels.

**2. New Thinking in Economics are reflected in (last years) Nobel Prizes in Economics**

The importance and the value of the new thinking in economics is highlighted in the fact that in last years representatives of the new thinking in economics won nobel prizes.

2015 the nobel prize in economics got one of the most well know happiness researcher worldwide:  Angus Deaton from Princeton University. In his work he deals with the situation of the poor (in all countries), the question of how people behave (behavioral economics) and question about what makes people happy (happiness research).[[17]](#footnote-17) In 2013 Deaton published his fundamental book "The Great Escape: Health, Wealth, and the Origins of Inequality".

In 2013 - more or less as a consequence of the great recession/ financial crisis in the second half of the first decade of this century (starting 2007) - Robert Shiller from Yale University got the nobel prize in economics for his work to explain economic/financial market crises with psychological reasons this means with insights of behavioral economics.[[18]](#footnote-18) In 2015 Shiller published the 3th Edition of his fundamental book "Irrational Exuberance".

Already in 2002 the **psychologist** Daniel Kahneman from Princeton University got the nobel prize in economics for his groundbreaking work in showing that people by far not (so) rational in their decision making as the neoclassical theory model assumes.[[19]](#footnote-19) The neoclassical theory is mainly based on the homo oeconomicus assumption where the agent of economic theory is **rational** and **selfish**, and his **tastes does not change.**

„I had been professionally trained as a psychologist **not to believe a word of it**.“ so Daniel Kahneman about the homo oeconomicus assumption in his article "Psychological Perspective on Economics" in the "American Economic Review" in 2003.[[20]](#footnote-20) In 2011 Kahneman published his fundamental book "Thinking, fast and slow".

But in the years following the nobel prize for Kahneman this/his insights were simply ignored by the mainstream in economics unfortunately. Most (or better nearly all) economists prefered to believe in/ use still simply the neoclassical theory based on the SEM. The consequence was that deregulation and believe/ trust/ ideology in/of the self-controlling capacity which means in the efficiency of free financial markets ("efficient market hypothesis") led to the great recession/ financial crisis in the second half of the first decade of this century (starting 2007) with a nearly breakdown of the financial sector in the Western world and a following great recession in the (mainly Western) world.[[21]](#footnote-21)

„The financial crises which began to gather pace in 2007 and the subsequent recession **have led to a major rethink about some fundamental assumptions in economic theory**."

N. Gregory Mankiw/ Mark P. Taylor, Economics, Second Edition 2011, preface p. xix.

In October 2008 the former chairman of the US-Central Bank (Fed) Alan Greenspan was asked in a hearing at the US House of Representatives about his view about the reasons for the financial crises (starting 2007). The chairman of the committee was Henry Waxman.

„Henry Waxman summed up: „In other words,“ he said, „you found that your view of the world, your ideology, was not right. It was not working.” „Precisely,“ answered Greenspan. „That `s precisely the reason I was shocked, because I had been going for forty years or more with the very considerable evidence that it was working exceptionally well.” … “The whole intellectual edifice collapsed in the summer of the last year” Greenspan admitted at the October 2008 hearing.”[[22]](#footnote-22)

“Greenspan struggled to explain what had gone wrong because the intellectual edifice around which he had built his thinking simply didn´t allow room for events of the preceding fourteen months. This was the edifies of rational market theory. The best-known element of rational market theory is the efficient market hypothesis, formulated at the University of Chicago in the 1960s with reference to U.S. stock markets. … Financial markets possessed a wisdom that individuals, companies, and governments did not.”[[23]](#footnote-23)

"… the **basic presumption** of **neoclassical economics** … was that we **should have faith in the market system**.“ [[24]](#footnote-24)

Paul Krugman 2009 (Nobel Prize for Economics 2008)

In September 2009 the New York Times published a fundamental article written by Paul Krugman who got the Nobel Prize for Economics in 2008 with the headline „How did Economists Get It so Wrong“. Krugman wrote: „They (the neoclassical economists) believe that all worthwhile economic analysis starts from the premise that people are rational and markets work … In short, the belief in efficient financial markets blinded many if not most economists to the emergence of the biggest financial bubble in history. And efficient-market theory also played a significant role in the inflating that bubble in the first place. … Economics, as a field, got in trouble because economists were seduced by the vision of a perfect, frictionless, market system. … “.

William White, who served as the Economic Adviser and Head of the Monetary and Economic Department of the [Bank for International Settlements](https://en.wikipedia.org/wiki/Bank_for_International_Settlements) (BIS) from May 1995 to June 2008 and who was appointed chairman of the Economic Development and Review Committee at the [Organization for Economic Co-operation and Development](https://en.wikipedia.org/wiki/Organisation_for_Economic_Co-operation_and_Development) (OECD) in Paris in October 2009, wrote in December 2009:

"What do the above considerations imply for the future of macroeconomics? The simplifying assumptions of the New Classical and New Keynesian models do not make them obvious candidates for near-term guidance on how best to conduct macroeconomic policies. We are left then with the Keynesian framework, with all the likely fuzziness and uncertainties implicit in the principal functional forms being subject to “animal spirits.”"[[25]](#footnote-25)

William White, 2009

As a consequence of the - inevitable/necessary - failure of neoclassical thinking meanwhile it has lost credibility dramatically especially in politics and institutions like central banks,[[26]](#footnote-26) regulatory organizations (f.e. for consumer protection) and so on.

Or to illustrate it with the words of the Chancellor Angela Merkel which she used as opening remarks at the conference of the Nobel Prize winners in economics in August 2014 in Lindau (Germany). In her speech she points to the fact that economists who wants to be taken seriously should concentrate on reality and not on a homo oeconomicus based thinking. She said: “It is about distinguishing research in a "vacuum" from the "reality" ”[[27]](#footnote-27)

That Chancellor Angela Merkel emphasises the fact of doing research in a "vacuum" means that politics and other institutions which are looking for economist`s advise are fully aware that - despite the disillusion about the worth of neoclassical theory for explaining reality following the great recession - a lot of economists still stick to the neoclassical theory.

In psychology this behaviour is well known as "confirmation bias" - a bias to believe and confirm. "Contrary to the rules of philosophers of science, who advise testing hypothesis by trying to refute them, people (and scientists, quite often) seek data that are likely to be compatible with the beliefs they currently hold."[[28]](#footnote-28) - or still much easier: To ignore all what is not in line with the believe someone has.

An argument which is used in defence of neoclassical theory and the SEM in this context is that without this assumptions mathematics could not be used anymore.[[29]](#footnote-29)

This argumentation is very interesting because Walras made use of the homo oeconomicus assumption in order to be able to use mathematics. Now it is argued that economists cannot give up the home oeconomicus assumption because otherwise mathematics could not be used anymore. So being able to use mathematic in an intensive way seems the decisive argument in order to stick to homo oeconomicus (SEM) assumption. Or to put it in another way: Research in a "vacuum" is necessary because research on explaining "reality" is not possible with mathematics.[[30]](#footnote-30)

But what is the real use of being able to make use of mathematics if the results we get are not useful to describe what is going one in reality?

To repeat:

"In truth, however, nothing could be more ad hoc than the standard microfoundations; as economists such as Pareto, Hicks, and Koopmans have made clear. The assumptions we make about individuals in microeconomics are based on introspection, not on any mass of coherent empirical evidence or even on any intuitive plausibility criteria. The only justification of the hyper-rational, self-interested agent typically used in standard macro models was that it was consistent with the characterization used in micro theorizing. And even that justification is now disappearing with the rise of behavioral economics."

David Colander, Peter Howitt, Alan Kirman, Axel Leijonhufvud, Perry Mehrling, Beyond DSGE Models: Toward an Empirically Based Macrooeconomics, American Economic Review: Papers and Proceedings, Vol. 98, p. 236.[[31]](#footnote-31)

Despite the fact that a lot of economists are still stick to simple neoclassical theory the influence of behavioral economics increases step by step at universities too. For example the President of the American Economic Association in 2015 is Richard H. Thaler. Daniel Kahneman called him as the real founder of behavioral economics because he made use of the insights of Daniel Kahneman and Amos Tversky (who died in 1996) in psychology for applying it in economics. In 2015 Thaler published his fundamental book "Misbehaving – The making of Behavioral Economics".

It is very interesting that even Adam Smith who is seen as the founder of (modern) economics in the second half of the 18th century is seen as an natural behavioral economist: “In short, Adam Smith`s world is not inhabited by dispassionate rational purely self-interested agents, but rather by multidimensional and realistic human beings.”[[32]](#footnote-32)

**3. Behavioral Economics - How People really decide (based on the "Dual Action System" / "The Two Systems" - in our brain)**[[33]](#footnote-33)

"The **foundation of political economy** and, in general, of every social science, is **evidently psychology**. A **day may come** when we shall be able to deduce the laws of social sciences from the **principles of psychology**." [[34]](#footnote-34)

Vilfredo Pareto, 1906

Behavioral economics deals with the question of how people really decide - so it deals precisely about what Vilfredo Pareto had in mind in 1906. It moves away from the a priori assumption of the Standard Economic Model. Behavioral economics is based on neurobiological and psychological insights of the "**dual action system**", which consists roughly of our **neocortex** and our **limbic system** in our brain (Kahneman calls both in a more precise way System 2 and System 1).[[35]](#footnote-35)

"Understand How Decisions Are Made: For decades, **behavioral decision researchers** and **psychologists** have suggested that human beings have **two modes of processing information** and **making decisions**. The first, **System 1 thinking**, is **automatic, instinctive, and emotional**. It relies on mental shortcuts that generate **intuitive answers** to problems as they arise. The second, **System 2,** is **slow, logical, and deliberate**. (Daniel Kahneman, winner of the Nobel prize in economics, popularized this terminology in his book [Thinking, Fast and Slow](http://us.macmillan.com/thinkingfastandslow/danielkahneman).)"

[John Beshears](https://hbr.org/search?term=john+beshears), [Francesca Gino](https://hbr.org/search?term=francesca+gino), Leaders as Decision Architects, Harvard Business Review, How to make better decisions - How to outsmart your biases and broaden your thinking (topic), May 2015

Extensive research has shown that our ability and our willingness to act rationally (logically) according to our neocortex - which means to act often against our emotions, against non-logic thinking which are merely based on associations and against our views of the world by which our limbic system system is mainly driven - is very limited. Or to put it differently: In our dual action system the limbic system most wins. This means also that our decisions are often influenced by **biases** (a predisposition towards error), **heuristics** (a rule of thumb used to make a decision), **framing effects** (decisions are influenced by the manner in which the setting for the decision is described), **loss aversion** and so on. In addition the ability of our neocortex to think rationally (which means logically - without any logical contradictions) - our cognitive capability - is more or less (very) limited too.

Research has also shown that most of the people - 80 % or more - are not selfish. Rather than they are driven by an **innate feeling of fairness**, more than 10 % are even altruistic. This has something to do with history and evolution of mankind. Crucial for the survival of the tribe of humans (homo sapiens) was our **capability to cooperate**. But the prerequisite for cooperation was and is fairness. Without fairness there is no cooperation simply at the end of the day.[[36]](#footnote-36)

Our plans and decisions are also often not time consistent. One reason for it is that we have cold and hot states. In a cold state we think about something in the future theoretically in a calm atmosphere (f.e. we should save more for our retirement) – here the neocortex is active. In the hot state we are in a concrete situation f. e. in a shop. In such a situation our limbic system which only knows the needs and wants of the moment urges us to buy what we want in this moment without thinking about our situation in future (too less money when we get retired). Mostly the limbic system wins. This has something to do with the fact that our limbic system is much stronger than our neocortex and to the fact - so Kahneman calls it - that our neocortex is lazy (it doesn`t want to think too much) too. The limbic system is millions of years old. Its task was simply to do all for surviving in the moment. Our neocortex is relatively young, only some hundred thousand years. Our limbic system only thinks about **immediate reward** - it doesn`t know about the future, it knows only about the present, the here and now. So rewards which are expected in future are not influencing the limbic system.

„It is, after all**, in our nature** to do things that will provide the **most immediate reward**. This is wired into our DNA for **basic survival.** … the reality is, our **short-term self** (limbic system, KR) still wins and gets dessert, despite objections from our **long-term self** (neocortex, KR)that wants a healthy and long life.“

Tom Rath, Jim Harter, Wellbeing – The Five Essential Elements, 2010 (Gallup), S. 8f.

Finally the a priori assumption of "more material things are better than less" does not hold in the light of the results of the interdisciplinary happiness research. Because as soon as the material needs are satisfied more money/ income doesn`t lead to more satisfaction with life – we are getting accustomed to the new situation easily and increase our expectations simply. This is a simply (old) insight from psychology.[[37]](#footnote-37)

„Unlike assumptions normally used in the psychological literature, standard economics textbooks assume a given utility (or happiness) function in which there is generally no habituation or adaptation. In other words, if the death of our loved one hurts like hell in the first year, economists say that it will hurt like hell – in exactly equal measure – for as long as we live, which seem wholly unrealistic.”[[38]](#footnote-38)

Insights of behavioral economics are more and more used in politics:

- **On a micro economic level** to help to make better decisions i.e. to take the confirmation bias into consideration.

„The **false assumption** is that **almost all people**, **almost of the time**, **make choices** that are in their **best interest** or at the very least are better than the choices that would be made by someone else.” [[39]](#footnote-39)

Richard Thaler, Cass Sunstein, 2008

"In principle, research findings in behavioural finance can provide important ideas for lawmakers on how to improve investor protection through suitable regulation. Findings from research on behavioural finance allow a better assessment of the behaviour patterns of economic agents and show potential reasons why actual behaviour in investment decisions differs from the idealised investor behaviour in classical finance theory."[[40]](#footnote-40)

Deutsche Bundesbank, 2011

More information about how the insights of behavioral economics supports political decisions could be found at the homepage of the Behavioural Insights Team of the Government of the UK (United Kingdom) (http://www.behaviouralinsights.co.uk/) and in the new books of Cass R. Sunstein: Why Nudge?: The Politics of Libertarian Paternalism, 2015 and David Halpern: Inside the Nudge Unit: How small changes can make a big difference, 2015. David Halpern is the Chief Executive of the Behavioural Insights Team. Cass R Sunstein was from 2009 to 2012 Administrator of the White House Office of Information and Regulatory Affairs in the US government. He is the founder and director of the Program on Behavioral Economics and Public Policy at Harvard Law School.  Together with Richard H. Thaler he is the author of the influential book "Nudge – Improving Decisions about Health, Wealth, and Happiness" which was published in 2008.

- **On a macro economic level** to calm markets because we know especially financial markets are less rational but more fluctuating driven by herd behaviour between panic and mania.[[41]](#footnote-41)

„… left to their own devices, capitalist economies will pursue excess, as current times bear witness. There will be manias. The manias will be followed by panics. ...

No one has ever made **rational sense** of the **wild gyrations** in **financial prices**, such as stock prices.” [[42]](#footnote-42)

George A. Akerlof, Robert J. Shiller, 2009

„Much of the above reasoning (that markets work efficiently, KR), however, is based on the principle of rational behavior as opposed to a herd mentality or mass psychology … The existence of speculative bubbles suggests that markets react to what Alan Greenspan called „irrational exuberance“ and what Keynes referred to as „animal spirits“. … Such views could lead to irrational waves of optimism and pessimism. … Faith in markets is fundamental to economic growth in most of the world and the financial crisis has shaken this faith to the core."[[43]](#footnote-43)

N. Gregory Mankiw/ Mark P. Taylor, 2010

Meanwhile the policy of the European Central Bank is based mainly on this insights.[[44]](#footnote-44)

„Some critics have argued that because of our determined policy action, the shoring up of bank capital and the consolidation of fiscal positions have been delayed. My answer is simple. Our measures gave breathing space from **markets driven by panic**, which were forcing the economy into a position where inappropriately high interest rates would make **default a self-fulfilling prophecy**. Adjustment would have been impossible. Instead of better capitalised banks and stronger fiscal positions we would have been left with **financial and economic meltdown**.“ [[45]](#footnote-45)

Mario Draghi, 2013

President of the European Central Bank

"On the financial markets, investors frequently mimic one another, behaviour which classical finance theory cannot explain. This is described as herding, or herding behaviour. Herding can cause problems since it can make financial markets more volatile and feed speculative bubbles, such as the recently burst real-estate bubble in the United States."[[46]](#footnote-46)

Deutsche Bundesbank, 2011

But this insight is a very old one. The reason for establishing the US-central bank system ( Federal Reserve System (Fed)) - in 1913 was financial panics which plagued "the nation":

"During the nineteenth century and the beginning of the twentieth century, **financial panics plagued the nation**, leading to **bank failures** and **business bankruptcies** that **severely disrupted the economy**. The failure of the nation's banking system to effectively provide funding to troubled depository institutions contributed significantly to the economy's vulnerability to financial panics. Short-term credit is an important source of liquidity when a bank experiences unexpected and widespread withdrawals during a financial panic. A particularly severe crisis in 1907 prompted Congress to establish the National Monetary Commission, which put forth proposals **to create an institution** that would help prevent and contain financial disruptions of this kind."

Federal Reserve System, Purposes and Functions, Washington 2005, p. 1f.

**4. From the Standard Economic Model to Reality: What can/should companies learn?[[47]](#footnote-47),[[48]](#footnote-48)**

“Your company has been operating on the **premise** that **people** – customers, employees, managers – **make logical decisions**. **It`s time to abandon that assumption**.”

Dan Ariely, The end of Rational Economics, Harvard Business Review, July/August 2009, p. 78

From a business/ company perspective the discussion we have done till now is by far a theoretical discussion.

It is important to be aware of these findings, because most of today's executives were more or less indoctrinated with the neoclassical assumptions in economics. Neoclassical theory was dominating economics the last three decades or so unfortunately. So generations of students were indoctrinated with the “believe” in the "Standard Economic Model" - without getting aware of it because SEM was not explicitly mentioned or discussed in the textbooks they had to use and the lessons they had to listen too.

For example they implicitly were indoctrinated with the "believe" that humans normally are selfish or even greedy[[49]](#footnote-49) and more material things are better than less. And this had consequences for dealing with others especially in business and for setting personal life goals like focusing on money and status as primary goals in life and using life time to reach this.

So unsustainable assumptions of neoclassical economics that lead to certain imprints cause faulty management decisions and bad leadership in companies and less personal happiness as it could be. Especially the questions how to treat employees/ others and how to create an effective award system in companies for motivating them were massively influenced by the (wrong) neoclassical assumptions of the SEM.

Or to quote Mankiw/Taylor again: "Research has suggested that this (the Standard Economic Model / SEM, KR) is far from the case." which means with the SEM we cannot describe reality. Or to quote Kahneman again: „I had been professionally trained as a psychologist **not to believe a word of it**.“

So dealing with these assumptions in detail is compulsory to create room for overcoming old imprints and be ready to deal with the new thinking in economics without prejudice.

These imprints must be identified and invalidated as “mere” settlements before we are ready to deal with new thinking in economics and especially with the findings of the interdisciplinary happiness research. Then this can fall on a fertile ground and really find the way into everyday actions.

**5. Happiness Research - What People really want**[[50]](#footnote-50)

“The **happiness of mankind** … seems to have been the **original purpose** intended by the **Author of nature**, when he brought them into existence.”

**Adam Smith**, The Theory of moral Sentiments, 1759

"How to gain, how to keep, how to recover **happiness** is in fact for most men at **all times** the secret **motive for all they do**." [[51]](#footnote-51)

**William James**, 1902

Interdisciplinary happiness research examines the question of what people really want. It is based on the fundamental economic question of how to use resources efficiently. It’s about how people use their ultimate scarce resources. The ultimate resources are our lifetime. So economics is about to make use of our time in order to be happy and satisfied in life as the final goal. To put it simple: We have to decide how to allocate the 24 hours we have each day. **Input** is our **time**, **output** is the **utility** **we get from our time use** (**utility** = **subjective well-being**)[[52]](#footnote-52).

The decisive role which happiness research meanwhile plays in economics demonstrates also the quotation of Ben Bernanke:

"The ultimate goal of Economics is, of course, to understand what constitutes well-being and how it can be increased / improved." [[53]](#footnote-53)

Ben Bernanke

Chairman of the US-Central Bank (until end of January 2014)

**a) What is happiness (subjective well-being)?**

Happiness research deals with subjective well-being (SWB) and not with being "lucky", thus random luck (e.g. the probability of winning a lottery prize). Another word for SWB which is more common used in economics is utility. Often the term **"happiness"** is used in terms of "**SWB**" in literature too. In a more narrow use **"happiness"** means only **"emotional well-being"**. On the other hand **"statisfaction with life"** means **cognitive well-being**. So **SWB** has two parts: **emotional** and **cognitive well being**. SWB is the self-perceived "happiness" (narrow use) and "satisfaction with life". SWB is used "along with measures of objective well-being (for example physical and economic indicators) to evaluate people`s quality of life."[[54]](#footnote-54) So **subjective well-being** (SWB) and **objective well-being** together are the "**quality of life**". The well-known **OECD Better Life Index** consists of subjective and objective well-being indicators.

There are two characteristics of subjective well-being [[55]](#footnote-55) (economically spoken: utility)**:**

**- Emotional well-being** (happiness)

Emotional well-being is the emotional state at the moment. It is based mainly on the ratio between positive and negative emotions on a daily average. This is about the well-being that people experience as they live their lives. We should try to reach a ratio of at least 3:1 (positive to negative emotions). So we should strengthen our positive emotions f.e. via writing a gratitude diary some days a week for some months in order to change our negativity bias in our mind and viewing the world around us in a more realistic, not mainly negative way. On the other hand we should try to regulate our negative emotions which means to think about whether a negative emotion we feel makes a real sense in order to provide us with some valuable information about our current/future life. F.e. feeling anger because you are in a traffic jam doesn`t really make sense. So you can train not to get upset in such a situation.[[56]](#footnote-56)

„Psychologists have long known that negative emotions narrow our thoughts and range of actions, which has served an important evolutionary purpose (fight the or flee from the tiger). ... Positive ones broaden the amount of possibilities we process, making us more thoughtful, creative, and open to more new ideas. … We even quite literally see more of what`s around us when we`re feeling happy.“[[57]](#footnote-57),[[58]](#footnote-58)

**- Cognitive well-being** (satisfaction with life)

Cognitive well-being is the degree of "satisfaction with life" - most it is measured on a scale from 0 (totally unsatisfied) to 10 (totally satisfied). It is an evaluation comparing what one wants (objectives, expectations, desires) with what one has, how life goes. It is about the judgment that people make when they evaluate their lives. Goal setting is important here, as the judgment is made based on whether the goals that are set by the people themselves are going to be met. But the question is also: Do I have valuable/meaningful and reachable goals? It is about the big picture: "There is no right life in the wrong life" - to quote the German philosopher Theodor W. Adorno. We know from psychology that goals like working on personal growth, good relations with others and contributions to society are valuable goals - putting priority on money, prettiness and publicity are not.[[59]](#footnote-59)

A happy person often enjoys positive emotions and rarely experiences negative feelings in the “here” and “now”. He/she sees a meaning in his/her life - therefore pursues meaningful and realistic (life-) goals. To put it different: Happiness implies a positive mood in the present and a positive outlook for the future.

To quote some very well-known psychologists working in the field of happiness research:

“Happiness is the experience of frequent, mildly pleasant emotions, the relative absence of unpleasant feelings, and a general feeling of satisfaction with one`s life.”

Robert Biswas-Diener, Ben Dean, Positive Psychology Coaching – Putting the Science of Happiness to Work for Your Clients, Hoboken (New Jersey) 2007, p. 41.

„Happiness implies a positive mood in the present and a positive outlook for the future.“

Shawn Achor, The Happiness Advantage - The Seven Principles of Positive Psychology That Fuel Success and Performance at Work, New York 2010, p. 39.

**b) What are the sources of Subjective Well-being (the so called "Happiness Factors")?**

The interdisciplinary research on happiness deals intensively with the question of what factors contribute to our subjective well-being - the so-called happiness factors.

The following factors were identified by happiness research:

* Successful/ affectionate social relationships (partnership, family, friends, neighbours, colleagues ...);
* Physical and mental health;
* Commitment and satisfying employment and / or satisfying unpaid activities;
* Personal freedom;
* Attitude (in terms of gratitude, optimism, avoiding to much social comparison, emotion regulation, ...)[[60]](#footnote-60) and life philosophy (spirituality, that is a personal search for meaning of life and/or religiosity[[61]](#footnote-61));
* Means of satisfying the material (basic) needs and financial security,

Social relationships are an important factor of happiness, but also work plays an important role as well. We need work because we want to do something useful with our time and to generate income. Work creates opportunities for intellectual development. Work conveys the feeling of being needed, strengthens our confidence, creates identity and provides social contact.

Having a look at the framework a society offers for its inhabitants the most important factor for happiness is **trust**. This means trust in others, trust in companies and trust in the government/ governmental institutions like the legal system and so on. For a society as such the most important indicator of happiness is the degree of trust in the society. Trust is also the decisive factor in case of the economy.[[62]](#footnote-62)

In Deutsche Post Glücksatlas 2015 Andrew E. Clark (Paris School of Economics) pointed to the fact that a trust based society is also wished by most people because how we behave with each other is decisive for our happiness.[[63]](#footnote-63)

Daron Acemoglu and James A Robinson published a fundamental book about "Why Nations Fail. The Origins of Power, Prosperity, and Poverty" in 2012. They write that trust in institutions and in the legal system which is produced by this institutions is decisive for explaining the differences between countries/ nations worldwide.[[64]](#footnote-64)

"... trust and cooperative norms refers to the shared value expectations that underpin societal functioning and enable mutually beneficial co-operations."

OECD, How`s Life? 2013 - Measuring Well-Being, Paris 2013, p. 187.

In the OECD Better Life Index "trust" as part of the social capital is a decisive item in measuring the sustainability of well-being over time.

**c) Why is it worth to be happy?**

Someone who is working on becoming happy and satisfied, will not only feel subjectively better, but also will have more energy, a better creativity, strengthen the immune system, have stronger relationships, work productively and increase his life expectancy.

"Happy people live longer, stay married longer, make more money, receive better evaluations from work supervisors, take fewer sick days, are more altruistic and more creative. ... Happiness is functional. Individuals, families, organizations, and societies need happy individuals to flourish. Happy people are more likely to be curious and explore, to take risks and to seek new social contacts."[[65]](#footnote-65)

„Coventional wisdom holds that if we work hard, we will be more successful, and if we are more successful, then we`ll be happy. … But recent discoveries in the field of positive psychology have shown that this formula is actually backward: Happiness fuels success, not the other way round. ... Psychologists have long known that negative emotions narrow our thoughts and range of actions, which has served an important evolutionary purpose (fight the or flee from the tiger). … Positive ones broaden the amount of possibilities we process, making us more thoughtful, creative, and open to more new ideas. … We even quite literally see more of what`s around us when we`re feeling happy. ... Based on Losada`s extensive mathematical modeling, 2.9013 is the **ration of positive** to **negative interactions** necessary to make a **corporate team successful**. This means that it takes about three positive comments, experiences, or expressions to fend off the languishing effect of one negative.“[[66]](#footnote-66)

**d) The relationship between happiness and economic growth in Western industrialized countries over the last decades - or: Can money buy happiness?**

"If it turns out to be true that rising incomes have failed to make Americans happier, as much of the recent research suggests, what is the point of working such long hours and risking environmental disaster in order to keep on doubling and redoubling our Gross Domestic Product?"[[67]](#footnote-67)

Derek Bok

President of Harvard University from 1971 to 1991 and from 2006 to 2007

“For example, although today most Americans surveyed will tell you they are happy with their lives, the fraction of those who say that they are happy is not any higher than it was 40 years ago. … Or, as your parents always said, money doesn`t buy happiness.”[[68]](#footnote-68)

Ben S. Bernanke

Chairman of the US-Central Bank (until end of January 2014)

Worldwide large-scale surveys done since the 1960’s show that in Western industrialized countries there is barely any connection between the increase in real gross domestic product per capita and life satisfaction. There are two psychological principles which "explain why, **for all but the very poor**, more money buys no more than a temporary surge of happiness."[[69]](#footnote-69)

The two psychological phenomena are adaptation and comparison:[[70]](#footnote-70)

**- Adaptation**:

On the one hand, expectations adapt to the actual development. That is, as income increase expectations also increases, therefore, no greater satisfaction arises (so-called hedonic treadmill).

**- Comparison**:

On the other hand – if the basic material needs are satisfied - less absolute income, but rather more relative income - i.e. one's income in comparison to other is decisive. A general increase in income for everybody results in an increase of social norms, therefore the level of satisfaction does not increase, as everyone receive more. With income changes: The sum of ranking positions in a economy is fixed – when one rises, another one must scale down - a zero sum game.

**6. Happiness Research - Consequences for companies: a win-win situation**[[71]](#footnote-71)

"Why do we keep ourselves busy with happiness and satisfaction? … The reason is quite simple: Investigations in the fields of neurobiology, psychology as well as in the field economics make the link between happy and satisfied employees and better business results completely clear. … . "

Harvard Business Review, Editorial, January / February 2012 p. 77

In management this topic is discussed in the literature about "Positive Organization Scholarship". The insights of happiness research from psychology which are from the field of Positive Psychology[[72]](#footnote-72) are used to improve management in companies.[[73]](#footnote-73) Also the discipline "Organizational Behavior" is dealing with this topic.[[74]](#footnote-74)

We explain in our book entitled "Healthy Leadership with findings/perceptions of happiness research" (the original title in German is: "Gesundes Führen mit Erkenntnissen der Glücksforschung" - http://shop.haufe.de/gesundes-fuehren-mit-erkenntnissen-der-gluecksforschung - the target group of this book are managers) the meaning of "baseless assumptions" as well as the state of the current findings of the interdisciplinary research in economics in order to derive recommendations for management and personnel.[[75]](#footnote-75)

**a) Why should companies care about the well-being of their employees?**

* Improving operational results/performance;
* Demographic development in Germany
* Image boost/enhancement (respectively pure necessity) in order to remain competitive in winning / retention of employees

(Employer rating potal "Kununu" - belongs to the career network Xing - and "Job voting") - Keyword Employer Branding;

* important for the health of an aging workforce;
* important for the willingness to voluntarily retire later on;
* Shift in the values of Generation Y (those born from 1980) towards a holistic, satisfied / happy life;[[76]](#footnote-76)
* Legal requirements ("clarification" in the German Labor Protection Law § 5 para. 3, no. 6, according to which the risk assessment also refers to mental stress at work).

Alone for economic reasons because of the demographic development and changing values of Generation Y, companies should look after the happiness and satisfaction of their employees in the near future, in order to compete without having bad cards.

A persuasive, science-based "happiness strategy" will soon be a central component of a successful "Employer Branding".

**b) Where can companies concretely begin?**

**Two-pillar-concept** (happiness strategy) to increase Well-being:

**Pillar 1** is about raising awareness / supporting the employees.

It's about pointing out the basic findings of the interdisciplinary happiness research (What is happiness (SWB)?, what makes/brings to Happiness ?, what are the factors of happiness ?, what is the significance/importance of work and money?), and a clarification of what an individual himself can do (happiness activities).

**Pillar 2** is about where the company can begin to improve the conditions for Well-being. This concerns the **leadership style**, the nature of **workplace design** and a sustainable **work-life balance**.

* **Compatibility of family and work (Work-life balance) -** Happiness is not separable

Satisfaction with the compatibility of work and private life means above all an improvement of the compatibility between work and family life. Without an adequate work-life balance a sustainable satisfaction cannot be achieved, therefore productivity at work will eventually suffer.

* **Workplace design:** From job to vocation

The company can lay the foundations in which a job is conceived as a vocation and therefore corresponds to work flow-experiences:

* Work requirements must be quantitatively and qualitatively manageable; it comes to avoiding over- and underload;
* Employees must have a certain influence on the work;
* Work must require a variety of talents and skills;
* Employees must be able to perform a specific task completely, thus, from the beginning to the end;
* Employees need to feel that their work has a meaning for others, for example through quality and usefulness of products, environmental sustainability, training efforts among young people, support for social projects in the society, scientific and cultural fields.

**Flow activities** are mainly characterised by being challenging activities that require special skills, focus all the attention on that action, targets are clearly outlined and instant feedback is given. With this kind of action you can totally forget everything around you and live up in your activity and totally forget about time. If you get into that flow, working goes on its own, and you don’t always have to force yourself to stay focused on the job.

**- Leadership:**

It doesn’t work without leadership ethics and social/soft skills. Leadership has a central meaning. What is it about in details? It is basically an ethical-conscious management.

**Ethical leadership** describes the **individual self-discipline** to **balance** between what is best in **your own interests** and what should be done in **the interest of others**. In other words, it is about the behaviour that follows the golden rule.

**Golden Rule:** “How you want to be treated by others – that’s how you should treat them"(Bible, New Testament, Matthew 7:12) -. The philosopher Immanuel Kant speaks of the **categorical imperative.**

The Golden Rule applies to all areas of life, particularly in the area of dealing with each other in companies. Without this anchor, without such "leadership ethics", it will be difficult - game theoretic speaking - to attract employees to co-operate, that is releasing commitment and creativity.

In concrete terms managers should show interest in the welfare of their employees, care for them, take them seriously and be polite, put emphasis on politeness in the way employees deal with each other and enforce good behaviour. This involves:

* Share information;
* Give performance feedback;
* Promote development of individual employees;
* Fill exemplary role of managers;
* Provide scope for decision making;
* Promote teamwork and good working environment;
* Show fairness;
* Give recognition.

„Whether you manage a few people, lead a large group, or run an entire organiziation, you are already **in the business of managing employee wellbeing**. The research on this topic is quite clear: **Your workforce`s wellbeing** has a direct impact on your organization`s bottom line.“

Tom Rath, Jim Harter, The Economics of Wellbeing, New York (Gallup) 2010, p. 1

**7. Happiness Research - Consequences for politics: the OECD Better Life Index**

Research shows that the influence of material things on subjective well-being are very limited after the basic material needs are satisfied. But this has clear consequences for the policy of the government: Rather than focusing on economic growth it is central to directly focus on those factors which are decisive for improving subjective well-being.

In this context OECD started its Better life initiative in 2011:

"Over the **past 50 years**, the OECD has developed a rich set of **recommendations** on policies that can best **support economic growth**. The **task that we face today** is to develop an equally rich menu of recommendations on policies to support societal progress: better policies for better lives.”

OECD: Better Life Initiative Website, May 2011.

What is the content of this initiative?

"Are our lives getting better? How can policies improve our lives? Are we measuring the right things? The OECD Better Life Initiative and the work program on Measuring Well-Being and Progress answer these questions. They allow understanding what drives well-being of people and nations and what needs to be done to achieve greater progress for all."

OECD, Better Life Initiative: Measuring Well-Being and Progress, December 2015

(http://www.oecd.org/statistics/better-life-initiative.htm)

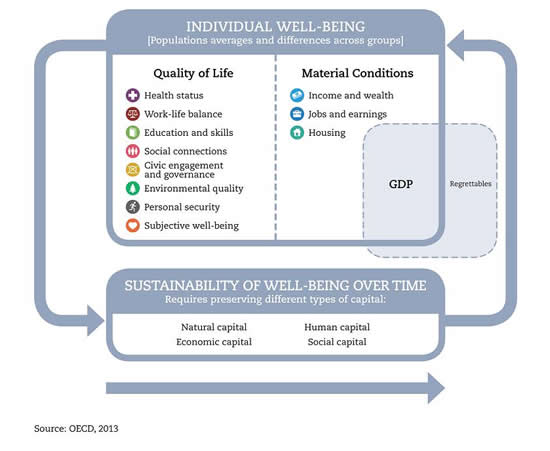
In context of this initiative the OECD is working on the so-called "OECD Better life index" which was published first in 2011.

“Understanding and improving well-being requires a sound evidence base that can inform policymakers and citizens alike where, when, and for whom life is getting better. These Guidelines have been produced under the OECD’s Better Life Initiative – a pioneering project launched in 2011, which aims to measure society’s progress across eleven domains of well-being, ranging from income, jobs, health, skills and housing, through to civic engagement and the environment. Subjective well-being – i.e. how people think about and experience their lives – is an important component of this overall framework. To be most useful to governments and other decision-makers, however, subjective well-being data need to be collected with large and representative samples and in a consistent way across different population groups and over time."[[77]](#footnote-77)

„But what **ultimately matters** is the **well-being of citizens**.“

OECD, HOW`S LIFE - Measuring Well-Being, Paris 2011, p. 16

The OECD Better life index consists of eleven main/general indicators, some of them are subjective some of them are objective. Each indicator has some sub-indicators to get some concrete figures. Indicators are not only measured by average figures but also questions of distribution are taken into account. The theoretical and empirical background is that Subjective Well-Being (measured concrete as Life Satisfaction) is influenced positively and independently by the remaining 10 indicators like Education, Health, ... . So SWB is somewhat the dependent variable.[[78]](#footnote-78)



"The OECD aims to promote "better policies for better lives". Doing this requires a good understanding of what it means to have a better life; an assessment of people`s well-being today along with a sense of what improvements should be prioritised."

OECD, How`s Life 2015, p. 22

Every two years the OECD is publishing a report about "HOW`S LIFE" in which the progress in this field is discussed. Meanwhile there are three reports (2011, 2013 and 2015).

The EU (European Union) is working on this field intensively, too. More information about the well-being of Europeans could be found at the homepage "Quality of Life" (http://ec.europa.eu/eurostat/cache/infographs/qol/index\_en.html) and in the report "Quality of Life - facts an views" published by Eurostat - the statistical office of the European Union - 2015.

In Germany we have one of the best data availability in case of happiness research worldwide. Since the middle of the 1980ties there is the German Socio-Economic Panel (SOEP). It is a wide-ranging representative longitudinal study of private households, located at the German Institute for Economic Research, DIW Berlin. Every year, there were nearly 11,000 households, and about 30,000 persons sampled (http://www.diw.de/en/soep). From the start the participants have not only been asked about objective items like the income they earn etc. but also about subjective questions like their satisfaction with life (on a scale from 0 - totally unsatisfied to 10 - totally satisfied).

Since 2011 there is a special publication the so-called "Deutsche Post Glücksatlas" (happiness atlas) too which is financed by the Deutsche Post as public relations activity. It deals with happiness in Germany and in the different regions of Germany. It is based mainly on the data from SOEP and there is each year a special topic in the Glücksatlas which is discussed in more detail. In 2015 this special topic is the question what factors are important for happiness at work (for more information in German see http://www.gluecksatlas.de/cms/2015/start.html)

Worldwide there is the World Happiness Report published by the UN Sustainable Development Solutions Network (SDSN) (in 2012, 2013 and 2015 http://worldhappiness.report/). The task of the SDSN is to mobilize global scientific and technological expertise to promote practical problem solving for sustainable development, including the design and implementation of the Sustainable Development Goals (SDGs) of the UN. Following their adoption, the SDSN is now committed to supporting the implementation of the SDGs at local, national, and global scales.

At the United Nations Sustainable Development Summit 2015 which took place in New York from 25.-27. September 2015 the new United Nations Sustainable Development Goals (2015-2030) were passed.

Sustainable Development Goal 3 which is dealing with health is formulated in the following way: "Ensure healthy lives and promote well-being for all at all ages." There are two concrete indicators for monitoring this goal: Healthy life expectancy and life satisfaction.

**8. Turing away from Materialism - the Economist`s Recommendation to (more) Happiness (Subjective Well-Being)**[[79]](#footnote-79)

"It does appear that, despite the massive increase in wealth, income and access to material goods and services, for many people in developed countries over the last 50 years, our perception of happiness has not really changed that much. Increased wealth has not brought with it similar increase in happiness. Numerous surveys have highlighted relatively stable rates of "happiness" in rich countries."[[80]](#footnote-80)

N. Gregory Mankiw/ Mark P. Taylor

In the Western world and in other countries with already enough material goods we should therefore be very careful not to concentrate/focus too much on material goals which contributions to a happy life are very limited. We should use our time more in efficient - which means happiness creating - for example for social relationships, dealing with topics someone is really interested in ... (see happiness factors).

Some years ago I had the privilege to spend some days with the President of the Centre for Bhutan Studies & Gross National Happiness Research, Dasho Karma Ura. At that time I was asked by a journalist whether there is any difference between happiness research in Bhutan and in the Western world. I said: The difference is that dealing with happiness research in Bhutan is based on the insights of Buddhism, but dealing with/ the reason for happiness research in the Western World is based on the simple (late) insight that the contribution of material things to happiness is very limited.

„Since the **consumption benefit** **approaches zero as income rises**, **happiness profiles** over time in developed countries **are flat**.”

Andrew Clark, Paul Frijters, Michael Shields,

Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles, in: Journal of Economic Literature, Vol. 46 No. 1, March 2008, p. 137

So the insights of happiness research will lead to a turn away from materialism[[81]](#footnote-81) because materialism simply doesn`t lead to happiness - in the contrary.[[82]](#footnote-82)

"The more materialistic values are at the center of our lives, the more our quality of life is diminished."

Tim Kasser, The high price of materialism, Cambridge/ Massachusetts, 2002, p. 14.

So pursuing materialism as a goal is simple not reasonable or economical because we don`t use our time in an efficient way to get what we really want. But worldwide we have to talk about the distribution of income and wealth. The OECD Better Life Index and the new UN Sustainable Development Goals 2015 - 2030 taking this into account.[[83]](#footnote-83)

We should not forget the subject of economics:

"Economics is a science which studies [human behaviour](https://en.wikipedia.org/wiki/Human_behaviour) as a relationship between ends and scarce means which have alternative uses."

Lionel Robbins, [An Essay on the Nature and Significance of Economic Science](https://en.wikipedia.org/wiki/An_Essay_on_the_Nature_and_Significance_of_Economic_Science), London 1932, p. [15](https://books.google.com/books?id=nySoIkOgWQ4C&printsec=find&pg=PA15#v=onepage&q&f=false).

And to quote Ben Bernanke again:

"The ultimate goal of Economics is, of course, to understand what constitutes well-being and how it can be increased / improved."

On the one hand: Taking in account that the ultimate goal ("end") of Economics is to increase happiness (utility) going away from (not using our "scarce means (time)" for) materialism is efficient. On the other hand: This shift in goals contributes/ helps us strongly to protect our planet from getting destroyed and to preserve it for future generations.

„But what **ultimately matters** is the **well-being of citizens**.“

OECD, HOW`S LIFE - Measuring Well-Being, Paris 2011, p. 16

The Nobel Prize winner in literature of the year 1925, George Bernard Shaw, said a long time ago:

"Economics is the art of making the most of our lives."

Poem (Gedicht)

from Johann Wolfgang von Goethe, 1827

about Happiness:

Erinnerung

Willst Du immer weiter schweifen?

Sieh, das Gute liegt so nah,

lerne nur das Glück ergreifen,

denn das Glück ist immer da.

**References**

Daron Acemoglu, James Robinson, Why Nations Fail. The Origins of Power, Prosperity, and Poverty, New York 2012.

Daron Acemoglu, James Robinson, Warum Nationen scheitern - die Ursprünge von Macht, Wohlstand und Armut, Frankfurt 2013.

Shawn Achor, The Happiness Advantage - The Seven Principles of Positive Psychology that fuel Success and Performance at Work, New York 2010.

George A. Akerlof, Robert J. Shilller, Animal Spirits, How Human Psychology drives the Economy and why it matters for Global Capitalism, Princeton 2009.

Dan Ariely, The end of Rational Economics, Harvard Business Review, July/August 2009.

Max H. Bazerman, Don A. Moore, Judgment in Managerial Decision Making, 8th Edition, Hoboken (USA) 2013.

Heinrich Bedford-Strohm, Glück und Glaube - Die Ratschläge eines Glücksforschers im Lichte der Bibel, Sonntagsblatt 3.2.2013.

Eric D. Beinhocker, The Origin of Wealth, Cambridge Mass. 2006.

Ben Bernanke, The Economics of Happiness, Speech given at the University of South Carolina, 8. May 2010.

[John Beshears](https://hbr.org/search?term=john+beshears), [Francesca Gino](https://hbr.org/search?term=francesca+gino), Leaders as Decision Architects, Harvard Business Review, How to make better decisions - How to outsmart your biases and broaden your thinking (topic), May 2015.

Robert Biswas-Diener, Ben Dean, Positive Psychology Coaching – Putting the Science of Happiness to Work for Your Clients, Hoboken (New Jersey) 2007.

Derek Bok, The Politics of Happiness - what Government can learn from the new Research on Well-Being, Princeton 2010.

Kerstin Bund, Glück schlägt Geld - Generation Y: Was wir wirklich wollen, Hamburg 2014.

Ashraf, N. Camerer, George Loewenstein, Adam Smith, Behavioral Economist, Journal of Economic Perspectives, Vol. 19, Nr. 3, Summer 2005.

Kim S. Cameron, Gretchen M. Spreitzer, The Oxford Handbook of Positive Organizational Scholarship, Oxford/ New York 2012.

Andrew Clark, Paul Frijters, Michael Shields, Relative Income, Happiness, and Utility: An Explanation for the Easterlin Paradox and Other Puzzles, in: Journal of Economic Literature, Vol. 46 No. 1, March 2008, S. 95-144.

Andrew Clark, Was nützt uns Glück, Deutsche Post Glücksaltlas 2015, München 2015, p. 19-26.

David Colander, Peter Howitt, Alan Kirman, Axel Leijonhufvud, Perry Mehrling, Beyond DSGE Models: Toward an Empirically Based Macroeconomics, American Economic Review: Papers and Proceedings, Vol. 98 (2), p. 236-240.

Jason A. Colquitt, Jeffery A. Lepine, Michael J. Wesson, Organizational Behavior - Improving Performance and Commitment in the Workplace, New York 2013.

Angus Deaton, The Great Escape: Health, Wealth, and the Origins of Inequality, Princeton 2013.

Stefano DellaVigna, Psychology and Economics: Evidence from the Field, in: Journal of Economic Literature, Vol. 47/2, June 2009.

Deutsche Bundesbank, Investor behaviour in theory and practice, Monthly Report, January 2011, p. 43-54.

Deutsche Post Glücksatlas 2012, München 2012.

Deutsche Post Glücksatlas 2015, München 2015.

Ed Diener, Robert Biswas-Diener, Happiness - Unlocking the Mysteries of Psychological Wealth, Malden (USA) 2008.

Mario Draghi, Building Stability and Sustained Prosperity in Europe, Speech given at the event entitled “The Future of Europe in the Global Economy” hosted by the City of London Corporation, London, 23 May 2013.

Frans De Waal, The Bonobo and the Atheist. In Search of Humanism Among the Primates, New York/ London 2013.

Elizabeth Dunn, Michael Norton, Happy Money: The Science of Smarter Spending, 2014.

Eurosat, Quality of life - Facts an views, Luxembourg 2015.

Tobias Esch, Sonjy Maren Esch, Stressbewältigung - Mind-Body-Medizin, Achtsamkeit, Selbstfürsorge, 2th Edition, Berlin 2016.

Federal Reserve System, Purposes and Functions, Washington 2005.

Niall Ferguson,The Ascent of Money: A Financial History of the World, New York 2008.

Barbara L. Fredrickson, Positivity - Groundbreaking Research Reveals How to Embrace the Hidden Strength of Positive Emotions, Overcome Negativity, and Thrive, New York 2009.

Justin Fox, The Myth of the Rational Market, New York 2009.

Bruno S. Frey, Claudia Frey Marti, Glück - Die Sicht der Ökonomie, Zürich/Chur 2010.

Sylvie Geisendorf, The irrational foundation of neoclassical economics. How a simplified Newtonism shaped the perception of the economy, in: Walter Otto Ötsch, Claus Thomasberger (Hrsg.), Der neoliberlae Markt-Diskurs – Ursprünge, Geschichte, Wirkungen, Marburg 2009.

Francesca Gino, Sidetracked, Boston 2013.

H. Gintis, Samuel Bowles, Robert Boyd, Ernst Fehr (ed.), Moral Sentiments and Material Interests: The Foundation of Cooperation in Economic Life, Cambridge 2005.

Egon Görgens, Karlheinz Ruckriegel, Franz Seitz, Europäische Geldpolitik, 6. Edition, Konstanz/München 2013.

Daniel Goleman, The Hidden Drivers of Excellence, New York 2013.

James J. Gross (Ed.), Handbook of Emotion Regulation, 2th Edition, New York/ London 2014.

David Halpern: Inside the Nudge Unit: How small changes can make a big difference, London 2015.

Klaus Hurrelmann, Erik Albrecht, Die heimlichen Revolutionäre - Wie die Generation Y unsere Welt verändert, Weinheim/Basel 2014.

Harvard Business Review, The Value of Happiness – How Employee Well-Being Drives Profits (topic), January-February 2012.

Harvard Business Review, How to make better decisions - How to outsmart your biases and broaden your thinking (topic), May 2015.

Daniel Kahneman, Psychological Perspective on Economics, in: American Economic Review, Vol. 93 (2003), No. 2, S. 162-164.

Daniel Kahneman, Thinking fast and slow, London/ New York 2011.

Tim Kasser, The high price of materialism, Cambridge/ Massachusetts, 2002.

Roderick M. Kramer, Ann E. Tenbrunsel, Max H. Bazerman, Social Dilemmas, Social Values and Ethical Judgments, New York 2010.

Jürgen Kromphardt, Der jüngste Methodenstreit: Alter Streit mit neuem Akzenten, Heinz D. Kurz (Ed.), Studien zur Entwicklung der ökonomischen Theorie, Berlin 2014, p. 11-33.

Paul Krugman, How did Economists Get It so Wrong, New York Times, 6. September 2009.

Legatum Institute, Wellbeing and Policy - Report 2014 by Gus O`Donnell (Chair), Angus Deaton, Martine Durand, David Halpern, Richard Layard, London 2014.

P. Alex Linlex, Susan Harrington, Nicola Garcea, Oxford Handbook of Positive Psychology and Work, Oxford/ New York 2010.

Shance J. Lopez, C.R. Snyder, Oxford Handbook of Positive Psychology, Second Edition, Oxford/ New York 2009.

Sonja Lyubomirsky, The How of Happiness – A New Approach to Getting Life You Want, New York 2007.

N. Gregory Mankiw/ Mark P. Taylor, Economics, Special Edition with coverage of the world financial crisis, 2010.

N. Gregory Mankiw/ Mark P. Taylor, Economics, 2th Edition 2011.

N. Gregory Mankiw/ Mark P. Taylor, Economics, 3th Edition 2014.

Angela Merkel, Rede von Bundeskanzlerin Merkel bei der 5. Lindauer Tagung der Wirtschaftswissenschaften, 20.8.2014.

David G. Myers, Psychology, 8th Edition, New York 2007.

Martin Nowak, Roger Highfield, SuperCooperators, Altruism, Evolution, and Why We Need Each Other to Succeed, New York 2011.

OECD, How`s Life - Measuring Well-Being, Paris 2011.

OECD, Guidelines on Measuring Subjective Well-being, Paris 2013.

OECD, How`s Life? 2013 - Measuring Well-Being, Paris 2013.

OECD, How`s Life? 2015 - Measuring Well-Being, Paris 2015.

Robert S. Pindyck, Daniel L. Rubinfeld, Microeconomics, 7th Edition, London 2009.

Robert S. Pindyck, Daniel L. Rubinfeld, Mikroökonomik, 8th Edition, München 2013.

Nick Powdthavee, The Happiness Equation - The Surprising Economics of Our Most Valuable Asset, London 2010.

Tom Rath, Jim Harter, Wellbeing – The Five Essential Elements, 2010 (Gallup).

Lionel Robbins, [An Essay on the Nature and Significance of Economic Science](https://en.wikipedia.org/wiki/An_Essay_on_the_Nature_and_Significance_of_Economic_Science), London 1932.

Karlheinz Ruckriegel, [Quo vadis, Home oeconomicus?](http://www.ruckriegel.org/papers/Quo%20vadis,%20Homo%20oeconomicus%20WISU%20Feb%2007.pdf), WISU, 36. Jg., February 2007, p. 198 – 201.

Karlheinz Ruckriegel, Happiness Research (Glücksforschung) - eine Abkehr vom Materialismus, Nürnberg May 2007.

Karlheinz Ruckriegel, Die Wiederentdeckung des Menschen in der Ökonomie - Von der Neoklassik zurück(!) zur Psychologischen Ökonomie (Behavioral Economics) und zur Glücksforschung (Happiness Research), Nürnberg 30.12.2010 (www.ruckriegel.org - Aufsätze/ Papers - 2010).

Karlheinz Ruckriegel, Bundesverfassungsgericht versus EZB/Eurosystem - zur Frage der Effizienz von Finanzmärkten, Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 56, Nürnberg March 2014.

Karlheinz Ruckriegel, Zur Verwendung von "Subjektiven Indikatoren" (Erkenntnissen der interdisziplinären Glücksforschung) in der (Wirtschafts-) Politik - eine grundsätzliche Kritik am Sachverständigenrat Wirtschaft (SVR), Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 58, Nürnberg January 2015.

Karlheinz Ruckriegel, Abschied von der Neoklassik (Standard Economic Model), Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 59, Nürnberg February 2015.

Karlheinz Ruckriegel, [Glücksforschung: Erkenntnisse und Konsequenzen](http://www.izpp.de/fileadmin/user_upload/Ausgabe-1-2015/Ruckriegel.pdf), in: IZZP - Internationale Zeitschrift  für Philosophie und Psychosomatik, Ausgabe  1/2015 -  Themenschwerpunkt: Glück und Leid, June 2015.

Karlheinz Ruckriegel, Happiness Research: Insights and Consequences, Lecture at the University of Teheran, Department for Social Sciences, 23.6.2015 in Teheran/Iran (Abstract), ([www.ruckriegel.org](http://www.ruckriegel.org/) - Glücksforschung / Happiness research (Statement)).

Karlheinz Ruckriegel, Günter Niklewski, Andreas Haupt, Gesundes Führen mit Erkenntnissen der Glücksforschung, Freiburg 2014.

Dominik Salvatore, Managerial Economics - Principles and worldwide applications, 8th Edition, Oxford/ New York 2015.

Frank Schirrmacher, Ego - Das Spiel des Lebens, München 2013.

Robert Shiller, Irrational Exuberance, Third Edition, Princeton 2015.

Tania Singer, Matthieu Ricard, Mitgefühl in der Wirtschaft - Ein bahnbrechender Forschungsbericht, München 2015.

Gretchen Spreitzer, Christiane Porath, Creating Sustainable Performance, Harvard Business Review, The Value of Happiness – How Employee Well-Being Drives Profits (topic), January-February 2012, p. 93-99.

Joseph Stiglitz, The Great Divide: Unequal Societies and What We Can Do About Them, New York 2015.

Joseph Stiglitz, Rewriting the Rules of the American Economy: An Agenda for Growth and Shared Prosperity, New York 2015.

Cass R. Sunstein: Why Nudge?: The Politics of Libertarian Paternalism, Yale 2015.

Richard Thaler, Misbehaving - The Making of Behavioral Economics, New York 2015.

Richard H. Thaler, Cass R. Sunstein, Nudge – Improving Decisions about Health, Wealth, and Happiness, New Haven/ London 2008.

The Mayo Clinic Handbook for Happiness, Boston 2015.

Hal R. Varian, Intermediate Microeconomics: A Modern Approach, 8th Edition, New York 2010.

Joachim Weimann, Andreas Knabe, Ronnie Schöb, Geld macht doch glücklich, Stuttgart 2012.

Joachim Weimann, Verhaltensökonomik und Politikberatung, in: Martin Held, Gisela Kubon-Gilke, Richard Sturn (Ed.): Reformen und ihre politisch-ökonomischen Fallstricke, Marburg 2015, p. 107 - 137.

William White, Modern Macroeconomics is on the Wrong Track, in: Finance and Development, December 2009, S. 15-19.

Richard Wilkinson, Kate Pickett, The Spirit Level, Why More Equal Societies Almost Always Do Better, London 2009.

Edward O. Wilson, The Social Conquest of Earth, New York 2012.

World Happiness Report 2015.

1. Lionel Robbins, [An Essay on the Nature and Significance of Economic Science](https://en.wikipedia.org/wiki/An_Essay_on_the_Nature_and_Significance_of_Economic_Science), London 1932, p. [15](https://books.google.com/books?id=nySoIkOgWQ4C&printsec=find&pg=PA15#v=onepage&q&f=false). [↑](#footnote-ref-1)
2. N. Gregory Mankiw, Mark P. Taylor, Economics – Special Edition with the coverage of the world financial crisis, Andover (UK) 2010, p. 846. [↑](#footnote-ref-2)
3. Karlheinz Ruckriegel, Happiness Research (Glücksforschung) - eine Abkehr vom Materialismus, Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr.38, Nürnberg May 2007. [↑](#footnote-ref-3)
4. Richard H. Thaler, Misbehaving – The making of Behavioral Economics, New York / London 2015, book cover. [↑](#footnote-ref-4)
5. George A. Akerlof, Robert J. Shiller, Animal spirits – How Human Psychology Drives the Economy, and why it Matters for Global Capitalism, Princeton 2009, p. 146. [↑](#footnote-ref-5)
6. Lionel Robbins, [An Essay on the Nature and Significance of Economic Science](https://en.wikipedia.org/wiki/An_Essay_on_the_Nature_and_Significance_of_Economic_Science), London 1932, p. [15](https://books.google.com/books?id=nySoIkOgWQ4C&printsec=find&pg=PA15#v=onepage&q&f=false). [↑](#footnote-ref-6)
7. Karlheinz Ruckriegel, Abschied von der Neoklassik (Standard Economic Model), Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 59, Nürnberg February 2015; Karlheinz Ruckriegel, Bundesverfassungsgericht versus EZB/Eurosystem - zur Frage der Effizienz von Finanzmärkten, Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 56, Nürnberg March 2014; Karlheinz Ruckriegel, Die Wiederentdeckung des Menschen in der Ökonomie - Von der Neoklassik zurück(!) zur Psychologischen Ökonomie (Behavioral Economics) und zur Glücksforschung (Happiness Research), Nürnberg 30.12.2010 (www.ruckriegel.org - Aufsätze/ Papers - 2010). [↑](#footnote-ref-7)
8. N. Gregory Mankiw, Mark P. Taylor, Economics – Special Edition with the coverage of the world financial crisis, 2010, p. 846. [↑](#footnote-ref-8)
9. A good description of the neoclassical theory could be found in Joachim Weimann, Andreas Knabe, Ronnie Schöb, Geld macht doch glücklich, Stuttgart 2012, p. 163-200. [↑](#footnote-ref-9)
10. See Eric D. Beinhocker, The Origin of Wealth, Cambridge Mass. 2006; Karlheinz Ruckriegel, Die Wiederentdeckung des Menschen in der Ökonomie - Von der Neoklassik zurück(!) zur Psychologischen Ökonomie (Behavioral Economics) und zur Glücksforschung (Happiness Research), Nürnberg 30.12.2010 (www.ruckriegel.org - Aufsätze/ Papers - 2010). [↑](#footnote-ref-10)
11. Sylvie Geisendorf, The irrational foundation of neoclassical economics. How a simplified Newtonism shaped the perception of the economy, in: Walter Otto Ötsch, Claus Thomasberger (Hrsg.), Der neoliberlae Markt-Diskurs – Ursprünge, Geschichte, Wirkungen; Marburg 2009, S. 163. [↑](#footnote-ref-11)
12. Hal R. Varian, Intermediate Microeconomics: A Modern Approach, 8th edition, New York 2010, Chapter 30 "Behavioral Economics", p. 566. [↑](#footnote-ref-12)
13. Max H. Bazerman, Don A. Moore, Judgment in Managerial Decision Making, Eighth Edition, Hoboken (USA) 2013; Harvard Business Review, How to make better decisions - How to outsmart your biases and broaden your thinking (topic), Mai 2015; Roderick M. Kramer, Ann E. Tenbrunsel, Max H. Bazerman, Social Dilemmas, Social Values and Ethical Judgments, New York 2010; Karlheinz Ruckriegel, Günter Niklewski, Andreas Haupt, Gesundes Führen mit Erkenntnissen der Glücksforschung, Freiburg 2014. [↑](#footnote-ref-13)
14. Robert S. Pindyck, Daniel L. Rubinfeld, Microeconomics, 7th Edition, London 2009, p. 70. The argumentation could be found in the latest German version of the 8. Edition: Robert S. Pindyck, Daniel L. Rubinfeld, Mikroökonomie, 8th Edition, München 2013, p. 110 too. [↑](#footnote-ref-14)
15. See also: Jürgen Kromphardt, Der jüngste Methodenstreit: Alter Streit mit neuem Akzenten, Heinz D. Kurz (Ed.), Studien zur Entwicklung der ökonomischen Theorie, Berlin 2014, p. 11-33. [↑](#footnote-ref-15)
16. Quoted from Richard H. Thaler, The Making of Behavioral Economics, New York 2015, preface xi. [↑](#footnote-ref-16)
17. See the interview "Can Money Buy You Happiness?" Angus Deaton gave at the day he got the nobel prize in Stockholm on 10 December 2015 (http://www.nobelprize.org/nobel\_prizes/economic-sciences/laureates/2015/deaton-interview.html). [↑](#footnote-ref-17)
18. See the interview with Robert Shiller he gave at the day he got the nobel prize in Stockholm on 6 December 2013 (http://www.nobelprize.org/nobel\_prizes/economic-sciences/laureates/2013/shiller-interview.html) [↑](#footnote-ref-18)
19. See the interview with Daniel Kahneman and Vernon L. Smith they gave at the day they got the nobel prize in Stockholm on 12 December 2002 (http://www.nobelprize.org/mediaplayer/index.php?id=532). [↑](#footnote-ref-19)
20. Daniel Kahneman, Psychological Perspective on Economics, in: American Economic Review, Vol. 93 (2003), No. 2, S. 162; Karlheinz Ruckriegel, [Quo vadis, Home oeconomicus?](http://www.ruckriegel.org/papers/Quo%20vadis,%20Homo%20oeconomicus%20WISU%20Feb%2007.pdf), WISU, 36. Jg., February 2007, p. 198 – 201. [↑](#footnote-ref-20)
21. See for example Egon Görgens, Karlheinz Ruckriegel, Franz Seitz, Europäische Geldpolitik, 6th Edition, Konstanz/München 2013, p. 61-78: "Qou vadis, Europäische Währungsunion"; Karlheinz Ruckriegel, Bundesverfassungsgericht versus EZB/Eurosystem - zur Frage der Effizienz von Finanzmärkten, Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 56, Nürnberg March 2014. [↑](#footnote-ref-21)
22. Justin Fox, The Myth of the Rational Market, New York 2009, S. xi f (introduction). [↑](#footnote-ref-22)
23. Justin Fox, The Myth of the Rational Market, New York 2009, S. xiii (introduction). [↑](#footnote-ref-23)
24. Paul Krugman, How did Economists Get It so Wrong, New York Times, 6. September 2009. [↑](#footnote-ref-24)
25. William White, Modern Macroeconomics is on the Wrong Track, in: Finance and Development, December 2009, p. 17. [↑](#footnote-ref-25)
26. Deutsche Bundesbank - the German central bank - published an interesting article in this context: Investor behaviour in theory and practice, Monthly Report, January 2011, p. 43-54. [↑](#footnote-ref-26)
27. # Rede von Bundeskanzlerin Merkel bei der 5. Lindauer Tagung der Wirtschaftswissenschaften, 20.8.2014.

    [↑](#footnote-ref-27)
28. Daniel Kahneman, Thinking, fast and slow, London/ New York 2011, p. 81. [↑](#footnote-ref-28)
29. Joachim Weimann, Verhaltensökonomik und Politikberatung, in: Martin Held, Gisela Kubon-Gilke, Richard Sturn (Ed.): Reformen und ihre politisch-ökonomischen Fallstricke, Marburg 2015, p. 116. [↑](#footnote-ref-29)
30. "Die Abkehr vom Rationalmodell hätte schwerwiegende Folgen. Wenn nicht mehr angenommen werden kann, dass Akteure optimieren, dann verbietet sich der Einsatz des mathematischen Instrumentariums, das in der Mikrotheorie seit über achtzig Jahren gebräuchlich ist." Joachim Weimann, Verhaltensökonomik und Politikberatung, in: Martin Held, Gisela Kubon-Gilke, Richard Sturn (Ed.): Reformen und ihre politisch-ökonomischen Fallstricke, Marburg 2015, p. 116. [↑](#footnote-ref-30)
31. See also: Jürgen Kromphardt, Der jüngste Methodenstreit: Alter Streit mit neuem Akzenten, Heinz D. Kurz (Ed.), Studien zur Entwicklung der ökonomischen Theorie, Berlin 2014, p. 11-33. [↑](#footnote-ref-31)
32. Ashraf, N. Camerer, George Loewenstein, Adam Smith, Behavioral Economist, Journal of Economic Perspectives, Vol. 19, Nr. 3, Summer 2005, S. 142; H. Gintis, Samuel Bowles, Robert Boyd, Ernst Fehr (ed.), Moral Sentiments and Material Interests: The Foundation of Cooperation in Economic Life, Cambridge 2005, p. 3. [↑](#footnote-ref-32)
33. Daniel Kahneman, Thinking, fast and slow, London/ New York 2011; Richard H. Thaler, The Making of Behavioral Economics, New York 2015; Max H. Bazerman, Don A. Moore, Judgment in Managerial Decision Making, Eighth Edition, Hoboken (USA) 2013; Francesca Gino, Sidetracked, Boston 2013; Karlheinz Ruckriegel, Abschied von der Neoklassik (Standard Economic Model), Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 59, Nürnberg February 2015; Karlheinz Ruckriegel, Bundesverfassungsgericht versus EZB/Eurosystem - zur Frage der Effizienz von Finanzmärkten, Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 56, Nürnberg March 2014. [↑](#footnote-ref-33)
34. Quoted from Richard H. Thaler, The Making of Behavioral Economics, New York 2015, preface xi. [↑](#footnote-ref-34)
35. For more about the "dual action system" see for example Daniel Kahneman, Thinking fast and slow, London/ New York 2011; Daniel Goleman, The Hidden Drivers of Excellence, New York 2013, Karlheinz Ruckriegel, Günter Niklewski, Andreas Haupt, Gesundes Führen mit Erkenntnissen der Glücksforschung, Freiburg 2014. [↑](#footnote-ref-35)
36. See for example Frans De Waal, The Bonobo and the Atheist. In Search of Humanism Among the Primates, New York/ London 2013; Martin Nowak, Roger Highfield, SuperCooperators, Altruism, Evolution, and Why We Need Each Other to Succeed, New York 2011; Tania Singer, Matthieu Ricard, Mitgefühl in der Wirtschaft - Ein bahnbrechender Forschungsbericht, München 2015; Edward O. Wilson, The Social Conquest of Earth, New York 2012. [↑](#footnote-ref-36)
37. See for example David G. Myers Psychology, 8. Edition, New York 2007, p. 542f. [↑](#footnote-ref-37)
38. Nick Powdthavee, The Happiness Equation - The Surprising Economics of Our Most Valuable Asset, London 2010, p. 101. [↑](#footnote-ref-38)
39. Richard Thaler, Cass Sunstein, Nudge – Improving Decisions About Health, Wealth, and Happiness, New Haven u.a. 2008, p. 9. [↑](#footnote-ref-39)
40. Deutsche Bundesbank, Investor behaviour in theory and practice, Monthly Report, January 2011, p. 53. [↑](#footnote-ref-40)
41. See for bubbles in history Niall Ferguson,The Ascent of Money: A Financial History of the World, New York 2008, especially the chapter about "creating bubbles". [↑](#footnote-ref-41)
42. George A. Akerlof, Robert J. Shilller, Animal Spirits, How Human Psychology drives the Economy and why it matters for Global Capitalism, Princeton 2009, preface ix, p. 131. [↑](#footnote-ref-42)
43. N. Gregory Mankiw/ Mark P. Taylor, Economics, Special Edition with coverage of the world financial crisis, Andover (UK) 2010, p. 822, 828. [↑](#footnote-ref-43)
44. See for example Karlheinz Ruckriegel, Bundesverfassungsgericht versus EZB/Eurosystem - zur Frage der Effizienz von Finanzmärkten, Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 56, Nürnberg March 2014 and Egon Görgens, Karlheinz Ruckriegel, Franz Seitz, Europäische Geldpolitik, 6. Edition, Konstanz/ München 2013. [↑](#footnote-ref-44)
45. Mario Draghi, Building Stability and Sustained Prosperity in Europe, Speech given at the event entitled “The Future of Europe in the Global Economy” hosted by the City of London Corporation, London, 23 May 2013. [↑](#footnote-ref-45)
46. Deutsche Bundesbank, Investor behaviour in theory and practice, Monthly Report, January 2011, p. 49. [↑](#footnote-ref-46)
47. Max H. Bazerman, Don A. Moore, Judgment in Managerial Decision Making, Eighth Edition, Hoboken (USA) 2013; Harvard Business Review, How to make better decisions - How to outsmart your biases and broaden your thinking (topic), Mai 2015; Roderick M. Kramer, Ann E. Tenbrunsel, Max H. Bazerman, Social Dilemmas, Social Values and Ethical Judgments, New York 2010; Karlheinz Ruckriegel, Günter Niklewski, Andreas Haupt, Gesundes Führen mit Erkenntnissen der Glücksforschung, Freiburg 2014. [↑](#footnote-ref-47)
48. Books about "Managerial Economics" aren`t really helpful because they stick to the SEM too. In most of them "Behaviroal Economics" cannot even found in the index. See for example Dominik Salvatore, Managerial Economics - Principles and worldwide applications, International Eighth Edition, Oxford/ New York 2015. [↑](#footnote-ref-48)
49. See especially Frank Schirrmacher, Ego - Das Spiel des Lebens, München 2013. [↑](#footnote-ref-49)
50. Karlheinz Ruckriegel, Zur Verwendung von "Subjektiven Indikatoren" (Erkenntnissen der interdisziplinären Glücksforschung) in der (Wirtschafts-) Politik - eine grundsätzliche Kritik am Sachverständigenrat Wirtschaft (SVR), Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr. 58, Nürnberg January 2015; Karlheinz Ruckriegel, [Glücksforschung: Erkenntnisse und Konsequenzen](http://www.izpp.de/fileadmin/user_upload/Ausgabe-1-2015/Ruckriegel.pdf), in: IZZP - Internationale Zeitschrift  für Philosophie und Psychosomatik, Ausgabe  1/2015 -  Themenschwerpunkt: Glück und Leid, June 2015; Karlheinz Ruckriegel, Happiness Research: Insights and Consequences, Lecture at the University of Teheran, Department for Social Sciences, 23.6.2015 in Teheran/Iran (Abstract), ([www.ruckriegel.org](http://www.ruckriegel.org/) - Glücksforschung / Happiness research (Statement)). [↑](#footnote-ref-50)
51. Quoted from: David G. Myers, Psychology, 8. Edition, New York 2007, p. 537. [↑](#footnote-ref-51)
52. "Traditionally, when economists talk about happiness or satisfaction, they use a technical term, "utility"" Ben Bernanke, The Economics of Happiness, Speech given at the University of South Carolina, 8. May 2010, Footnote 1; See also Bruno S. Frey, Claudia Frey Marti, Glück - Die Sicht der Ökonomie, Zürich/Chur 2010, p. 26. [↑](#footnote-ref-52)
53. Quoted from Legatum Institute, Wellbeing and Policy - Report 2014 by Gus O`Donnell (Chair), Angus Deaton, Martine Durand, David Halpern, Richard Layard, London 2014, p. 14. [↑](#footnote-ref-53)
54. David G. Myers, Psychology, 8th Edition, New York 2007, p. 539. [↑](#footnote-ref-54)
55. See for example David G. Myers, Psychology, 8th Edition, New York 2007, p. 538. [↑](#footnote-ref-55)
56. See for example James J. Gross (Ed.), Handbook of Emotion Regulation, Second Edition, New York/ London 2014. [↑](#footnote-ref-56)
57. Shawn Achor, The Happiness Advantage, New York 2010, p. 43f.. [↑](#footnote-ref-57)
58. For more information about the positive effects of positive emotions and the 3:1 ratio see Barbara L. Fredrickson, Positivity - Groundbreaking Research Reveals How to Embrace the Hidden Strength of Positive Emotions, Overcome Negativity, and Thrive, New York 2009. [↑](#footnote-ref-58)
59. "Tim Kasser concludes from their studies that those who instead (of seeking money to prove themselves, gain power or show off rather than support their families, KR) strive for "intimacy, personal growth, and contributions to the community" experience a higher quality of life." David G. Myers, Psychology, 8. Edition, New York 2007, p. 541. [↑](#footnote-ref-59)
60. For more information about how to change one`s attitude see Sonja Lyubomirsky, The How of Happiness – A New Approach to Getting Life You Want, New York 2007; Tobias Esch, Sonjy Maren Esch, Stressbewältigung - Mind-Body-Medizin, Achtsamkeit, Selbstfürsorge, Berlin 2016; Karlheinz Ruckriegel, Happiness Research: Insights and Consequences, Lecture at the University of Teheran, Department for Social Sciences, 23.6.2015 in Teheran/Iran (Abstract), ([www.ruckriegel.org](http://www.ruckriegel.org/) - Glücksforschung / Happiness research (Statement)); Karlheinz Ruckriegel, [Glücksforschung: Erkenntnisse und Konsequenzen](http://www.izpp.de/fileadmin/user_upload/Ausgabe-1-2015/Ruckriegel.pdf), in: IZZP - Internationale Zeitschrift  für Philosophie und Psychosomatik, Ausgabe  1/2015 -  Themenschwerpunkt: Glück und Leid, June 2015; The Mayo Clinic Handbook for Happiness, Boston 2015; [↑](#footnote-ref-60)
61. See especially Heinrich Bedford-Strohm, Glück und Glaube - Die Ratschläge eines Glücksforschers im Lichte der Bibel, Sonntagsblatt 3.2.2013; Heinrich Bedford-Strohm is Bischop of the Protestant Church (Evangelisch-Lutherische Kirche) in Bavaria and the Chairman of the Council of Protestant Churches in Germany. [↑](#footnote-ref-61)
62. Deutsche Post Glücksatlas 2012, p. 62-72; Dennis J. Snower, Währung Vertrauen, Handelsblatt 30.11.2015, p. 48. [↑](#footnote-ref-62)
63. Andrew E. Clark, Was nützt uns Glück, Deutsche Post Glücksatlas 2015, München 2015, p. 23. [↑](#footnote-ref-63)
64. Daron Acemoglu, James Robinson, Warum Nationen scheitern - die Ursprünge von Macht, Wohlstand und Armut, Frankfurt 2013, p. 69, 85f. [↑](#footnote-ref-64)
65. Robert Biswas-Diener, Ben Dean, Positive Psychology Coaching, Hoboken (USA) 2007, p. 31, p. 41. [↑](#footnote-ref-65)
66. Shawn Achor, The Happiness Advantage, New York 2010, book cover, p. 43f and p. 61. [↑](#footnote-ref-66)
67. Derek Bok, The Politics of Happiness - what Government can learn from the new Research on Well-Being, Princeton 2010, p. 63. [↑](#footnote-ref-67)
68. Ben Bernanke, The Economics of Happiness, Speech given at the University of South Carolina, 8. May 2010. [↑](#footnote-ref-68)
69. David G. Myers, Psychology, 8. Edition, New York 2007, p. 542. [↑](#footnote-ref-69)
70. See for example David G. Myers, Psychology, 8. Edition, New York 2007, p. 542f.; see also Ed Diener, Robert Biswas-Diener, Happiness - Unlocking the Mysteries of Psychological Wealth, Malden (USA) 2008, p. 91-111. [↑](#footnote-ref-70)
71. Harvard Business Review, The Value of Happiness – How Employee Well-Being Drives Profits (topic), January-February 2012; Karlheinz Ruckriegel, Günter Niklewski, Andreas Haupt, Gesundes Führen mit Erkenntnissen der Glücksforschung, Freiburg 2014. [↑](#footnote-ref-71)
72. See Shance J. Lopez, C.R. Snyder, Oxford Handbook of Positive Psychology, Second Edition, Oxford/ New York 2009; P. Alex Linlex, Susan Harrington, Nicola Garcea, Oxford Handbook of Positive Psychology and Work, Oxford/ New York 2010. [↑](#footnote-ref-72)
73. See for example Kim S. Cameron, Gretchen M. Spreitzer, The Oxford Handbook of Positive Organizational Scholarship, Oxford/ New York 2012; Gretchen Spreitzer, Christiane Porath, Creating Sustainable Performance, Harvard Business Review, The Value of Happiness – How Employee Well-Being Drives Profits (topic), January-February 2012, p. 93-99. [↑](#footnote-ref-73)
74. See for example Jason A. Colquitt, Jeffery A. Lepine, Michael J. Wesson, Organizational Behavior - Improving Performance and Commitment in the Workplace, New York 2013. [↑](#footnote-ref-74)
75. For more information about what should be done in companies order to improve happiness at work see also Deutsche Post Glücksatlas 2015, München 2015, p. 58-129. [↑](#footnote-ref-75)
76. See for example Kerstin Bund, Glück schlägt Geld - Generation Y: Was wir wirklich wollen, Hamburg 2014; Klaus Hurrelmann, Erik Albrecht, Die heimlichen Revolutionäre - Wie die Generation Y unsere Welt verändert, Weinheim/Basel 2014. [↑](#footnote-ref-76)
77. OECD, OECD Guidelines on Measuring Subjective Well-being, Paris 2013, preface. [↑](#footnote-ref-77)
78. OECD, How`s Life? Measuring Well-Being, Paris 2011, p. 277. [↑](#footnote-ref-78)
79. Karlheinz Ruckriegel, Happiness Research (Glücksforschung) - eine Abkehr vom Materialismus, Sonderdruck Schriftenreihe der Technischen Hochschule Nürnberg Georg Simon Ohm Nr.38, Nürnberg May 2007. [↑](#footnote-ref-79)
80. N. Gregory Mankiw/ Mark P. Taylor, Economics, Third Edition 2014, p. 449. [↑](#footnote-ref-80)
81. Karlheinz Ruckriegel, Happiness Research (Glücksforschung) - eine Abkehr vom Materialismus, Nürnberg May 2007. [↑](#footnote-ref-81)
82. See for example David G. Myers, Psychology, 8th Edition, New York 2007, p. 539-541. [↑](#footnote-ref-82)
83. See also Joseph Stiglitz, The Great Divide: Unequal Societies and What We Can Do About Them, New York 2015; Joseph Stiglitz, Rewriting the Rules of the American Economy: An Agenda for Growth and Shared Prosperity, New York 2015; Richard Wilkinson, Kate Pickett, The Spirit Level, Why More Equal Societies Almost Always Do Better, London 2009. [↑](#footnote-ref-83)