



In Pursuit of Happiness

Among employees in Germany, job satisfaction has been falling since the mid-1980s – an alarming finding. At the **Max Planck Institute of Economics** in Jena, researchers working with **Martin Binder** are studying the role that different forms of employment and states of health can play – and the circumstances under which this could be politically relevant.

TEXT **RALF GRÖTKER**

Low wage increases, growing uncertainty about future job prospects and poor work-life balance are some of the reasons for declining job satisfaction, according to the Institute for Work, Skills and Training (*Institut Arbeit und Qualifikation, IAQ*) at the University of Essen. This trend is generating discussions in trade unions, but not just there.

The issue of work quality is becoming increasingly important also at the political level. In 2002, the German federal and state governments, trade unions and employers' associations came together to establish the New Quality of Work Initiative (*Initiative Neue Qualität der Arbeit, INQA*).

The initiative is funded by the Federal Ministry of Labour and Social Affairs, and its objective is to improve the quality of work. It also aims to make Germany a more attractive place

to work. As another example, the Confederation of German Trade Unions (*Deutscher Gewerkschaftsbund, DGB*) has been coordinating the Good Work Index (*Index Gute Arbeit*) – an annual survey of job satisfaction across all industries – since 2007.

Martin Binder, a research associate in the Evolutionary Economics department at the Max Planck Institute of Economics in Jena, is also concerned with the issue of job satisfaction. He is interested in how work and other aspects, such as health, product innovations and voluntary commitments, impact life satisfaction. According to Binder, life satisfaction studies, also known as “happiness research,” are directly relevant to economic research.

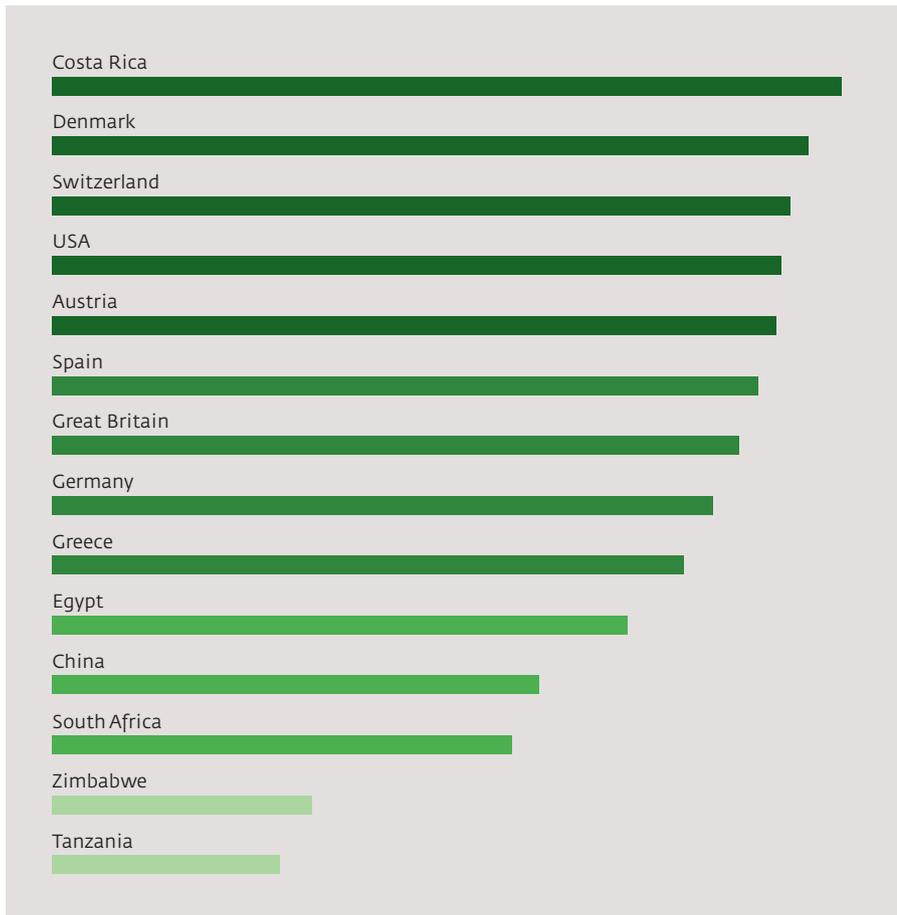
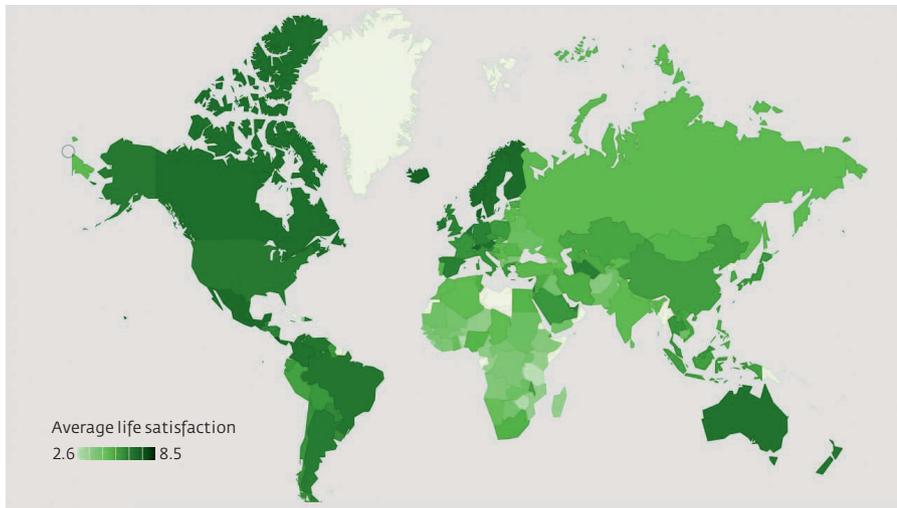
In the past, economists focused mainly on income as a measure of social progress. Gross domestic product (GDP) is the most commonly used so-

cial indicator in this regard. Binder and other happiness researchers believe that life satisfaction should also be taken into account, so he examined the factors that determine life satisfaction.

Binder's current study, which he undertook together with his colleague Alex Coad from the University of Sussex, looks at how self-employment affects life satisfaction. To date, little is known about this subject. Surveys have revealed, for example, that employees at management level and highly specialized skilled workers are, on average, more satisfied with their lives than unskilled workers or farmers. Various international studies on the topic of happiness, which are listed in the online World Database of Happiness, prove this correlation. The reason for this, however, is unknown: it's possible that the results express only effects that are caused by various incomes. >

Satisfied happiness researcher: Martin Binder from the Max Planck Institute of Economics examines how employment in its various guises – unemployment, salaried employment, self-employment – affects a person's life satisfaction.

» External circumstances influence individuals' assessment of their own satisfaction.



The data in the World Database of Happiness provides comparative information about happiness and satisfaction levels internationally, about how feelings of happiness have increased or fallen over the years, and about how an individual's work situation or personal life choices, such as marriage or parenthood, affect their life satisfaction.

In order to find out how satisfied people are, most researchers whose work is included in the database content themselves with asking one simple question: "Overall, on a scale of 1 (unhappy) to 10 (very happy), how happy are you with your life?" This approach elicits great skepticism again and again. After all, surely every individual approaches such a question differently? And what purpose would it serve to compare the answers of different people with one another?

Behavioral psychologists like Norbert Schwarz at the University of Michigan have discovered that external circumstances influence the question of happiness: participants in such studies give different answers depending on the issues that were previously touched on in the interview. If positive events from the recent past are discussed, people judge their happiness to be higher; if the events are negative, they consider it to be lower. People who remember negative experiences in the distant past consider their current happiness to be higher than people who remember a positive experience that occurred a long time ago. The way in which the researchers transition from one ques-

Global happiness barometer: The most satisfied people live in Costa Rica; on a scale of 1 to 10, residents of the Central American country rated their life satisfaction at an average of 8.5. Germany, at 7.25, ranks in the middle of the field in this global comparison. People living in African countries report the lowest life satisfaction.



Previously, economists always used only income to measure progress in a society. "But life satisfaction should also be taken into account, as it affects economic research," says Martin Binder.

tion to another is also important. If the researchers ask: "Apart from your marriage – how would you assess your life otherwise?" they get completely different answers than if they ask first about the marriage and then about an overall assessment of life satisfaction without this segue.

GREATER COMMITMENT – A NEGATIVE FACTOR?

These observations also lead to the conclusion that the survey results are valid if none of the previously mentioned distortions have come into play. In addition, some of the effects, such as the effect of a person's current mood, balance each other out over a larger number of test persons. Another indication that the "How happy are you?" survey produces credible results is the fact that people can also assess the satisfaction of others relatively reliably.

Martin Binder does not work with his own surveys. Instead, he uses the re-

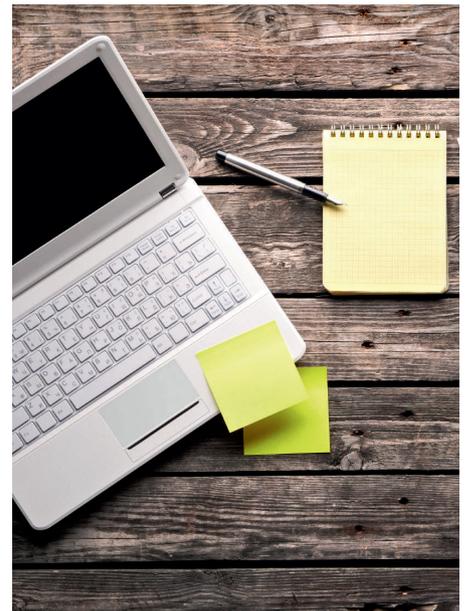
sults of large-scale household surveys, such as the German Socio-Economic Panel Study (*Sozio-oekonomisches Panel, SOEP*) or the British Household Panel Survey (BHPS). He was already aware from previous analyses that self-employed individuals actually report higher levels of job satisfaction than salaried employees, even though some of them earn less and most of them work more than their employed colleagues. "We were interested in investigating whether this translates into greater life satisfaction – or whether greater commitment to the job means that other areas of life, like leisure time or family, are neglected in some way, which would have a negative effect on overall personal happiness," explains Binder.

This question couldn't be answered using the previous methods. On the contrary: the existing data shows very clearly that self-employed and employed individuals also differ in many other areas, such as family status, gender and age, all of which play a role in

life satisfaction. "Using so-called multivariate regression, we can rule out the possibility that the correlation between self-employment and life satisfaction doesn't come about because of the self-employment itself, but instead is due to one of these other variables, which still doesn't answer the question of the causal effect," explains Binder. So multivariate regression doesn't tell us whether happy people tend to be self-employed or whether people who are self-employed are happier.

Even if panel data is used in which the same participants are surveyed again and again over several years, the causal effect still can't be determined flawlessly using this method. "It could still be the case that there is something that makes the self-employed fundamentally different from the rest of the population. This can't necessarily be extrapolated using multivariate regression."

Researchers at the Jena-based Institute of Economics are thus using a different method: matching. This method



Class society: It has long been acknowledged that the self-employed are more satisfied with their work situation than salaried employees. Martin Binder and his team are now investigating whether they also have a higher life satisfaction.

simulates, as far as possible, a clinical test. Subjects are divided into two groups. One group is exposed to the “treatment” (in this case: self-employment) and a control group doesn’t receive the treatment. As it can be difficult to instruct test subjects to become self-employed in an experiment, a trick is used: the dataset information is searched to find “twins” for all participants in the study who are actually self-employed; these twins resemble the self-employed individuals as closely as possible, except for the self-employment factor. The researchers then examine the differences in the twin’s development over time compared with the self-employed individual, and the differences in the survey answers provided by the two “siblings.”

NOT ALL OF THE SELF-EMPLOYED ARE AUTOMATICALLY HAPPIER

The result that was obtained using the matching methodology speaks for itself. For the first time ever, it was shown empirically that self-employment actually does lead to higher life satisfaction. This general statement was qualified in a number of respects.

For one thing, the data shows that the increase in life satisfaction isn’t just a temporary phenomenon. Two years after making the move to self-employment, satisfaction was even higher. “This finding was important to us because we learned from other areas that something like a hedonic adaptation occurs: a person becomes accustomed to the new sense of well-being, with the result that the gain in quality of life decreases over time, or is even lost completely.” The opposite seems to be the case when it comes to self-employment.

The research also revealed a clear distinction between people who pursue self-employment as opportunity entrepreneurs and those who move to self-employment to escape unemployment. Only the former group achieves significant gains in life satisfaction. A final point relates to what is discussed on the topic of inequality in relation to income and assets. The findings of the matching methodology also provide information about this aspect. Although it was possible to actually identify a small group of highly satisfied self-employed individuals, seen as a whole, the satisfaction in the group of

the self-employed is distributed more or less the same as in the group of salaried employees.

In and of themselves, these results may not be particularly surprising, but there are real situations in which empirical satisfaction measures could have direct practical relevance. Financed by the EU research initiative, large-scale studies were recently launched to determine how changes in the economy affect quality of work. The basis on which “quality” is measured, however, is simply set by the scientists, for lack of better alternatives.

Using a method like the one Martin Binder used to examine self-employment can help to ascertain the effect that the factors studied in connection with work quality have on life satisfaction. “On the basis of such data, we could at least make the argument that more weight should perhaps be attributed to some factors than to others,” suggests Binder.

In another study, which was structured in the same way as the self-employment study, Binder and a colleague investigated the issue of how various health problems – such as anxiety, migraines, allergies, heart disease and can-

» The gain in quality of life doesn't decline over time because a person becomes accustomed to the sense of well-being – rather, it rises even further.

cer – affect life satisfaction. This study made it particularly clear that people get used to various illnesses, but also to their alleviation, to quite different extents – without the individuals themselves being able to assess this effect particularly well.

According to the studies, the consequences of improvements to health for life satisfaction are vastly overestimated. In the case of severe physical impairments, such as those associated with paraplegia, the adaptability of human biology is systematically underestimated, and the loss of quality of life is overestimated. The effects of mental impairments are considered to be lower compared with those of physical illnesses. However, in the event of an actual mental disorder, they have a greater negative effect on life satisfaction than physical suffering.

“Seeing how much life satisfaction depends on small, unforeseeable details makes me very humble where policy recommendations are concerned,” admits Binder. “It worries me when I see how politicians jump on the happiness research bandwagon and use initial, provisional research findings as justification for their own objectives and interests. When it comes to life satisfaction research, we don't know enough about many issues to be able to make policy recommendations on the basis of research studies.”

Consequently, the Jena-based economist currently sees the social benefits of life satisfaction research less in specific policy recommendations than in initiating a social discourse about the objectives that society as a whole should pursue. “Almost all party agendas are based on the premise that in-

creased material prosperity represents a positive value for our society,” says Binder. “From the perspective of happiness research, however, it is doubtful whether this should be the only benchmark for progress in a society.” This is where scientists can inform citizens which areas of life, apart from material prosperity, affect their well-being and the extent to which this effect is permanent or not.

SYSTEMATIC WEAKNESSES ACCURATELY PINPOINTED

Nevertheless, there is an abundance of concrete potential applications for “happiness research.” For example, when conducting a cost-benefit analysis of expensive, high-tech drugs, the gain in life satisfaction could be made a criterion for deciding whether, in times of scarce resources, a medication should be used or not. If scarce resources have to be allocated to two different treatments, the treatment that alleviates the most pain (or generates the most happiness) for the given cost could be systematically given priority.

Such an approach has long been discussed in health policy circles, and has also been in use for many years in a number of countries. This approach is based on a QALY – quality-adjusted life year – and works essentially as follows: In a hypothetical situation, a patient who is suffering from a particular illness is offered a drug that cures the illness. However, this drug also carries the risk of immediate death. Does the patient take the drug? In the experiment, the probability of death is varied until the patient can no longer say with certainty whether they would

prefer to accept the risk of treatment or to live with the illness until they die a natural death. The risk index is then deemed to be an indicator of how high the patient considers their current quality of life to be.

It turns out, however, that individuals are not particularly good at accurately assessing the impairments to their quality of life that arise as a result of illness. Studies such as those that Binder carried out can be used to show precisely where these systematic weaknesses can be observed in the QALY method. “If, for example, a statutory health insurance fund has to calculate the measurable loss of quality of life in the case of a paraplegic patient, it might find out with our method that this loss is much lower than in the case of severe anxiety attacks, even though individuals judge the opposite to be the case,” explains the happiness researcher. If the focus is then on the most cost-effective alleviation of suffering, the treatment of anxiety would, in fact, have to be given priority.

“In this way, it is indeed possible to justify something on an ethical basis. But of course this can't be a decision made by health economists and other experts; it requires broad consensus across society.” In this case, the criteria governing any decision would have to be transparent. Another possible requirement would be clarification about how incorrectly we assess the effect of a future illness or recovery on our own quality of life.

Studies on life satisfaction could also prove to be an important tool in correcting models of rational decision-making. According to such theories, people consciously and rationally de-



"Seeing how much life satisfaction depends on small, unforeseeable details makes me very humble where policy recommendations are concerned." Martin Binder in his office at the Max Planck Institute of Economics in Jena.

cide to consume cigarettes, for instance, because doing so has a positive effect on their well-being. According to this theory, the pleasure that is derived from smoking is deliberately offset against the health risks posed by the consumption of tobacco. This suggests that smokers consider the benefits they obtain from cigarettes to be higher than the health risks.

Studies on life satisfaction show a more realistic picture of the situation, namely that – all other factors being held constant – smokers are less satisfied with their lives than non-smokers, and the consumption of cigarettes is thus obviously not a rational decision made to maximize their well-being. Further support for this theory is offered by numerous studies that show that many smokers desperately want to stop smoking but can't.

And further applications are conceivable: "Adverse effects on citizens

caused by airport noise, for example, can be measured more accurately using life satisfaction studies rather than, as usual, asking affected individuals to state the corresponding value in monetary terms," says Binder. The economist himself will take up a new position in the Science & Technology Policy Research Unit at the University

of Sussex in Brighton this fall. He intends to focus particularly on the effects of entrepreneurship and innovation on life satisfaction – thus bringing the topics that he has spent many years researching at the Max Planck Institute in Jena, to the UK. ◀

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TO THE POINT

- In addition to gross domestic product (in other words, material value), life satisfaction also plays a role in measuring social progress.
- External circumstances influence individuals' assessment of their own life satisfaction. However, meaningful results are still obtained when these factors are deliberately eliminated from the survey.
- A current study being conducted by the Max Planck Institute of Economics took the external circumstances into account using a matching method and, for the first time, showed empirically that self-employment does indeed lead to greater life satisfaction.