Research on happiness and economics
Research on happiness has recently become a hot topic in economics. For a long time, economists were convinced that it is not possible to measure utility. Therefore they developed micro-economic theory avoiding measuring individual utilities by relying on “revealed preference”. This theory was quite successful in many respects. In particular, it enabled extending economics to areas outside the narrow field of economics. Considerable insights were gained for instance with respect to politics, the natural environment, the family, or art and culture. Much of this successful extension is due to Becker[1,2,3]. This development was coined “economic imperialism” because it introduced economic concepts into other disciplines and areas.

Essentially since the turn of the century, there has been cumulative research on well-being (or, more shortly happiness). This research has been inspired by social psychologists, i.e. economics has been an importer of concepts and methods from another discipline. Today, research on happiness is truly interdisciplinary. In contrast to previous scholarly research by philosophers, the modern research undertaken by economists and psychologists is strongly based on empirical data collected by careful surveys and analyzed by extensive econometric
estimates. The results gained are based on estimation equations simultaneously taking into account a large number of determinants relating to socio-demographic, economic, social, and political aspects.

The results reported in the following vary only one determinant at one time, i.e. they hold when all the other determinants are kept constant (ceteris paribus).

Some of the insights gained are in line with general public opinion, but other insights are novel and surprising [4,5,6,7,8,9,10].

**Major results of happiness research**

The econometric research on the determinants of well-being has reached challenging and important results. Many of them are in line with standard economic theory as conventionally taught at most universities all over the world. Among the best known results are:

- **Individuals and households with higher income state to be happier** – i.e. their subjective life satisfaction is higher – than those with lower income. There is a diminishing marginal effect of income on happiness. People rather quickly adapt to higher income, and they tend to compare themselves with people of higher income; this reduces their level of well-being because they consider themselves to be relatively less well-off.

- **One of the most important factors for individual well-being are satisfactory personal relationships.** Those persons having a good family life, friends and acquaintances are more satisfied with their lives than the ones of isolated persons.

- **Good physical and psychic health are part of the most significant contributors to happiness.** The inverse relationship also holds: happy persons are less affected by contagious diseases.

- **To live in a democracy makes happy; individuals value the possibility to politically participate in a meaningful and effective way.** People are also more satisfied with their lives if as many political decisions as possible are taken on a decentralized level.

These results are consistent with economic thinking. However, they do not necessarily correspond to what laypersons think and believe. For example, many think that people in poor developing nations are happier than those living in countries with higher average income, presumably they assume that they are under less economic pressure. The empirical research on happiness has demonstrated in a great number of
studies that this idea is mistaken. It greatly contributes to happiness if one lives in a rich country. Many people also believe that artists are unhappy because only then they can be productive and creative. Empirical happiness research also rejects this notion[11].

The econometrically based research on well-being has also produced results, which are not in line with standard economic theory. These are three examples:

• The unemployed are dramatically less happy than persons having a job. This result holds even when income is kept constant. Thus the reason why unemployed persons are much less happy is not (only) due to reduced income. This appears surprising to conventional economics. In that theory, work is considered a burden or a cost. People are assumed to work solely because of the pay they receive. Thus, to receive the same income but not having to work should raise well-being.

• The self-employed work more hours and on average have a lower income and higher risk than employees of firm or other organizations. Nevertheless, careful happiness studies reveal that the self-employed (ceteris paribus) are happier than those working as employees.

• According to standard economic theory more money and leisure always contribute to utility. Empirical studies on well-being suggest that the opposite also holds. Those giving money to other persons, or engaging in voluntary unpaid work are more satisfied with their lives than those persons giving less or nothing to others.

Ex post explanations

Once confronted with these results, modern economists are well equipped to provide ex post explanations. Such explanations made afterwards need to be clearly distinguished from predictions made before the empirical result has been reached. For the three results mentioned before not in line with standard economic theory, the following perfectly reasonable explanations can be offered:

• The unemployed with equal income are less happy. This result can easily be explained by introducing ex post additional arguments in the utility function. When social relationships, reputation, recognition and self-esteem are relevant factors in individual utility functions, the unemployed are in a bad situation. They quickly lose social contacts because they lose their work environment, and they may even be ridiculed and disregarded by others. Above all they lose their self-esteem. These negative factors easily overshadow the possible advantages of getting income without having to work.

• The self-employed are happier. To explain this result one only needs to introduce the notion that people are risk loving. Those persons seeking independent work probably have a strong desire to take risks, and are therefore happy with working hard and long hours. The result may also be explained in a quite different way. People are prone to overestimate the chance of being successful in what they engage in. We therefore observe many persons in situations in which they are happy but thereafter fail. Introducing autonomy as a determinate can also serve to extend the utility function. Self-employed workers enjoy their autonomy and are therefore happier than those working in a hierarchical setting.

• Giving makes happy. This result can be explained by a desire to induce reciprocity by the persons receiving a gift. If such reciprocity is strong enough according to standard theory, it is rational to give. Even if this is not the case, the givers may raise their reputation in society. They therewith demonstrate that they are rich enough to afford to be generous. Such action may help them to increase their status in society.

The explanations offered make sense and can easily be introduced into economic theory. However, in each case additional assumptions
In each case additional assumptions are required to reach such reasonable explanations. This procedure is perfectly all right as long as the additional explanations are not introduced ad hoc. If the extensions are introduced ad hoc, it is impossible to advance empirically testable hypotheses. But to be able to advance hypotheses, which can be wrong and therefore need to be tested empirically, is one of the most important foundations of any science.

This notion shall be made clear with the example of the “happy self-employed”. Standard economics would predict that a person working harder and longer, having to bear higher risk, and moreover earning less has a lower utility than a person working less and earning more in a less risky occupation. Such a statement should only be made on the basis of a utility function, which always and from the beginning includes a desire for autonomy and risk. Such a utility function must be formulated before a prediction about a person’s utility level or happiness is made.

**Conclusion**

The advent of happiness research can in two respects be considered a happy occasion for economics.

Firstly, the modern interdisciplinary and strongly empirical happiness research clarifies the limits of standard economics. It directs attention to new aspects, which economic theory has little or not at all considered. Among them are for instance social relationships and particular political institutions with respect to political participation rights and decentralization. In addition, values such as recognition, autonomy or the benefits derived from fair procedures (procedural utility) are suggested as relevant arguments in the utility function. Standard economics is usefully generalized if such aspects and values are introduced as an integral part of a more encompassing theory. Research on happiness makes important contributions in this respect.

Secondly, the research on well-being provides crucial insights for economic and social policy...
deviating from a fixation on Gross National Product. The digitalization of our world makes many activities free of charge; they are no longer done on markets. As a result GNP incompletely, or not at all, captures them. As recognition by other persons is an important motivator for human behavior, pay-for-performance becomes increasingly questionable as an incentive mechanism, and there are other possibilities – such as awards\cite{12,13,14} – able to meet this desire. The research on happiness also calls attention to the relationship of psychic health on individual well-being.\cite{15,16} In modern societies the concept of health has changed. While considerable progress was made with respect to supporting physical health, psychic problems become more relevant. Well-being research has emphasized the importance of these aspects for a long time.

References


