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**Does money mean happiness?
A survey on happiness and its determinants.**

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INTRODUCTION

At what stage of life are people happiest – when they are on the threshold of their adult lives, at midlife when families are complete and many are close to the peak of their working careers, or in the “golden years” of retirement? What are the factors responsible for the life cycle pattern of happiness? One thing is clear for sure, everybody wants to be happy. There is probably no other goal in life that commands such a high degree of consensus. Yet, curiously enough, economists have shied away from dealing with happiness. They have long considered it to be an “unscientific” concept. Instead they have based their microeconomic theory on utility that has no material content but that allows the successful analysis of human behavior. In the past few years the situation has changed: a number of economists see an advantage in measuring subjective well-being as expressed by individuals themselves. This thesis wants to investigate the relationship between happiness and some aspects, in particular economics, politics and socio-demographic sphere.

ABSTRACT

Felicità ed economia, felicità e politica, felicità e rapporti interpersonali, come sono legati tra loro? Possono questi fattori essere considerati decisivi per il benessere della singola persona e della comunità in cui essa si trova? Questa tesi vuole essere una ricerca sulle maggiori determinanti della felicità degli individui, sia a livello economico che non, partendo dalla felicità com'era intesa per i nostri antenati sin ad arrivare alle più recenti teorie dei giorni nostri. In particolare verrà presa in considerazione la relazione che lega la felicità a rilevanti aspetti economici, quali il reddito e l'occupazione (o disoccupazione), ad aspetti politici, quali la possibilità di voto e i diritti costituzionali riconosciuti al cittadino, senza dimenticare anche gli aspetti interpersonali tra persone, anch'essi fondamentali fattori della felicità.

1.HAPPINESS IN THE PAST

Greeks and Romans

This chapter starts considering the meaning of happiness as illustrated by the ancient Greeks and Romans; it is usual to say that, for the classics, happiness did not consist of material things. But what people should have, rather than wealth, was independence from “material” necessities: this was the meaning of *scholè*, leisure in order to be able to devote oneself entirely to something different from earning one’s living. From this point of view, therefore, welfare had an instrumental character, according to a well-known formulation by Aristotele who affirms that men begin to philiphize only when they have satisfied all their material requirements. Welfare is therefore needed for the exercise of the “superior” activities; but there is also the other side of the coin: this superior knowledge was not to use for practical purposes. Greek morals had a strong intellectual character, in fact knowledge was the first step towards the good, and it was conditioned by the possibility of consecrating time to speculation. Here we meet a well-known feature of the Greek philosophy: the separation between theory and practice, which relegates all economic activities to the field of practice, qualifying them as inferior to scientific, disinterested knowledge. So, it was necessary to be rich to give oneself up entirely to study, knowledge and contemplation which led to happiness: only wealth brought a command of one’s own time. Certainly in everyday life wealthy men were respected, as has been the case since the world began; but philosophical theories asserted that one should not look for wealth because the true values are to be found elsewhere. Which ones? Happiness, the personal realization through the pursuit of knowledge and virtue, not of money. The Roman attitude, it would seem, was more pragmatic and less intellectual: increasing the riches of the family by correct means was considered a good enterprise. Rome had a less philosophical and more juridical-political attitude than Greece: the rights conferred to the richest citizens by its constitution based on the census had to be carefully preserved, because the loss of estate preclude access to a political career. So the Greeks proposed a model of liberality and consumption, a model which disapproved of attachment to money: money had to be freely given, if one had it and the Romans, although deriving many of their ideas from Greece, adapted them to their own traditions. For example Cicero says that certainly liberality is a virtue but it must not be pushed as far as to waste one’ estate and Cicero again, was the first to establish with plenty of detail the antithesis between *utile* and *honestum*, that is, to envisage and theorize a clash between profit and morals. We ought to stress that this conflict is mainly described from apolitical or juridical

perspective; very seldom did he put it in terms of a problem connected with an exclusively economic profit, but it was only a matter of time before this was the case. As yet, we have dealt with what the ancients thought was the right attitude towards wealth and personal enrichment. But there was also a different state of mind in ancient moral philosophy: the pursuit of happiness passed through a resolute reduction of needs. This position, of Cynical origin, prevails in Hellenistic doctrines, and was received in Roman philosophy through a certain influence that the Cynics had on Stoicism, at least in its initial form. Wealth was, for the Stoics, among things “indifferent”, but faced with a choice it had to be considered preferable to poverty in so far as it could allow life according to nature. Overall, almost none of the philosophical schools of the past allow wealth to constitute a source of happiness for individuals, or trouble themselves with problems concerning fair or just distribution among the different strata of society. It is clear that Hellenistic hypotheses focused on the single individual rather than on the citizen as a part of a community. The “private” individual may be happy even without possessing anything other than his good conscience; but the “public” man in the classical polis needs an economic basis to perform his capacity well. Certainly this point of view prevented egoistic representations of wealth: a frequently repeated principle was that we are not rich only for ourselves. External indigence was no obstacle to *eudaimonia* for the Stoics, but Aristotle, followed in this aspect by Cicero, gave greater responsibilities, and more important duties, to the man in high station. In sum, there were distinctive attitudes towards welfare and wealth in the ancient world. These could be considered desirable and even necessary for living well, but were conceived mainly as things to be possessed and used: for being independent, for devoting oneself to one’s preferred activities, for benefiting friends and the city. We should recall that the etymological root of “chrematistics” (from *chremata*, good or riches) comes from the verb *chraomai*: to use. The man who is an important member of society, with an important role in the life of the city, will use his wealth generously in the service of others – and to avoid the reputation of being a miser, among other things. Concern about the way he has acquired his riches is not important from a “public” point of view: it is the private man, the *oikodespotes/paterfamilias* who has the task of providing (and administering/preserving) his wealth. There were, on the other hand, different strategies, and perhaps more “philosophical” ones: being contented with the minimum required for living brings the “liberty” of not being a slave to external goods – another way of being rich, in that one has what is needed; or Plato’s attempt to bring economic activities into the more important sphere of the communal bond, which leads him to defeat the social institutions of family and property. It is evident that there are different aspects of individual well-being, and distinctive relationship of it with material goods. One of the characteristics of

moral perfection, deemed to be the best path towards true happiness, was freedom from material welfare, in the sense of not caring for it – and this could be achieved by both rich and poor man alike. Only Christian teaching will say that wealth is so incompatible with this kind of happiness that it should be eliminated by giving it to the poor; the classics never thought this, but much of their philosophy maintains that even the poorest of men could easily attain happiness. Now ancient moral philosophy is usually defined by modern scholars as eudemonistic, from the Greek word *eudaimonia*. The meaning of this modern definition is that ancient ethics was concerned with a search for happiness rather than for virtue – although we should note that frequently virtue was considered a means to reaching happiness. But virtue was not enough: Socrates' well-known principle was that knowledge was required to give a correct evaluation of everything including material goods. In the field of ethics, the two sorts of theoretical and practical knowledge must be associated, although usually ethics is characterized as a philosophy of practice, together with politics and economics. But it would be extremely peculiar to participate in practical activities and to exclude reasoning, awareness, and knowledge: for instance, in the problem of choice, which was so important for the Stoics; or the adaptation of means to ends, vital for Aristotle and connected in later thought with the unbelievable “fortune” of the virtue of prudence. In our setting, together with Socrates' famous sentence that wrong conduct is because of lack of awareness, it is proper to review another surely understood guideline, in particular that the savvy man realizes that the true values are not economic, in this way he couldn't care less to end up rich, regardless of the possibility that he could. This thought is illustrated in the well-known anecdote about Thales who was able to foresee, studying astronomical signs, an exceptionally good crop of olives and hired at the right time all the olive presses in the country, thus earning a lot of money with the “monopolistic” position and the philosopher, conclude Aristotle, if he so desired, would even be able to become rich (Thales proved that he possessed this ability) – but this does not interest him. So the individual could be glad just given that he could accurately judge what was better than average in life, and keep to it. One basic difference with Christian ethics is that the latter deems the individual to be unable to reach this object by him/herself, needing the help of God. In addition, happiness being reserved to the other world, it seems inappropriate to search for it in the present. In this life, we must strive to reach virtue, rather than happiness. This is the motivation behind why the idea of “eudemonistic ethics” is seen in modern meaning as something blameworthy, in a certain sense, as if it were an egoistic search for personal worldly success void of whatever spiritual aspirations. Also, it was arrogant in character, so to speak, with its “autonomy”, which was not likely to be appreciated by Christian thought, since the latter did not admit that individuals could reach virtue and

happiness only by virtue of their strength. If we look at the etymology of the word we see that even in ancient thought outside intervention was considered. The Greek happiness, *eudaimonia*, means “to have a good *daimon*”, that is a good lot of fortune, something untranslatable but somehow referring to the power controlling the destiny of individuals. All the Greek lexica give this importance of fortunate circumstances, associated with well-being, thriving and culminate satisfaction of one's own best desires. If we add that also the corresponding Latin word, *felicitas*, has an analogous meaning of enjoying the favour of fortune, we may conclude that this kind of happiness was approaching the idea of success, and was therefore more or less connected with wealth. *Eudaimonia/felicitas* didn't mean essentially "good luck" , it additionally suggested a part of individual capacity and good character, yet these alone were not adequate: the ideal circumstances were likewise considered. So there was an idea of happiness connected with material wealth and worldly success, but the truly “philosophical” idea of happiness followed a different path and was considered independent from economic welfare. In the event that one had riches, so much the better; if not, the personal satisfaction did not endure on the grounds that genuine qualities were to be discovered somewhere else.

Antonio Genovesi

Now, closer the present day, the Neapolitan Antonio Genovesi (1713-69) is one of the last authoritative representative of the classical (Aristotelian – Thomistic) tradition of economic and social thought. While Smith taught moral philosophy at the University of Glasgow in Scotland – and began reflecting upon economics – in 1754 Genovesi began to teach in Naples in the first-ever chair of economics. Genovesi's record of human instinct and of human activity utilizes some Newtonian themes (such as the idea of equilibrium as a representation of the relationship between of passions), however in its basics it fits in with the Latin tradition. Genovesi does not try to reduce human motivation to self-interest. He argues that some passions are manifestations of self-love (*forza concentrativa*), but others reflect “love of the species” (*forza diffusiva*). Love of the species is not altruism (that is, concern for the well-being of others); it is a matter of *relations* between people. Its most basic element is cordiality, which means the need of relationship with our fellows. Cordiality (or sociality) is an indelible feature of our nature , common to all social animals. Along these lines it is vital to Genovesi's hypothesis that social relations are not simply implies by which, or imperatives inside of which, we fulfill self-interest. So far, of course, there is not a qualitative difference between Genovesi and other classical economists (such as Smith, who

was keenly aware of the ways in which human sentiments are responsive to interpersonal relationships). However, in Genovesi's work there is a much stronger sense that these relationships are valuable in their own right. For Genovesi, it seems, the chief advantage of society is not to be found in its production of material goods, but in the enjoyment of social relationships. To Genovesi, economy is "civil" only if it aims at public happiness. The common good accordingly, is not just the unintended after effect of individual quest for private interest: singular self-interest can be changed into public happiness just inside of the laws and institutions of civic life.

Coming now to Genovesi's theory of happiness, what we note immediately is that his account of happiness is in strict continuity with the classical tradition, in particular with Aristotelian *eudaimonia*. As a matter of first importance, to Genovesi happiness is clearly distinguished from pleasure, in fact happiness must be assessed along the whole life, despite pleasure is a mental state of a moment and above all happiness is the final end of human conduct.

Besides, happiness can be achieved just as a repercussion of virtues, specifically you can be happy only by means of being virtuous, by thinking in a non-computing way and doing activities that are ideal for their own purpose. Furthermore, Genovesi was a priest, and virtues to him are Christian virtues (other important sources for Genovesi were the Christians, Thomas Aquinas and G.Vico). As a consequence, economic life is an exercise of virtues: the market is a place to put into practice the virtues, in particular the "civic" virtues, such as the love of the common good and the control of individualistic passions. The market is the place where each agent is helping others to satisfy their wants. So with this conception of economics, we can intend that engagement in economic relations is an exercise of virtue

For Genovesi then, virtue is additionally an economic resource. The general point of Genovesi's economic writing is to clarify the role of virtue in promoting economic development by promoting trust and social capital. For Genovesi public trust (*fede pubblica*), which can be correctly translated in modern terms as "social capital", consists of a common and mutually recognized commitment to the virtues of friendship and reciprocal assistance. Alternately maybe we ought to say that social capital comprises of a system of associations based on those virtues and that propagate them..

Moreover, to Genovesi happiness is *social*, because it can be reached only in "genuine" (virtue-friendship) interpersonal relations. Genovesi recommends cultivating *sincere* friendships with one another, and the *will* to be useful to one another. The rationale of his thinking is to caution every person that on the off chance that he/she neglects to develop the virtues of friendship, there will be adverse results for his/her satisfaction. The logic of

Genovesi's contention recommends that we ought to recognize friendship with corresponding help, correspondence being comprehended in a separately non-instrumental, non-computing way.

Genovesi, as well, has a hypothesis of unintended outcomes of an individual's activities: individuals normally care for their own particular interests; (ii) the true interest, in any case, is happiness; happiness, in the classical tradition, implies eudaimonia, and in this manner one can be cheerful just by means of virtues; and if all individuals search for happiness they will create civic virtues (what today we call "social capital") and, inadvertently, public happiness will increment. Now we have the elements for making Genovesi's public happiness consistent with the individual eudaimonia. Public happiness is, as Genovesi and the whole tradition of *pubblica felicità* say, the sum of individuals' happiness. Within a theory of fulfillment as eudaimonia, the more individuals carry on honorably, the more individual happiness grows, the more civic virtues (*buon costume and fede pubblica*) grow, the "happier" the population (public happiness) is.

That Genovesi and the Neapolitan economists ought to be found in coherence with the tradition of civic humanism does not appear to be odd. Their vision of economic agency in fact considered the individual as a social entity, and the affirmation of the presence of the ego and of his/her rights and freedom was not found contrary to the existence, rights, and value of the others of the community.

Adam Smith

Now let's focus on another great economist: Adam Smith. His *Theory of Moral Sentiments* is loaded with a relational approach to the human person, seen ontologically in association with others. He said that individuals are lucky if they receive consideration and unfortunate if they are indifferent to others, the whole relationship between others and us is mediated by how we look: how we are seen, viewed as, appreciated and imitated; so for Smith, even riches and power are only the means for attracting an other's attention, for being perceived. From this relational anthropology, most comes the thought that nothing satisfies us more than to see in other men a common sensitivity or correspondence of estimations with all the emotions of our own breast. Moreover, wealth can be transformed into happiness or well-being, not consequently, but rather just under given conditions that allow wealth to become happiness, both individual and social. Regardless of the fact that the thought is available that men need others in order to be happy, happiness is not distinguished from pleasure, and pleasure is used as a primitive idea. The thought that happiness is identified with interpersonal

connection is not stressed, in spite of the fact that his ethical framework is based on relational categories. However, Smith's vision of happiness in relation to the economic field is more perplexing than the simple equivalence "more wealth = more happiness". The argument runs as follows. The emulation of wealth and greatness of the rich is the engine of both social mobility and economic development, so for example the poor man's son trying hard to acquire talents superior to all his competitor. This social engine however, is based upon a deception, to be specific the thought that the rich man is more satisfied than poor people. In reality this is not true and Smith gets numerous arguments in support of this thesis. Right now the invisible hand argument becomes an important factor. Given the false notion that more wealth brings more happiness, and the inability of consuming all the goods of his industry, Smith says that rich men despite their natural selfishness and rapacity and the sole end which they propose from the labours of all the people they employ is the gratification of their own desires, they divide with the poor the product of all their improvements, so this is the concept of "invisible hand". Smith sees in the mysterious fact the presence of Providence, which "when it divided the earth among a few lordly masters, it neither forgot nor abandoned those who seemed to have been left out of the partition". Nature then has designed the world with endogenous just mechanisms, which allow the equal distribution not of material means but of happiness, in fact in Smith's theories in what constitutes the real happiness of human life, the poor men are in no respect inferior to those the rich men, both physically and mentally.

So Smith knew that thinking that, social recognition, wealth and fortune leads to happiness is a deception and social dynamics is providentially based on this deception. The individual desires to enhance his material conditions, for his happiness is guided by an "invisible hand" towards public happiness, despite the natural selfishness of the individuals. When a few years later he wrote the *Wealth of Nations*, the title itself defined the object of the newborn political economy. It deals with not with happiness but wealth, even if in Smith's choice of the word "wealth" instead of "riches" one can rightly see the idea that wealth is more and different from simply possessing riches. Given the very rich anthropology and theory of human agency present in the *Theory* and his theory of deception, Smith's political economy (and the whole classical paradigm) could have become something totally different: political economy, instead of being defined as the science of wealth, could have been defined as the study of how and under which conditions riches could be transformed into happiness. Nevertheless, the philosopher of the deception became an economist studying the wealth of nations. However, if wealth does not lead to happiness, if the wealth-happiness link is a deception that the philosopher points out, why would the philosopher study the ways of increasing wealth? Smith's probable answer to this question of happiness could have been

that is produced by an active life and *modest* wealth, but not by luxury and *excessive* wealth. In general, the “wealth of nations” is strictly linked to the happiness of nations, because only a tiny minority are in the idle class. The pursuit of excessive wealth is a deception but it provides the motivational power for the economic system, which provides everyone with subsistence, and people’s susceptibility to this deception is one of the mechanism through which the invisible hand mechanism works.

The tradition of economics after Smith, apart from the very few exceptions that we shall consider later on, forgot the very complex and slippery relationship between wealth and happiness, as the enthusiasm for the “novelty” of contemporary paradox of happiness signals.

Alfred Marshall

Then we can consider the idea of another economist, Alfred Marshall. Marshall’s economics is very interesting from the point of view of a history of happiness in economics. We know that Marshall allowed room for altruism in his economics, denying that individualistic self-interest is an essential requisite of economics, the only constraint in the economic domain is the possibility of monetary measurement. Therefore economic goods are those that “can be measurable by a money price”. Marshall’s theory of human agency is in continuity with the classical philosophical tradition, Malthus saw a sharp distinction between happiness and wealth, but in his economic analysis he chose to deal with wealth and only indirectly with happiness. This approach, is used by Marshall in opening his *Principles*.

In this Marshall was really a “neo” classical, his approach being fully in continuity with Smith and even more so with Malthus, he knew very well the complex relationship between happiness and wealth. From the sentence, not by chance placed at the beginning of his *Principles*, we get the basic elements of Marshall’s vision of economic agency:

- Economics does not deal directly with “well-being” (that to Marshall is a substitute for happiness) but with the “material requisites” of it. We no longer find the word “happiness” (which in England was linked to the utilitarian and hedonistic philosophy from which Marshall wanted to distance himself); there is however the expression “well-being”, later translated by his follower A.C. Pigou into “welfare”, the key category in his *Economics of Welfare*.
- The “material requisites” of well-being is “wealth”, in line with the English classical tradition.

In the “Introduction” to the *Principles* we also find the theoretical key to understanding Marshall’s idea of the relationship between happiness and wealth: “It is true that in religion, in the family affections and in friendship, even the poor may find scope for many of those faculties which are the source of the highest happiness. But the conditions which surround extreme poverty, especially in densely crowded places, tend to deaden the higher faculties. Those who have been called the Residuum of our large towns have little opportunity for friendship; they know nothing of the decencies and the quiet, and very little even of the unity of family life; and religion often fails to reach them”.

Happiness to Marshall, depends largely on extra-economic factors that are not wealth in the usual economic sense, that do not pass through the market, but factors such as religion and, mainly, genuine interpersonal relationships like family affections and friendship. We find in Marshall the Aristotelian idea that happiness does not coincide with wealth, and also that happiness has a social nature. Moreover poverty, even if in itself it is not necessarily mean unhappiness, determines those conditions that render very difficult, the possibility of developing the dimensions of life and the interpersonal relationships on which happiness actually depends. Therefore to Marshall, the economists’ role in society is very important, studying the means of increasing wealth or reducing poverty is consistent with the general well-being or happiness – a means for increasing directly the standard of life by also fostering the interpersonal dimensions of life. In this methodological choice there was, however, a gap, the analysis of the transformation of goods into well-being , subjectively and collectively. In fact, as the contemporary economy and economics show, economics goods do not always become welfare or well-being.

Marshall then states that the true key-note of economic progress is the development of new activities rather than new wants, specifying that the very important question in our generation is the connection between changes in the manner of living and the rate of earning.

In order to analyse this urgent question he distinguishes between two concepts: “the standard of life” and “the standard of comfort”, where the standard of life means the standard of activity adapted to desires , and the standard of comfort means an increase of artificial desires. Then Marshall explains that every large improvement in the standard of comfort bring with it a better manner of living, and open the way to new and higher possibilities and people who hadn’t so far the necessities in their life, can get some increase in vitality and energy from an increase of comfort. This improvement in the standard of comfort will probably involve some improvement in the standard of life.

But this is not always the case, in fact the author also analyzed the labour market, in particular the limitation of the hours of labour and the related issues of the minimum wage

and redistribution of income, of the cases when rises in the standard of comfort bring to a fall the standard of life. A first application of this analysis is Marshall's recommendation for a general reduction of the work hours that leads a little net material loss and considerable moral good, so a reduction of income can cause a higher standard of life (happiness).

Utilitarianism

After having considered Marshall's thought, it is right to take into account utilitarianism, built around the golden rule of "the greatest happiness for the greatest number". In fact, utilitarianism plays an important role in our reconstruction for the methodological turn it gave to the concept of happiness in economics. If we look carefully at Bentham's idea of happiness we immediately see that in his system happiness corresponds to "pleasure", as it comes straight from the very first lines of his *An Introduction to the Principles of Moral and Legislations* (1789), in which Bentham affirms that the mankind is under the governance of two sovereign masters, pain and pleasure. Therefore with respect to happiness, he belongs to the hedonist tradition.

The Benthamite vision of happiness can therefore rightly be called "psychological hedonism", having an individualistic nature; people are depicted as seekers of happiness-pleasure. This psychological feature is essential to the utilitarian thought in which social happiness is seen only as an aggregation, a sum of individual pleasures. The other keyword of Bentham is "utility", from which the term "utilitarianism" came; the principle of utility is stated appropriately in the first page on his *Principles of Moral and Legislations* where he wrote that by utility he meant the propriety of every object by which it procures a benefice, advantage, pleasure, good or happiness.

With Bentham the distinction between end (happiness) and means (wealth) disappeared, happiness also became the direct end of economic actions, and it's equal to pleasure. Bentham's approach to happiness, therefore, is far from both Aristotle's (and Genovesi's) *eudaimonia*, and Smith and the classic who kept the distinction between happiness (the final end) and wealth. Bentham's methodological project nurtured economics thanks mainly to the works of Stanley Jevons and Edgeworth.

W.S. Jevons (1871) defined economics as the science of utility, explicitly stating his acceptance of the utilitarian philosophy of Bentham. Happiness entered neoclassical economics totally identified with utility, the new subject of the new economics. Jevons not only states the old utilitarian thesis that happiness is related to utility, but also that economics is the "calculus of pleasures and pain". Jevons affirms that pleasures are different "only in

degree, not in kind". Economics deals with the "lowest" ones, and he doesn't exclude that men can renounce pleasures coming from the economic domain for the sake of ethical or superior pleasures. But, like Bentham, Jevon's ethical rule is to maximize the sum of pleasures, both individually and socially. For English marginalist economists, economics became the science of happiness-pleasure. The domain of economics was no longer wealth but happiness-pleasure directly. While the classical economists were dealing with objective, external aspects ("material prerequisites"), with Jevons and even more so with Edgeworth, economics comes back to a subjective perspective – the domain of economics is inside man's mind.

With Jevons, happiness-pleasure became the main point of economics, and the reductionism of happiness/*eudaimonia* to utility/pleasure is the real break-point in this history of happiness in economics. The distinction between material prerequisites and happiness has been lost and whereas *eudaimonia* is not consequentialist (the action is performed because it is intrinsically good and, as a byproduct, happiness can arrive), utilitarianism (both act and rule) is. Furthermore, every connection with the non-instrumentality of the logic of happiness and its relation to virtues disappeared.

2. HAPPINESS AND ECONOMICS

Economically speaking, there are three major influence on happiness:

1. Income
2. Employment (or unemployment)
3. Inflation

These are the focal variables of macroeconomic theories, and they have also proved to be the most important determinants of the citizens' satisfaction with their government, as caught by election and popularity functions. Income, unemployment, and inflation are directly relevant to an economic analysis of happiness for the following reasons:

- Material conditions and prospects are two very important concerns for most people when they are asked about life satisfaction.
- The three macroeconomic variables can be influenced by economic policy. Economists have accumulated a lot of knowledge about the possibilities and limits of bringing about changes in income, employment, and prices. So they have a comparative advantage, which is not the case for personality factors or some socio-demographic factors.

In this chapter we'll discuss the relationship between income and happiness, we'll analyze the impact of unemployment on happiness and the role of inflation in happiness. To conclude we'll consider the effect of inequality on happiness too.

2.1 Income

Most economists take it as is normally that higher income leads to higher happiness. A higher income expands individuals' and countries' opportunity set and therefore more goods and services can be consumed. Those people not interested in more commodities don't consume them so they have the freedom to dispose of any unwanted surplus. Thus seem normal that income and happiness go together.

Psychologists are more unobtrusive in this respect in fact they are not so confident that higher income necessarily leads to more satisfaction. They may be influenced by studies such as those made on the winners of large sums of money in the state lottery that demonstrates that the winners had won within the previous year and reported only moderate higher levels of

life satisfaction than a control group (4.0 versus 3.8 on a five-point scale), and were significantly less pleased with everyday events. Or another study found that the expanded wealth also entailed significant costs for winners of the British football pools. A substantial rate of the winners quit their employments, losing relationship and a sense of accomplishment. Moreover, tensions with other people tended to increment because the winners were often expected to provide monetary help to the relatives and friends. The analysis of lottery winners therefore finds that, after a first period of adaptation, the winners' average utility is not significantly higher than it was before.

But some economists do not subscribe to the idea that higher income produce higher happiness, for example, Richard Easterlin affirming that money does not buy happiness.

Various studies (using purchasing power parity criterion) provide consistent evidence that, on average, people living in rich countries are happier than those living in poor countries. The reported subjective well-being tends to increase with income but we can discover a concave relationship, in fact income provides happiness at low levels of development, but once a threshold of approximately \$10.000,00 is reached, the average income level in a country has little effect on average subjective well-being.

A visual investigation of the relationship between income and happiness across countries is, in any case, of limited value because the positive correlation might be led by variables other than income alone. Specifically, rich countries tend to have more stable democracies than poor countries so it's possible that the apparent positive association between income and happiness is leads by more developed democratic conditions.

In addition to democracy, there are numerous other conditions going with income that may produce the observed positive correlation between income and happiness. For example higher income leads to more secure human rights , better health and more equal the distribution of income; therefore human rights, well-being, and distributional equality may seemingly make happiness rise with income.

Another thing to evaluate in whether causality runs from income to well-being, as implicitly assumed so far. In principle we can consider an inverse causation. It might, for instance, be argued that the more satisfied the population is with life, the more it is inclined to work well and hard, thus the higher is the per capita income. Or, happy people may be more creative and enterprising, leading to higher income too.

However there is enough evidence that is indeed income that leads subjective well-being, at least for countries below a determined threshold of wealth. It has been said that essentially all social indicators are more positive in nations of higher income: richer

countries have better-quality food, cleaner drinking water, a better education, better health services, higher longevity, sex parity, and more respect for human rights.

The available evidence allows us to affirm that income and happiness go together and that higher income increases people's subjective well-being in poor countries and the belief that people in poor countries are happier because they live under more natural and less stressful conditions can be rightly considered a myth.

However, the causal factors that relate wealth to happiness are not yet fully realized.

In another research we can find a suggestive and curious relationship: in the United States, the United Kingdom, Japan, and Belgium, per-capita income has risen rapidly in recent decades, while average happiness has stayed more or less constant or has even declined. Graphically, the development of income and happiness diverges like open scissors. For example in Japan, between 1958 and 1991, per-capita income grew by a factor of 6. This is probably the most spectacular growth in income since World war II anywhere. The rise was reflected by the presence of many new appliances in almost all households, as well as a car. However, this incredible rise in material well-being was not followed by an increase in average satisfaction with life, in fact in 1958, average life satisfaction rated on a four-point scale was 2.7, while in 1991, after more than 30 years of increasing affluence, average life satisfaction still stagnate at 2.7 points.

Data from the general social survey reveal the same relationship in the United States. In the periods 1972-1974 and 1994-1996, overall income in the sample has increased from USD 17.434,00 to USD 20.767,00 (19%). But the overall mean happiness rating has even decreased slightly, from 2.21 to 2.17. Income in all deciles (except the third) has increased, but mean happiness instead have fallen or stayed constant in eight of the ten deciles.

What can be said about the aforementioned cases? One possible position is to disregard the descriptive evidence on the following grounds: Germany, Denmark, and Italy experienced substantial growth in real per-capita income as well as a (small) increase in reported satisfaction with life in the 1970s and the 1980s.

These arguments are, however, not very convincing, so the observation that income and happiness do not necessarily increase arm in arm can be taken as an indication that there is more to subjective well-being than income level alone and one of the most important processes people go through is that of adjusting to experiences. Human beings in fact are unable to make absolute judgments; instead, they are constantly making comparisons from the past or from their expectations on the future. Additional material goods and services initially provide extra pleasure, but it is usually only transitory, in fact greater happiness wears out when it is generated by material things, so we can say that satisfaction depends on

change and disappears with continued consumption. This process of hedonic adaptation induces people to aspire ever more.

So three important lessons can be illustrated from the aforementioned considerations. Firstly, the upward conformity of goals propels people to fulfill an ever increasing amount. They are perpetually discontent. When they have accomplished something, they need to accomplish significantly more. The hypothesis of rising desires holds for material goods and services as well as for some immaterial achievements. An advancement, for instance, prompts provisional satisfaction, yet in the meantime raises the desire of, and the goal for, further advancements. Secondly, needs are insatiable. The more one gains, the more one needs. The marginal utility of income is thusly no more characterized in this structure, on the grounds that the utility function changes with income. Thirdly, the vast majority imagine that they felt less glad in the past and hope to be more content later on. This asymmetry can be clarified by changing aspirations. At the point when individuals look back, they judge their living standards in view of current desires, and post-utilization bundles look moderately ugly. Nonetheless, as individuals anticipate their prosperity later on while encountering a higher material expectation for everyday comforts, they likewise erroneously apply current desires for the assessment and hope to be more content, not understanding that their aspirations will adjust overtime.

The impact on happiness of income can likewise be surveyed by comparing individuals and distinctive income at a specific point in time who live in the same nation. At first sight, individuals with higher wage have more chances to accomplish whatever they want: they can purchase more material merchandise and services. In addition, they have a higher status in society. Higher salary yields higher utility. On the other hand, the poor are troubled. All things considered, on the off chance that somebody doesn't care for a high salary and trusts that poverty makes one happy, he is allowed to discard his high pay at no expense. These assumptions are fairly convincing, and it has thusly been a cliché in traditional economics that higher salary is connected with higher utility.

Interestingly, the exploration on happiness has looked at the relationship in the middle of income and subjective well-being in an a great deal more separated way. There are numerous reasons why salary does not purchase satisfaction. Maybe the most crucial one is that it might be difficult to achieve happiness by acquiring and spending wage, truth be told individuals are truly looking for nonmaterial goals, for example, individual satisfaction or the significance of life and are baffled when material things neglect to give them; so happiness is in this sense "priceless", that is, it can't be accomplished by material factors.

The relationship between income and happiness at a specific point in time and in a particular area (country) has been the subject of a large literature. After running many regressions with a wide range of data, the general result seems to be that happiness and income are really positively related. But differences in income just clarify a fairly low extent of the distinctions in happiness among individuals. Different components are more important to explain why some people are more happy than others.

In any case, there is a discernible impact of wage on satisfaction inside of countries. For instance, in an examination of Easterlin, we consider the U.S. population's 1994 percentage distribution of happiness taking seven levels of income into account.

The proportion of individuals rating themselves to be "very happy" increases from 16 percent for those with incomes underneath USD 10.000,00 to 44 percent for those with wages above USD 75.000,00. On the other hand, the proportion of persons viewing themselves to be "not too happy" falls from 23 to 6 percent. The "mean happiness" rating ascends from 1.8 for those with incomes underneath USD 10.000,00 to 2.8 for those with wages above USD 75.000,00. In any case, a simple correlation between happiness and income is only 0.20.

Data for Europe from the Euro-Barometer Survey Series (1975-91) uncover a similar picture. There is a correlation between happiness and wage. For instance, 88 percent of those people located in the upper quartile of income define themselves to be "fairly satisfied" or "very satisfied", while only 66 percent of those in the lowest income quartile do likewise.

More refined regressions, considering countless free of wage that impact happiness, for example, age, sex, instruction, and health likewise locate a beneficial outcome on happiness, yet the impact is littler. Other monetary variables (specifically, unemployment and inflation) and noneconomic components (specifically, health) frequently apply a more prominent impact.

The impact of income on happiness is normally caught in a solitary relationship or with a single coefficient in regression models. In any case, a few researchers accept that the relationship in the middle of income and happiness is curvilinear. So in the event that we consider for instance the United States for 1981-84, at low levels of pay, an ascent in pay firmly raises well-being; yet once a yearly pay of about U.S. USD 15.000,00 has been achieved, an ascent in pay level smallerly affects joy. Higher salary is still experienced as raising well-being, yet a lower rate. For Switzerland, interestingly, the most noteworthy income beneficiaries even report to some degree bring down well-being than does the income group immediately below. So as to recognize any nonlinear relationship in the middle of wage and fulfillment with life, five salary classes are indicated in the estimation equation. The reference group incorporates individuals with a proportionality family salary for every month

lower than SFr. 2.000,00. Normal life fulfillment on a 10-point scale steadily increment with higher wage, from 7.98 up to a level of 8.49 for wages between SFr. 4.000,00 and SFr. 5.000,00. Be that as it may, for the 12 percent of the general population constituting the top wage workers, normal fulfillment with life falls back to a normal score of 8.45. These enlightening results are affirmed in the various regression analysis. Individuals in the second top salary class report, with a statistically significant higher probability of 9.8 percentage points, being totally fulfilled contrasted with individuals with a pay underneath SFr. 2.000,00. For the top classification, this peripheral impact is just 7.4. What has been said as much far alludes to rich nations. As opposed to the discoveries reported for Switzerland, particularly in poor nations, the impact of wage on subjective well-being absolutely does not stop after physical needs have been satisfied. Maybe, there is a stronger impact of salary on happiness. The most grounded relationship in the middle of's pay and life fulfillment measured so far is 0.45; it has been seen in the poor territories of Calcutta. In any case, additionally meets with a portion of the wealthiest individuals in the United States uncover a moderately higher level of well-being than is found in comparison group.

As pointed out, there might be numerous reasons why higher wage does not just interpret into higher satisfaction. Without uncertainty, a standout amongst the most imperative ones is that individuals compare themselves with different persons. It is not irrefutably the level of wage that matters most, but instead one's position with respect to other individuals. This measurement of social comparison has not been considered in this part as such. The thoughts concentrating on inclination changes because of the examination with, for instance, one's past utilization level or expected future wage are supplemented with ideas of interdependent preferences because of the correlations with important others.

In economics, Easterlin utilized the idea of aspirations as a casing of reference to clarify happiness. He recognizes that individuals with higher pay are, by and large, more satisfied, yet raising everyone's wage does not build everyone's satisfaction, on the grounds that, in contrast with others, wage has not improved. Numerous economists in the past have noticed that people contrast themselves with critical others as for wage, consumption, status, or utility. One of the most punctual was Thorstein Veblen (1899). He instituted the term conspicuous consumption to depict the condition of wanting to impress other individuals. The relative salary hypothesis has been planned and econometrically tried by James Duesenberry (1949), who sets an asymmetric structure of externalities. Individuals look upward when making correlations. The philosopher Bertrand Russell depicted this human proclivity in the accompanying lowing way: Napoleon begrudged Caesar, Caesar begrudged Alexander, and Alexander begrudged Hercules, who never existed. You can't, consequently, make tracks in

an opposite direction from jealousy by method for achievement alone, for there will dependably be in history or legend some individual significantly more effective than you are. Aspirations in this manner have a tendency to be over the level actually reached. The wealthier individuals force a contrary outer impact on the poorer individuals, yet not the other way around. Subsequently, savings rates rely on upon the percentile position in the salary distribution, and not exclusively on the income level, as in a conventional savings function. A noteworthy line of examination has been started by Bernard van Praag and Arie Kapteyn that develop an econometrically evaluated singular welfare capacity with a "preference shift" parameter that catches the propensity of material needs to increment as salary increments. They find that increments in salary shift aspirations upward yet that individual fulfillment nevertheless increases. The preference shift annihilates around 60 to 80 percent of the welfare impact of an expansion in salary; Fred Hirsch (1976), in his book *Social Limits to Growth*, underlines sizes the part of relative economic calling so as to wellbeing consideration regarding "positional goods," which, by definition, can't be enlarged in light of the fact that they exclusively depend on not being accessible to others. Case in point, just the rich will ever have the capacity to afford servants. This topic was taken up by Robert Frank, who contends that the production of luxury goods, for example, exceedingly costly sive watches or yachts, is a misuse of productive resources, as overall satisfaction is along these lines diminished instead of expanded.

A few researchers have reasoned that we are on a "hedonic treadmill" (Brickman and Campbell 1971): People adjust to enhancing monetary conditions to the point that no genuine advantage regarding higher happiness piness is achieved. Rather than expanding on adaptation level theory (Helson 1964), an alternate rendition utilizes the thought of a homeostatic process that has a tendency to restore a similar level of satisfaction under differing circumstances (Headey and Wearing 1992). Individuals subjected to life-altering occasions eventually come back to a level of well-being that is characteristic for their particular identities. Every individual's capacity to experience fulfillment is for the most part acquired. Subsequently, every individual might be on an individual treadmill that has a tendency to restore happiness to a foreordained point after every change of conditions. Conversely, the "satisfaction treadmill" depends on actuated changes in aspirations levels, rather than changes in hedonic experiences as on account of the hedonic treadmill. In any case, exact proof recommends that the two ideas of treadmill impacts can't be effectively unraveled. In addition, empirical evidence does not support the strong implications of any treadmill taken at face esteem. Even if accident victims report larger amounts of life fulfillment than anticipated by outside observers, their level is lower than that of a control

group and it once in a while just adjusts after a generally long time period. The same holds for clamor adjustment with high variability as with highway or airplane noise. In board interviews, Weinstein (1982) finds that occupants turned out to be progressively negative about their capacity to conform to the clamor of a recently opened roadway. In a longitudinal and cross-sectional examination, Cohen et al. (1981) watch that youngsters in noisy schools do less well on a cognitive assignment than kids in the control group and that adjustment to aircraft noise among them is low. Additional confirmation for moderate or feeble adjustment originates from investigations of individuals with chronic or progressive maladies or of individuals who lost a son or a life partner. In an investigation for Germany somewhere around 1984 and 1994, it has been demonstrated that life changes clarify 30 percent of the beginning difference in life fulfillment and that steady components, for example, individual abilities and social relations, account for a fraction of comparative size. Whatever is left of the variance is appointed to mistakes. This is proof of impressive portability on the happiness ladder in a society a long way from full adaptation and quick changes of aspiration levels. This leads us back to the observational proof that a higher position in the salary distribution raises happiness but the amount is little, particularly contrasted with expansions caused by different influences on satisfaction. There is most likely individuals compare themselves with other individuals and don't utilize absolute judgments. . In any case, it is significant to know with which other individuals such a correlation is attempted. In an investigation of 10,000 British workers, two economists (Clark and Oswald 1996) recognized the reference group to be individuals with the same individual qualities for instance, sex, instruction, and employment. They finish up in concurrence with numerous different studies that the total salary level has little impact on happiness. Interestingly, relative salary matters, in fact the lower the salary of the group one contrasts oneself and, the more fulfilled individuals are. On the off chance that some companion family unit part earns more, fulfillment is lower.

A more straightforward and clear approach to study income correlations is to look at gender differences. As ladies are paid not as much as men are, notwithstanding for the same work, implying that there is gender discrimination, ladies ought to be less happy than men are. Be that as it may, this is negated by the empirical discoveries. Ladies report to be similarly happy or considerably more content than men are, notwithstanding controlling for a wide range of different impacts on happiness. This outcome is without a doubt confusing. Why do ladies report being more content than men despite the fact that they are victimized? One answer may be that ladies feel a commitment to (falsely) show that they are glad regardless of the possibility that they are most certainly not. In perspective of the high legitimacy of the information on satisfaction this clarification is not exceptionally persuading.

A superior clarification may be that ladies contrast themselves with other ladies and after that feel entitled for less pay than men. With the emancipation of ladies, this correlation is likely to have moved. Progressively, ladies contrast themselves with men, particularly on the off chance that they perform the same work. At that point they are disappointed with what they procure and report lower happiness.

In reality, young, better-instructed proficient ladies and those in male-commanded working environments report no higher work fulfillment than men do. Additionally, the paradox of the happy yet modest paid lady is by all accounts a simply Anglo-Saxon phenomenon. It is predominant just in the United States, Great Britain, New Zealand (and Hungary). In different nations, for example, Spain, Japan, Denmark, France, and Norway, the

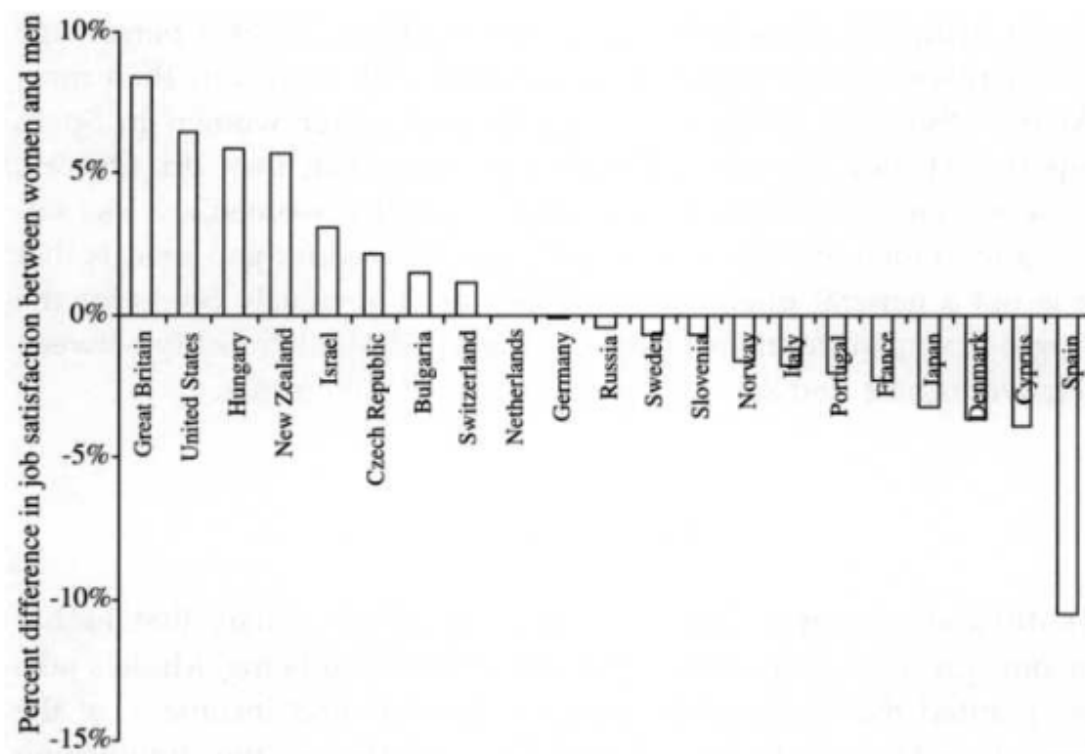


Figure 1. The gender gap of job satisfaction. The values indicate the percentage difference between woman and men. A positive value thus indicates that females are more satisfied with their jobs than man.

opposite happens, in fact men report higher employment fulfillment than ladies do, which relates with their higher wages. This is appeared in Figure 1. Figure1 demonstrates the gender gap of work fulfillment for 21 nations. It is measured as the distinction between the rates of females and guys who report above-normal fulfillment with their principle occupations (on a seven-point scale). In every one of the nations considered, the share of fulfilled male and female workers is above 60 percent aside from in Hungary and Russia. The positioning of the gender distinction in employment fulfillment demonstrates that the

fulfillment gap in women's favor is biggest in Great Britain. More than 8 percentage more ladies report toward be fulfilled by their occupations than men. At the other end of the scale, altogether less ladies in Spain report that they are fulfilled by their employments than men do. By and large, there are more nations in the sample in which ladies are less fulfilled than men are. Along these lines, a close look at the gender gap shows that it is not a general phenomenon. While it clearly holds for the Anglo-Saxon world, there is no such incomprehensible relationship between relative income and fulfillment in numerous different nations.

Traditional economics expect, as usual, that higher salary delivers more utility and individual prosperity. Models underestimate the relationship between utility U and salary Y of the structure $U = U(Y)$, with $U' > 0$ and $U'' < 0$ -that is, the reducing marginal utility of wage. This methodology has the benefit of straightforwardness. It is taken to hold for all connections in the middle of wage and happiness, be it crosswise over nations, after some time, or between people inside of a nation at a given point of time.

The aftereffects of happiness examination change this picture. They give a more refined perspective by presenting extra angles that can never again be neglected if one needs to manage empirical realities. See that happiness research does not just present new variables, but rather totally changes the structure of the relationship in the middle of income and utility. Happiness research clarifies that traditional economics' claim that the fundamental relationship in the middle of salary and happiness holds regardless of whether one analyzes nations, time, or persons is unfounded. In any case, the recommendations of accepted economics can be maintained for specific conditions. Looking at crosswise over nations, the reality of the matter is that salary and joy are emphatically related and that the marginal utility falls with higher wage. Higher salary unmistakably brings happiness up in developing nations, while the impact is just little, in the event that it exists, in rich nations. Economists are correct when they dismiss the idea of "poor but cheerful nations" once in a while progressed by romantics. The circumstance is totally diverse for the relationship in the middle of salary and joy over time: increasing per capita wage has not brought singular prosperity up in the long run. Experimental confirmation consequently is inconsistent with positive marginal utility of wage. The experimental proof can well be clarified by presenting an extra hypothetical idea outsider to conventional economics: aspiration levels acclimate to the rise in pay. Individuals get used to their higher pay level, which then delivers less satisfaction for them than they would appreciate if no such adjustment had occurred. A second essential hypothetical idea that is helpful for clarifying the experimental confirmation where salary and joy levels between individuals are concerned is relative wage. People don't esteem total lute salary, yet

contrast it with the wage of important others. This opens up the issue of what persons or groups one compares oneself with. The discussion of the specific instance of ladies proposes that the examination group does not as a matter of course stay consistent, but rather might change as the consequence of progress in income experienced. Considering correlations of income quickly demonstrates that higher salary does not just create higher utility. Be that as it may, inside of countries a beneficial outcome wins, and in poor nations the proof focuses to a much bigger impact of a higher relative income level on happiness between persons. Happiness research hence creates new bits of knowledge into the exceptionally old and focal relationship in the middle of salary and prosperity. In general, the thoughts with respect to heterodox analysts of presenting changing desire levels and wage correlations between individuals are borne out. Be that as it may, as of not long ago they depended to a substantial degree on hunches. Interestingly, happiness research has illustrated persuading exact proof utilizing progressed econometric techniques.

2.2 Employment

Most economists consider unemployment to be a grievous occasion to be maintained a strategic distance from however much as could reasonably be expected. To end up unemployed is thought to be costly and, most importantly, involuntary. Government ought to intercede with a specific end goal to raise the total demand for goods. To create the extra goods, more work would be required and unemployment would fall. This perspective is behind Keynesian hypothesis, which commanded the field in the 50s and 60s and is currently encountering a rebound. In any case, there are likewise financial experts who hold very much an alternate perspective. By new traditional macroeconomics unemployment is voluntary. Individuals leave employment since they discover the weight of work and the pay paid ugly contrasted with being unemployed and getting unemployment advantages and recreation. Involuntary unemployment is a disequilibrium phenomenon and is generally short-term, until people and firms have balanced. Government intercessions to lift demand result in higher future inflation and ought to in this manner be kept away from. As individuals be unemployed, since they hope to be better off, it ought not influence their happiness.

Few politicians, social researchers, or laypeople subscribe to this perspective. It is taken to be cynical, as it appears glaringly evident that workers are dismissed and that unemployment is a shocking state to be in. Nonetheless, by dissecting the unemployed as

having settled on a decision between options, natives, the economics of the new classical influence have attracted regard for specific angles that are difficult to debate:

- There are a few laborers who lean toward not to work and to appreciate the advantages of a government managed savings framework, which in a few nations absolutely adjusts for the loss of pay.
- Much unemployment is momentary. The unemployed soon look for some kind of employment once more, regularly in a more gainful segment, and earn higher wages than some time recently. Rejecting laborers as a response to request and cost contemplations additionally implies that individuals will be employed once more. At the point when workers can't be laid off for legal reasons, firms are additionally hesitant to contract them.
- Many individuals who are formally unemployed are indeed working in the shadow economy where they are not troubled by taxes and social security contributions. As of late, this part of the economy has achieved an impressive size in numerous nations (Norway, Greece, Italy, Belgium) for example.

In each of the three cases, it is not absurd to accept that the unemployed don't endure, and that some of them are even very fulfilled by their circumstance. The issue of whether, and to what degree, the unemployed are dissatisfied satisfied stays uncertain. Therefore, happiness research on unemployment is quite compelling and significance.

In this chapter, four questions and their ramifications will be discussed:

- What is the degree of happiness of an unemployed individual?
- How does general unemployment in an economy influence happiness?
- What affects work satisfaction?

How specific individuals are influenced when they get to be unemployed should be investigated with the assistance of a microanalysis that looks at individual information. Such a study (Di Tella, MacCulloch, and Oswald 2001) was embraced for 12 European nations over the period 1975-91, utilizing Euro-Barometer information. In a cross-section test, the "classical" life fulfillment inquiry was asked: "On the whole, are you very satisfied, fairly satisfied, not very satisfied, or not at all satisfied with the life you lead?" The investigation which controls for an extraordinary number of different determinants of happiness, for example, wage and education finds that the self-proclaiming satisfaction of those individuals being unemployed is much lower than that of employed persons with generally comparative attributes. The loss of satisfaction experienced by unemployment adds up to 0.33 units in the already specified happiness scale, extending from 1 ("not all fulfilled") to 4 ("very fulfilled").

Study for Switzerland goes to a fundamentally the same result. The outcomes in Table 1 demonstrate that unemployed individuals report, overall, a fulfillment level of 6.56 on a 10-point scale, contrasted with a normal score of 8.21 for employed individuals. The share of unemployed people stating to be "completely satisfied" (satisfaction score of 10) is 20.6 percentage points lower than in the group of employed persons. Comparably, the likelihood of having an unemployed individual expressing the most astounding fulfillment level is 20.6 rate point lower than the likelihood for an employed one. This analyzes to other peripheral impacts of, for instance, 3.1 percentage points between individuals with low and middle education, and 13.3 percentage points in the middle of healthy and unhealthy individuals. Unemployment consequently has a significant contrary impact on the happiness of the general

| | <i>Descriptive Statistics</i> | <i>Weighted Least Squares</i> | <i>Weighted Ordered Probit</i> | |
|--------------------------------|-------------------------------|-------------------------------|--------------------------------|--|
| | <i>Mean</i> | <i>Coefficient (t-Value)</i> | <i>Coefficient (t-Value)</i> | <i>Marginal Effect for Score of 10</i> |
| Employed | 8.21 | Reference group | | |
| Self-employed | 8.31 | 0.013 (0.18) | 0.051 (0.94) | 0.018 |
| Unemployed | 6.56 | -1.615 (-4.84) | -0.815 (-4.93) | -0.206 |
| Student | 8.16 | 0.031 (0.22) | -0.001 (-0.01) | -0.001 |
| Housewife | 8.38 | 0.158 (1.87) | 0.13 (2.30) | 0.045 |
| Retired | 8.23 | -0.294 (-2.84) | -0.164 (-2.65) | -0.055 |
| Other employment status | 8.37 | 0.127 (0.65) | 0.119 (0.89) | 0.042 |
| Demographic factors | | Included | Included | |
| Income level | | Included | Included | |
| Institutional factor | | Included | Included | |
| Observations | | 6,137 | 6,137 | |

Table 1. Employment status and satisfaction with life in Switzerland, 1992-94

population encountering it. Table 1 shows, in addition, the fulfillment with life that is associated with various types of employment status. There is no sizable distinction in mean fulfillment between the seven classifications of employment, with the exception of individuals being unemployed. In the event that it is controlled for related impacts, housewives are more content, and retired individuals are less happy than employed individuals. Regardless of the possibility that a great deal of working individuals can't hold up to be retired, for a few

individuals the essential change in their method for living is bound up with diminished prosperity, perhaps because of lost important activities.

Various different studies for a wide range of nations and time periods have likewise found that personally encountering unemployment makes individuals exceptionally despondent. In their study for Britain, Clark and Oswald (1994, p. 655) abridge their outcomes stating that joblessness discouraged well-being being more than whatever other single characteristic including essential negative ones, for example, separation and divorce." Korpi in his study for youthful Swedes goes so far saying that unemployment has an unambiguously negative impact on prosperity. Note that every one of these outcomes allude to the pure impact of being unemployed. The lower pay level and additionally other backhanded impacts that might, however require not, run with specifically being unemployed are kept steady. They can, obviously, be included, contingent upon the issue one needs to analyze. Consider, for instance, the misfortune in pay because of being unemployed. In a few nations it is after tax close near zero; that is, spending power is not recognizably influenced and no adjustment is required. In different nations, for instance Spain and Italy, the unemployed do in fact endure a considerable loss in wage. In Switzerland, to give a solid sample, contingent upon past compensation and on circumstances (for instance, whether one has kids or is disabled), unemployment advantages make up either 70 or 80 percent of the past pay. With a salary level of 70 or 80 percent contrasted with past paid work, the likelihood that an unemployed individual expresses that he is "totally satisfied" is 20.6 percent lower due toward the pure unemployment impact. On the off chance that the wage level is not controlled for, the general impact on satisfaction of getting to be unemployed is assessed. In the example for Switzerland this impact is less 21.5 percent. On the off chance that the pure impact of being unemployed is subtracted from the general impact, an estimation of the long term impact because of a lower salary level is uncovered. This partial effect accounts for minus 0.9 percentage points. In any case, the long term impact of a lower wage level does not catch the financial shock caused by unemployment. By the loss-aversion thought, unemployed individuals experience the unpleasant effects of the misfortune in wage in the short run. So, if unemployed people are compared with other people who suffer from a worse financial situation than in the previous year, 33% of the reduced well-being can be accounted to the income shock. In this manner, 66% of the general negative impact of unemployment on happiness still remain and must be clarified by nonpecuniary costs.

The insights picked up in conclusion show that unemployed persons endure significant cost as a consequence of their destiny. The drop in satisfaction might, to a huge degree, be credited to mental and social components:

- **Psychic cost:** unemployment produces depression and nervousness, and results in lost self-regard. Particularly for individuals exceptionally involved in their work, not having a job is an overwhelming blow. It has been built up in various studies that the unemployed are in more awful mental and physical health than individuals with work. Subsequently, they are liable to a higher death rate, all the more frequently submit suicide, and are more inclined to devouring substantial amounts of alcohol. Their own relationships are likewise more strained. As work is by and large more fundamental for men, unemployment makes men more unhappy than ladies. Individuals younger than 30 years old suffer less, likely in light of the fact that they realize that they will experience less difficulty getting another position and can change all the more effortlessly to new circumstances. To be sure, men somewhere around 30 and 49 years old are most troubled, and ladies more than 50 years old are slightest upset from being unemployed. Distress is most noteworthy for the more educated. This can be clarified by the opportunity cost of the higher salary forgone. The psychic cost is significantly higher for those being discharged for the first time. Interestingly, persons who have been unemployed all the more regularly in the past suffer less to some degree they get used to being unemployed.
- **Social cost:** being unemployed has a stigma connected to it, especially in a world in which one's work basically characterizes one's position in life.

It is also interesting to consider the reverse causation, namely that unhappy people do not perform well and therefore are laid off while happy individuals are more fitted to work life, which makes it less likely for them to lose their job. The subject of reverse causation, because of a selection bias, has been examined in numerous studies with longitudinal information, previously, then after the fact specific workers lost their occupations for instance, because of the closure of a plant. There is confirmation that despondent individuals are in reality not performing great in the work market, but rather the primary causation obviously keeps running from unemployment to happiness.

The already said investigation of 12 European nations over the period 1975-91 observes that-keeping every single other impact steady a one-percentage point increment in the general rate of unemployment from 9 percent (the European mean) to 10 percent decreases expressed life satisfaction by 0.028 units on the four-point scale connected. This impact is of impressive size. This little ascent in unemployment is comparable to moving more than 2 percent of the populace descending starting with one life-fulfillment class then

onto another for instance, from "not very fulfilled" to "not at all fulfilled." The general impact of unemployment on social well-being can be computed by including the misfortune experienced by those persons being unemployed to the general impact of unemployment. Think about again as a one percentage point increment in unemployment. It was demonstrated that the unemployed experience a fall of 0.33 in their happiness scale. This figure must be increased by the 1 percent of the populace who have been sufficiently unfortunate really to end up unemployed: $0.33 \times 0.01 = 0.0033$. Added to the general impact of a one percentage point unemployment increment of 0.028, it prompts an aggregate reduction of 0.0313.

This computation must be taken lightly. One purpose behind being watchful is that there might be different correlations in the middle of individual and more general unemployment, which might thusly influence the assessment of happiness. A vital interaction alludes to reference groups. Just like the case for money, people have a tendency to assess their own circumstance in respect to different persons. For most persons, unemployment brings down their happiness less if they are not the only one with this specific destiny. At the point when unemployment is seen to hit numerous persons one knows or knows about, both the psychic and the social impacts are relieved. Self-regard is better safeguarded on the grounds that it gets to be evident that being out of an occupation is less because of one's own flaw and more because of general developments in the economy. Disgrace and social disapproval are less predominant if unemployment hits numerous other individuals in the meantime. Keeping in mind the end goal to experimentally test the impact of reference groups on reported well-being, happiness scores are regressed on three sorts of explanatory variables:

- Personal unemployment
- Unemployment among a reference group
- An interaction variable combining personal and reference group unemployment

Utilizing as a reference group the employment condition of one's partnere or, then again, the region an individual lives in, such a happiness function has been assessed for British data over the period 1991-96, again keeping every single other impact steady (Clark 2000). As in practically every single past studies, the unemployed are significantly more disappointed than individuals with an occupation, and the general level of unemployment brings down satisfaction. Conversely, the unemployed to be sure endure less when a bigger extent of partners, or other individuals living in their region, are likewise out of work. The same result is come to when general unemployment in the economy is taken as the perspective.

Unemployed individuals' well-being, in addition, relies on upon the quality of the social norm to work. Social association of unemployed individuals with other group individuals, their constrained reference group, has the impact of demonstrating to them how they are expected to behave, and standard behavior is upheld through social sanctions. In an estimation crosswise over Swiss communities, it has been demonstrated that the more grounded the social standard to live off one's own income, the lower is unemployed individuals' reported fulfillment with life.

Reference groups are surely of major significance for demonstrating the degree to which individuals are upset by their own particular unemployment. Nonetheless, what group one alludes to is not given, but rather can to some degree be chosen. Individuals out of work tend to connect with other individuals without work, somewhat in light of the fact that they have time to do as such and partly on the grounds that they retreat from community life. It is likewise realized that marriages have a high danger of separating when one of the partners is unemployed. In every one of these cases, the meaning of the reference group conforms to one's labor market status. Causation then does not run unambiguously from the reference group to the assessment of unemployment regarding happiness.

Work or occupation fulfillment is one specific space of general well-being. Different spaces are, for instance, fulfillment with housing, with health, and with the natural habitat. General fulfillment with life all in all is unequivocally related with the different domain satisfaction. It has even been guaranteed that life fulfillment is a sum of the fulfillments picked up in the different areas. Be that as it may, once more, mutual interaction must be considered, and causation might go in both directions. Individuals with, say, high employment fulfillment likewise have a tendency to be content with their life in general; individuals who are for the most part happy additionally have a tendency to be fulfilled by their work. Research recommends that the impact of life fulfillment on employment fulfillment is fairly more grounded than the different way. In perspective of the focal part work plays in today's general public, work fulfillment is of incredible interest for itself. The separate inquiry in across the nation overviews is "All things considered, how fulfilled are you with your occupation?" Figure 2 demonstrates that, in 1997, in numerous nations, among them Denmark, Switzerland, Spain, the Netherlands, and the United States, no less than 50 percent of the workers reported that they feel very fulfilled or even totally fulfilled with their employments. Workers in East European nations, including East Germany, and Britain, France and Italy, were to some degree less fulfilled by their employments, however even there, well more than 33% are either totally or very fulfilled. The most elevated amount of persons demonstrating that they are dissatisfied with their occupations was in Japan (15

percent), trailed by Russia (14 percent), Britain, and France (11 and 10 percent, respectively). These and other information have been investigated in many studies. It is essential to recognize two very diverse angles identified with work:

-Intrinsic features. They relate to the conduct of work itself. Examples are

- The opportunity for personal control
- The possibility of utilizing one's skills
- The variety of work tasks
- Supportive or controlling supervision
- Opportunities for personal contacts

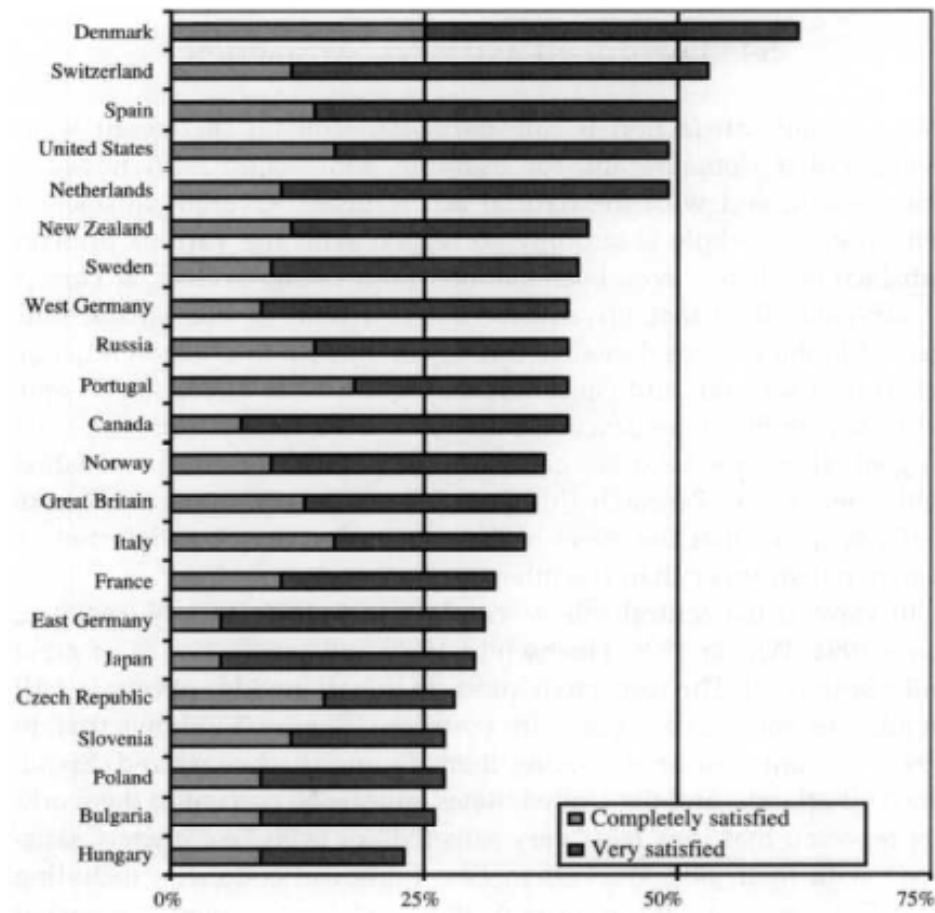


Figure 2. Job satisfaction in 1997. Data from International Social survey Program 1997

-Extrinsic features. They refer to the background of the work conditions. Examples are

- Pay, including fringe benefits
- Working conditions
- Job security
- Physical security at work

- Social status, for example, social rank or occupational prestige.

The two components of employment fulfillment are frequently emphatically related, yet the degree differs enormously as indicated by the particular context. A few researchers affirm that intrinsic elements fulfill more successfully innate needs than extrinsic elements and in this way contribute more to individual subjective well-being. Nonetheless, all the more vitally, intrinsic and extrinsic employment fulfillment are connected because of systematic motivational reliance. Crowding hypothesis recommends that external mediation is felt to be controlling by the occupation holder. Interestingly, if the external intercession is taken to be steady, the occupation holder's intrinsic inspiration and fulfillment are raised. Crowding out and crowding in have been recognized in many research facility tests furthermore real life settings, including within firms. For economics, the results of occupation fulfillment are of fundamental significance. Specifically, for firms and different associations, it is significant to know whether happy employees are additionally productive workers. As a rule, general occupation fulfillment and performance are positively related. It makes sense that disappointed individuals don't function admirably, force high expenses on the businesses by being all the more regularly missing from the occupation, and change employments more as often as possible than other individuals. Employees encountering little fulfillment from their work and having low intrinsic inspiration can't be relied upon to draw in themselves in the association and be inventive and creative. This is imperative in light of the fact that, in many occupations, the employers can screen their employees just in part; it is consequently important to depend, in any event partly, on the workers' intrinsic inspiration. Disappointed employees additionally have minimal incentive to ponder whether the undertakings they perform are sensible for the objectives of the association they work in. Individuals with high employment fulfillment are readied to attempt pro-social exercises or take part in extra role behavior; that is, they comply with what is normal regarding organizational citizenship conduct.

Work is unquestionably not just attempted on the grounds that it is paid (as many economic models assume). Maybe, it gives intrinsic fulfillment, which is uncovered by the way that numerous individuals are readied to undertake unpaid work. For some individuals, volunteer and philanthropy work is a wellspring of extraordinary fulfillment. Table 2 reports the different advantages gave by humanitarian effort. Charitable effort fulfills natural needs since it gives positive intrinsic work features. The survey results in Table 2 uncover that volunteers welcome the work all things considered and the chance to see its outcomes, and that gives them a feeling of individual accomplishment. Though inside opportunities for

| | <i>Very Important</i> (%) | <i>Fairly Important</i> (%) | <i>Not Very Important</i> (%) | <i>Not Important at All</i> (%) | <i>Don't Know</i> (%) |
|--|-------------------------------|---------------------------------|-----------------------------------|-------------------------------------|---------------------------|
| I meet people and make friends through it. | 48 | 37 | 11 | 4 | 0 |
| It's the satisfaction of seeing the results. | 67 | 26 | 5 | 2 | 1 |
| It makes me feel less selfish as a person. | 29 | 33 | 24 | 13 | 2 |
| I really enjoy it. | 72 | 21 | 6 | 2 | — |
| It's part of my religious belief or philosophy of life to give help. | 44 | 22 | 9 | 23 | 2 |
| It gives me a sense of personal achievement. | 47 | 31 | 16 | 6 | — |
| It gives me the chance to get a recognized qualification. | 3 | 7 | 15 | 74 | 1 |

Table 2. The Benefits of doing volunteer work in the United Kingdom

individual contacts are imperative, the gathering of externally applicable qualifications is most certainly not. However, having fulfilled workers is not as a matter of course a gift for a firm. Proof proposes that, past a specific level, high occupation fulfillment is no more helpful for the company's objectives. The employees have a good time at work, however don't inexorably do the diligent work additionally required. As on account of other relationship, the causation between occupation fulfillment and work execution is less clear than it may take a gander at first sight. Reverse causation likewise matters: high performers feel content with their occupations and with life by and large. Conversely, the individuals who are less productive than others have a tendency to be easier disappointed with their work and lives.

We have propelled a great deal of confirmation that, by and large, work is frequently experienced and reported as being highly fulfilling. In the meantime, leisure is likewise positively associated with satisfaction. Economic theory appears to have drawn the wrong refinement between work making disutility and leisure giving utility. Maybe, individuals need

to be sufficiently challenged (that is, they wish to perform), yet they don't wish to be overtaxed. In this manner economics ought to focus on distinguishing between the two. Among the leisure exercises that have been examined as giving specific fulfillment are sports exercises, which decrease depression and uneasiness, and additionally different group exercises, for example, being a part of a social club, a musical or theatre group, or a sports group. The most well known leisure activity these days is staring at the TV. With some restraint, it can add to fulfillment. Be that as it may, an excessive amount of staring at the TV is corresponded with unhappiness. The causation is open on the grounds that those persons having a tendency to invest the most energy in front of TV set don't know what else to do.

Happiness research provides clear results as for the impacts of unemployment on well-being. The discoveries appear differently in relation to the thought appreciated by a few financial specialists that unemployment is voluntary so no utility loss is to be expected from being unemployed. All studies utilizing happiness data find that unemployment causes real dependency for the persons influenced. The costs emerging are both mental and social in nature. The last needs to do with the way that one's work characterizes one's position in life. Not having work prompts isolation, which makes it troublesome or difficult to lead a satisfying life. For those in employment, work fulfillment is a critical piece of life fulfillment. The big fall in happiness brought on by unemployment is not exclusively because of loss of wage. In reality, the distress happens regardless of the possibility that compensates for the decrease in wage and in addition for different variables that might in a roundabout way be associated with unemployment. Satisfaction research proposes a much more fundamental change in standpoint contrasted with the traditional economic methodology. The thought that work produces disutility, verifiable and regularly unequivocal in economic models, is rejected. Maybe, the inverse is true: having work expands happiness, while not having work makes for misery. Happiness examine along these lines opens up a more practical and, in the meantime, more others conscious perspective of work as a focal action in life. Economists ought to begin from this premise and at exactly that point consider under what conditions work is seen to be a weight. The discoveries reported here offer us to get a more refined perspective of the part work plays in the economy and in society. Two aspects are particularly relevant:

- Unemployment has two thoughtfully diverse impacts: it brings down the happiness of those persons who really lose their occupations and, for different reasons, additionally makes trouble employed persons since they feel debilitated, dread social unrest, or are sad for the sad individuals out of work.

- Unemployment should be found in a more extensive setting than ordinarily considered in economics. How troubled the unemployed are mostly relies on upon their environment. The destiny of being unemployed is less discouraging when one contrasts oneself and other people who are likewise out of work. Yet, similar to the case for income, the reference group is not given, but rather relies on upon one's own particular unemployment history. Interestingly, being unemployed is a heavier trouble in a social setting in which having a job is a solid social standard.

2.2 Inflation

Theoretical economics talks about the costs of an expansion in the general price level inflation looking at the qualification in the middle of foreseen and unforeseen inflation. At the point when price increments are foreseen, people can acclimate to them with little if any cost. Be that as it may, when cost builds come as a shock, no such adjustment is conceivable. People's alteration is all the more exorbitant when expanded inflation causes higher variability in aggregate inflation and in relative prices. Individuals need to put significant exertion in informing themselves about, and protecting themselves from, the normal price increments. They might make a wide range of mistakes for example, thinking little of the degree of future expansion, or how a specific price changes in correlation with different prices. The welfare costs of increasing prices can be caught by computing the zone under the money demand curve, the essential thought being that conserving on the utilization of currency forces costs by diminishing well-being. Taking into account this technique, the cost of a 10 percent yearly inflation has been computed to be between 0.3 percent and 0.45 percent of national income. This is practically nothing, and it proposes that an anti-inflationary approach is infrequently justified regardless of the cost it causes by raising unemployment and creating real income losses. Numerous economists would firmly differ with the previous conclusion. They bring up that steady costs are an essential for a sound economy, at just when costs are steady can actors carry on rationally. Most economists take a transitional position. The photo rising up out of the current empirical evidence on the costs of inflation is in reality far from clear. The common opinion of economists has a tendency to be that widespread inflation is extremely hazardous for the economy, though steady (subsequently more unsurprising) but low inflation, 1-5 percent for every year, is not seen as creating any real problems. The populace

appears to feel in a different way. A broad survey of the United States, Germany, and Brazil finds that individuals are worried about issues associated with inflation that contrast from those making concern economists. Individuals appear to dismiss the way that expansion for the most part additionally expands their own nominal income. They focus on the conceivable mischief, however not on the conceivable advantages, that inflation may convey to their way of life. Also, the study distinguishes different concerns by and large ignored by economists. One is that inflation permits opportunists to exploit others in an unfair and unscrupulous way; another is that inflation undermines the ethical basis of society. Numerous fear that inflation produces political and monetary turmoil and a loss in national renown because of the falling exchange rate. Happiness research finds that inflation deliberately and particularly brings down reported individual well-being. The increase of inflation can be analyzed in several countries. Of most interest is the investigation of twelve European nations over the period 1975-1991. The mean rate of inflation was 7.5 percent yearly. Average satisfaction is calculated on a four-point scale that report "not at all satisfied" a value of 1, "not very satisfied" a value of 2, and so on. If individual socio-economic aspects and unemployment rate remain stable, an increment in the inflation rate by 1 percentage point, for example from the mean rate of 8 percent to 9 percent yearly, is estimated to reduce average happiness by 0.01 unit of satisfaction. So, an increase in the inflation rate by 5 % decreases subjective well-being by 0.05 unit. This effect is substantial, albeit not very large. It means that 5 % of the population is shifted downward from one life fulfillment category to the next lower one (from being "very satisfied" to "fairly satisfied" for example).

In studying the tradeoff in the middle of inflation and unemployment, the outcomes reported on the effect of unemployment on happiness can be combined with the results concerning inflation just considered. The question is: by how much, on average, must a country reduce its inflation in order to tolerate 1% increase in unemployment? Over the relevant range, happiness is assumed to depend linearly on the two economic variables, and the estimate controls for country fixed effects, year effects, and country-specific time trends. A 1% increase in unemployment compensates for a 1.7% decrease in inflation. Therefore, if unemployment rises by 5 % , inflation must decrease by 8.5 % to keep the population equally fulfilled. The "Misery Index," which only sums the unemployment rate to the inflation rate, attribute the same weight to each factor. This depicts a distorted picture of the tradeoff in the middle off unemployment and inflation by estimating too little weight to the effect of unemployment, relative to inflation.

2.3 Inequality

The market determines a distribution of income considered unacceptable by the citizens in several countries. Consequently, there is a strong demand for redistribution by the government. Therefore, modern governments engage in large-scale redistribution. This tendency increased remarkably in the twentieth century. At the end of the XIX century, the share of government transfers was less than 1 % of GDP in both Europe and the United States. At the end of the XIX century, this share had incremented to 14 percent of GDP in the United States, and to 22 % in Europe. This difference can be consistently attributed to the larger increase of government transfers in Europe than in the United States. Similarly, it has been shown that Europeans, with the exception of the Norwegians, prefer unemployment benefits higher than those of Americans. The effect of inequality in wage on happiness differs substantially between Europe and the United States . Income inequality is captured by the Gini coefficient and happiness by the Euro-Barometer Survey and the US General Social Survey. Europeans appear to strongly dislike inequality in income, while in the United States there is minimal correlation between state-level inequality. Alesina, Di Tella, and MacCulloch (2004) disaggregate this result within two dimensions: rich and poor and self-defined right- and left-wingers. In Europe, the poor suffer a decrease of happiness from inequality, but the rich are not affected. In USA, even the poor remain most unconcerned about inequality. Those who consider themselves left-wingers show a marked distaste for inequality, while those who consider themselves right-wingers are not affected by it. This effect is so marked in the United States that only rich left-wingers are negatively influenced by inequality. According to this research only Europeans have their happiness negatively influenced by inequality, in fact no such effect in the United States can be explained by differences in the extent of upward social mobility namely most Americans believe in the possibility of moving up the social and income ladders, so a large inequality in income indicates high opportunities in the future. On the other hand Europeans believe that social mobility is low and that present income is a good indicator of future income; thus, individuals don't appreciate an unequal income distribution. Sixty percent of Americans believe that the poor are lazy rather than just unlucky, whereas only 26 percent of Europeans think so. It is not clear whether the thought that social mobility is greater in the United States than in Europe is correct because unclear data make it difficult to draw any certain conclusions.

Capturing the effect of income inequality on happiness is made more complicated by several effects transmitted by other variables, for example inequality may affect individual

fulfillment indirectly through health and income and lower inequality increases health and increases wage, which consequently increases happiness.

3.HAPPINESS AND POLITICS

Politics usually runs within the rules expressed by the constitution. Political actors, such as the government, the voters and public bureaucracy, take the rules of the game specified in the constitution as given, and pursue their interests within these confines. Therefore, for example, the political parties in a representative democracy proceed from the assumptions that the parliament decides which parties are able to form the government, and that the parliamentary majority decides the laws. Thus, in order to come to power, a political party must grab the highest share of the citizens' votes and the voters on the other hand know that once they have voted in the parliamentary elections, they have no other constitutionally established direct say in political decision making. This part takes the basic framework of the political system the constitution as given looking at how the behavior of political actors in the current politico-economic process affects people's fulfillment.

3.1 Happiness policies

Economists' survey on happiness has given a substantial number of interesting insights into the determinants and the nature of happiness. These are some of the recurrent results:

- Most people, during most periods, in most countries, are satisfied with their lives.
- Economic conditions such as income, price stability, employment, fair income distribution are important determinants of fulfillment.
- Non material aspects like family, friendships, other social ties matter greatly for happiness.
- People tend to adjust to their basic level of happiness after positive and negative life events, but the speed and the degree of such adjustment differ depending on whether it relates to wage, employment or other areas.
- Individuals are status seekers and always compare themselves to others.
- Marriage makes people happy but not for long.
- Children lower parents' life satisfaction, but make them happy once they leave the household.
- Extensive television viewing makes active people less happy.

- Helping others by volunteering and by giving financial support increases fulfillment.
- People make systematic errors about their happiness with respect to both the past and the future (misprediction); they are subject to weakness of will.
- Procedural utility matters to happiness above and beyond outcome utility.
- Culture has little effect on the marginal effect of the various determinants of happiness.
- Political institutions-in particular, opportunities for citizens to participate via democracy and federalism-are significant determinants of life satisfaction.
- The value of public goods can be measured (using the Life Satisfaction Approach).

On the basis of these results economists have suggested various areas for policy reforms. A part of these policies are discussed below.

Standard economic theory assume preferences to be constant, and thus doesn't envisage a policy to change preferences. Even the few standard economists who accept that preferences may change still assume that each individual is the best judge of his or her interests. In contrast, Happiness Research demonstrates that preferences are endogenous and that people may make systematic errors in taking decisions. Easterlin (2003) argues, therefore, that serious attention should be paid to decision-making measures as contributing to more informed preferences. It is rather bland merely to advise individuals that they should take into account the consequences of hedonic adaptation and social comparison on their aspirations. But, it's not easy for individuals to correct their prediction of their own future preferences. There is no simple learning process, so it is not clear to what extent such a policy would work. If this policy intervenes with people's rights to make their own decisions, major difficulties arise. Many people believe that advertisements aimed at children should be banned, but other, more invasive government interventions have also been suggested as part of happiness policy.

Developed economies are characterized by marked inequalities between employed and unemployed people. In the European Union, approximately 10 % of the work force is unemployed; precisely in Eastern Germany this data is closer to 20 percent, and in some areas it is above 30 percent. Most unemployed individuals would like to work. People suffer a very high loss of life fulfillment while unemployed, even when compensated for their loss of income. Furthermore, a considerable share of retired people would like to continue working in some way, but are forced to stop. This happens particularly in the public sector, with its rigid

employment rules. On the other hand, a large number of workers would like to work fewer hours per week and per year, even if they had to forgo some of their income. Often a person must take a full time job with narrowly prescribed working hours. Because these restrictions strongly impair their choices, people are unable to reach the best possible arrangement of working hours. Many employees feel systematically overworked, tired, and stressed. Increased flexibility in choosing work time is therefore a good method to increase life fulfillment. One way to achieve this flexibility is by offering more part-time jobs, but among the major impediments to such a move are the present taxation and social security arrangements. Because many of the same social security and employment burdens are imposed on part time workers as on full-time ones, both workers and firm find partial employment disadvantageous. Although life satisfaction would increase if work could be distributed better, this is not an easy goal to achieve. In fact work cannot simply be redistributed in a simply way from those who are overworked to those who are seeking jobs or more work. The result depends greatly on how wage rates are affected and on how closely the many different intentions of those trying to reduce their work harmonize with the intentions of those seeking work (matching problem). Furthermore, the reduction in work time of the overworked individuals should not result in so great an increase in labor productivity that no additional jobs can be offered to the unemployed. One of the most consistent results identified by happiness research is the severe effect of unemployment on happiness. A 1% increase in the rate of inflation reduces happiness less than it is reduced by a 1% increase in unemployment. The question is by how much a country must increase its inflation to achieve a 1% reduction in unemployment. It is calculated that a 1% increase in the unemployment rate is compensated for by a 1.7% decrease in the inflation rate. For example, if unemployment rises by 5% ,the inflation rate must decrease by 8.5% to keep the population equally satisfied. The Misery Index, which simply sums the unemployment rate to the inflation rate, distorts the picture by attributing too little weight to the effect of unemployment, relative to inflation, on self-reported fulfillment. So, we can say that efforts to reduce unemployment increment the subjective well-being of the population as long as the rate of inflation increases by less than 8.5 percent when the rate of unemployment is reduced by 5 percent. This approach is somewhat misleading, for it suggests that economic policy makers can freely choose any position on the tradeoff between unemployment and inflation. This kind of choice is not possible, in fact expectations of inflation change as the tradeoff shifts. Moreover, it is not likely that policy instruments can be steered precisely enough to allow such a policy, especially in small open economies. The policies discussed above are surely not the only ones. Many factors systematically influencing happiness, are candidates

for policy intervention. If a determinant has a positive influence on well-being, policy should foster it; if it has a negative influence, policy should restrict it. Some examples follow.

- Marriage contributes significantly to happiness whereas separation and divorce reduce it greatly. A policy that supports family values tends to increase life satisfaction.
- Curbing advertising on television, or restricting the content of television in other ways, may be a good way to increase happiness, because it reduces the unrealistic comparisons typical for that medium. If television did not exist, we would be less frequently confronted with much richer, much more beautiful, much more successful, and much "cooler" individuals, and would therefore be more satisfied with what we have.
- Environmental degradation negatively affects happiness. A policy safeguarding and improving environmental conditions increases people's subjective prosperity
- The emphasis on mobility can be reduced, for it tends to lower happiness by ending important social relationships. Instead, reliability and loyalty should be fostered.
- Terrorism and crime lower life satisfaction. Curbing terrorist activities is, therefore, important to making the population happier. Different anti-terrorism policies will have quite different effects on welfare. A coercive anti-terrorism policy based on deterrence (i.e., killing or incarcerating terrorists) has many negative effects on a country's own population. In particular, human rights are curtailed and traveling becomes more cumbersome. In contrast, a positive anti-terrorism policy tries to lead terrorists back into civil society. It is not only more effective, but also has fewer negative side effects. It can be expected to yield higher returns in life satisfaction.

This part consider the question of whether government should be given the task of achieving the highest possible value of an aggregate, or national, happiness index.

The standard measure of aggregate economic activity, gross national product (GNP), is a well-defined standard but measuring aggregate economic activity by GNP has many well known shortcomings from the point of view of welfare. The five most important of the defects are these:

- Consumer surplus on intra-marginal units of consumption is disregarded.

- It is not possible to aggregate from the level of the individual consumer to the whole economy in welfare terms, because of distributional considerations.
- Social activities not exchanged on markets, such as services performed without pay in private households, are disregarded
- Shadow market activities are disregarded. (This applies particularly to illegal transactions such as drug dealing.)
- Some activities measured as productive, such as the activities resulting from road accidents, are regrettable and therefore welfare reducing.

Because of these shortcomings, GNP is bad indicator of the prosperity of the population. Nevertheless it is used regularly as a measure of welfare. A group of outsiders, including development economists and “post-autistic economists”, tries to counteract the orthodox GNP measure by proposing “Gross National Happiness” (GNH). Gross National Happiness seeks to describe prosperity in "holistic" terms and to identify actual well-being rather than consumption. Basic happiness is measured by the quality of nutrition, education, housing, health care, and community life. A major practical shortcoming of Gross National Happiness is that there is no consensus on how it should be constructed and measured. Recently, several researchers proposed an alternative "National Happiness Indicator" (NHI) a set of indicators for capturing the overall well-being of the population of a country-based on measurements of subjective well-being. We expect three potential uses for such a National Happiness Indicator:

- Changes in the well-being in a country over time can be identified, in particular the role of changes in affect for a given set of situations.
- The same can be done for differences in well-being between groups of people- for instance, between high-income and low-income earners.
- Differences in well-being between nations can be identified and decomposed.

For example Diener and Seligman (2004) also start by criticizing economic indicators for capturing only part of what is relevant for human fulfillment. Instead of economic indicators, they propose a "national system of well-being indicators." The system should go far beyond the present systems of measuring life satisfaction (e.g., the Euro-Barometer and the World Values Survey). It consists of a full scale of measures, including experience sampling of certain sub-samples, that will be sensitive to changes of well-being and ill-being in the major domains of life, such as job and health, as well as a narrower measures of trust, meaning, stress, and other components of prosperity. According to Diener and Seligman, well-being includes positive emotions and moods -Pleasant Life-, engagement -Good Life-, and having meaning in life -Meaningful Life-. They expect the set of indicators of national

well-being to provide answers to important questions and to ensure that the corresponding issues are brought to citizens' attention and addressed by policy makers. Among the questions are these: "How does economic growth influence well-being?" "How does governance influence well-being?" "Does income inequality affect well-being?" "What makes a job enjoyable and engaging?". The proponents are conscious that establishing a National Happiness Indicator would require important resources and certainly would not be easy. They argue, however, that the benefits would warrant the large costs.

Maximizing a National Happiness Indicator (NHI) can be considered a sensible policy for many reasons:

- A National Happiness Indicator includes non-material aspects of human welfare, such as the influence of social relations, autonomy, and self-determination on subjective well-being. In an important way, it goes beyond existing extensions of GNP.
- A National Happiness Indicator looks at outcome aspects of components already included in GNP via input measures. In particular, this holds for the vast area of government activity (measured in GNP by the costs of material and of labor). It is also directly relevant to (public) health and educational expenditures. "Social Indicators" such as the "Index of Social Progress" mostly measure the input side, such as numbers of hospital beds and doctors or numbers of classrooms and teachers.
- A National Happiness Indicator looks at subjectively evaluated outcomes. In contrast, the capabilities approach (which has led to the World Bank's "Human Development Index") looks at observable capabilities and functionings.
- A National Happiness Indicator provides a new vision for governmenta vision that goes beyond GNP and that serves as a signal that government really cares for people's well-being.
- A National Happiness Indicator augments the possibility that citizens will evaluate the government's general performance according to the criterion of individual well-being.
- A National Happiness Indicator is democratic in the restricted sense of attributing equal weight to every person. In contrast, the prices relevant to assessment of the value of goods in the GNP are determined by the purchasing chasing power, and thus the income and wealth, of market participants. The preferences of individuals without income to spend are disregarded.

Despite these arguments in favor of maximizing social welfare by using a National Happiness Indicator, the following subsections argue that this approach should be rejected for a number of reasons.

Classical welfare economics has long raised fundamental arguments against using the concept of aggregate social welfare rather than the concept of individual welfare. There are two highly important and partially interconnected objections to the concept of aggregate social welfare. Since Arrow (1951), it has been widely accepted that, under a number of "reasonable" conditions, no social-welfare function exists that generally and consistently ranks outcomes, except a dictatorship. This result derived from the assumption of impossibility spawned a huge literature that analyzed the robustness of this impossibility result when the assumptions are modified. Theorem after theorem demonstrated that nearly all changes in the axiomatic structure left unchanged the result pertaining to dictatorship. It has been concluded that there is no way we can use empirical observations on their own to produce an ethically satisfactory cardinalization, let alone an ethically satisfactory social welfare ordering. This verdict applies to happiness functions in their capacity as social-welfare functions.

The ordinalist revolution in economics, on which classical microeconomics is strongly based, takes it for granted that individual welfare can be measured only in an ordinal, not a cardinal, way, and that interpersonal comparisons of utility make no sense. Even if an ideal measure of individual welfare were possible, the fundamental philosophical issues in judging social welfare for the purpose of public policy could not be avoided. For example, should people with more refined tastes, who are able to make distinctions between minute differences in quality, be accorded greater weight in social choice?

Within Happiness Research, two concerns have been raised regarding the use of a National Happiness Indicator as an objective of public policy.

To achieve happiness (in its various forms) might not be people's ultimate goal. Other goals may be loyalty, freedom, self-esteem, responsibility, or personal development, for instance. Procedural aspects are also important. Social-welfare measures either exclude such aspects or fail to capture them sufficiently. Whether happiness is the ultimate goal of individuals, or whether it is only one of several goals, constitutes a crucial and much-discussed question in philosophy. However, the maximization of a National Happiness Indicator is not the obvious ultimate goal of public policy.

One of the central findings of Happiness Research is that many effects of life circumstances have only a short lived effect on reported life fulfillment. Extreme and well-

known examples are paraplegics who, after experiencing very low subjective well-being after the accident, report themselves to be in the long run only slightly less happy than before. In contrast, lottery winners, after a short period of exaltation, report themselves to be little happier than before. Another study based on longitudinal data finds that average life satisfaction decreases when a person is subjected to a moderate disability but fully recovers to the pre-disability disability level after 2 years. Only in the case of a severe disability, the recovery is less complete. Furthermore, average happiness increases significantly in the period leading up to marriage, but over the course of a marriage the happiness level declines to only slightly above the pre-marriage level. Most importantly for economics is the hedonic or "aspiration treadmill" effect, which has been used to explain the Easterlin Paradox, namely people adapt quite rapidly to increases in their income, and two-thirds or more of the benefits of the increase in income wear off after about a year. The aspiration treadmill has great consequences for social-welfare maximization, depending on how it is treated. It may well be argued that an individual who adapts quickly to higher income should be taxed very heavily, because his utility is barely and only briefly increased, whereas an individual whose utility is permanently raised by higher income should be taxed lightly. But does the small and brief increase in utility justify such a decision? And might taxpayers not react to foreseeing such a consequence in taxation by wrongly reporting a permanently higher happiness level? Alternatively, the whole issue of adaptation may be disregarded, which boils down to assuming no adaptation at all. Another possibility is to rely on remembered utility once the effects of the increase in income have been assimilated. However, it is well established that an individual's memory of the past is severely biased because of duration neglect. It must be concluded that the approach of maximizing social welfare on the basis of a National Happiness Indicator does not deal with the above-mentioned aspects of sustainable happiness. The role to be attributed to adaptation and aspiration as elements of social welfare must be discussed and decided on a more fundamental level. We need a social decision-making mechanism to indicate how adaptation effects (and similar effects) are to be taken into account. The social-welfare-maximization approach disregards existing political institutions and processes and tries to substitute for them. The essential message is that in a democracy constitutionally designed rules and institutions allow citizens to reveal their preferences and provide politicians (the government) with an incentive to put them into reality. The maximization of a social-welfare function does not serve this process. Even if the government were to take notice, it has no incentive to follow it. The social-welfare-maximizing approach, based on empirically estimated happiness functions, disregards the institutions on which democracy is based. Citizens are reduced to "metric stations." The interaction between

citizens and politicians, the representation of interests by organized groups, and the concomitant information and learning are all disregarded. So far, it has been assumed that the decision to use aggregate social welfare captured by an empirically estimated happiness function does not influence the measurement of happiness. This assumption must be doubted. Indeed, the political use of the happiness function will certainly generate strategic interactions between the government and the individuals. Two kinds of distortions should be taken into account.

Once the happiness function has become politically relevant, the government, the public bureaucracy, and interest groups have incentives to manipulate it. This has proved true for GNP and for other economic indicators declared to be goals of government. Since the rate of unemployment has become a politically important indicator, governments have started to influence it to suggest a better picture of the state of the labor market than is true in reality. For instance, people who have been unemployed for a long time are defined as no longer belonging to the work force and so no longer contributing to any increase in the official rate of unemployment. It is also well known that the measure of budget deficit were strongly manipulated by some European countries when the rules for the European Monetary Union required that budget deficits not exceed 3 percent of GDP and that public debt not exceed 60 percent of GDP. In the case in which a government is unable to manipulate a particular indicator to its benefit, it has an incentive to create new indicators. This is certainly possible in the case of happiness. In fact a variety of indicators may capture individual well-being. Governments and pressure groups will choose those most beneficial to their respective interests or will even create new ones to suit themselves.

The second systematic distortion stems from the reaction by respondents to happiness surveys. When individuals become aware that the happiness level they report influences the behavior of political actors, they have an interest in misrepresenting it. They try to "play the system."

The preceding discussion has shown that the maximization of a social-welfare function measured by happiness is a dubious approach for several reasons:

- Problems of cardinality and interpersonal comparability are not fully overcome.
- Governments are not composed of purely benevolent politicians who want to make the population as happy as possible; the personal interests of politicians also matter.
- The essential elements of democratic governance are disregarded: it does not simply consist in recording the reported well-being of the citizens.

- The government has an incentive to manipulate the happiness indicators and to create new ones to suit its goals. The individuals have the incentive to influence government policy in their favor by strategically misrepresenting their happiness levels.

Of course, these arguments do not mean that the maximization of GNP would be preferable to maximizing social welfare. Rather, they suggest that the insights provided by happiness research should be used in a different way.

The fundamental social institutions shape the incentives of the policy makers. Once these basic institutions are in place and the incentives have been set, little can be done to influence the current politico-economic process. This is the fundamental message of Constitutional Economics. Economic policy must, therefore, help to establish the fundamental institutions that lead to the best possible fulfillment of individuals' preferences. Research in Constitutional Economics helps us to identify the institutions that serve this goal. Happiness Research gives us insights into how and to what extent institutions systematically affect individual well-being. The results gained from happiness research should be taken as inputs into the political process. These inputs have to prove themselves in political competition and in the discourse among citizens, and between citizens and politicians. This vision differs fundamentally from an approach that seeks to maximize a social-welfare function.

Happiness research has already produced many insights that can be brought into the political discussion process. As will be argued in the next chapter, results from estimates of microeconomic happiness functions for Switzerland are pertinent. They suggest that institutions of direct democracy, such as popular initiatives, referenda, and federalism, increase the life satisfaction of the population. In direct democracies and federal countries, individuals experience a higher level of autonomy-an important factor in happiness. The objective of this section is to demonstrate that Happiness Research has become most useful for public policy and that it helps us to increase social welfare. However, the appropriate approach is not to maximize aggregate social welfare directly. The insights provided by Happiness Research should serve more as inputs into the political process, in which deliberations on the various views and results play a major role. Citizens can choose for themselves which insights they might want to consider for their own lives. The danger of state paternalism is evaded and individuals are given the chance to determine for themselves in what way they choose to raise their well being.

This section discusses a practical proposal directly derived from one of the major results of economic happiness research, namely that people do not value the absolute level of their income but always compare themselves to others. This tends to lead to a socially wasteful race for ever higher income and consumption, at the end of which no one is better off

than before. Positional externalities occur when the rise in one person's rank decreases the utility of other persons. When one person's position rises, the relative status of other persons falls correspondingly and the group as a whole, or society, is no better off. When status comes through income and someone is made happier as the result of a salary increase, other persons' incomes automatically decrease in relative terms. A higher level of income cannot increase overall happiness if people do not value absolute income but value only the relative position. The same happens for specific goods and services important to one's position in society. Someone owning such a good (for instance, a fancy sports car) imposes so strong a negative external effect on all those who do not own such a good that overall happiness stays constant. As a result, the expenditure of resources to produce and sell such goods is socially wasteful, because it does not increase social well-being. It then appears beneficial to impose a high tax on higher income and on the consumption of positional goods, to discourage people from engaging in such zero-sum status competition.

The externality may be produced by differences in income or by differences in consumption. In the extreme, the utility gain by the person rising in rank is completely compensated by the utility loss of the other persons. In that case, there is a "positional treadmill" where the effort of any particular person to rise relative to the others does not produce any gain for society overall. It may even be possible that such effort reduces total individual welfare. The research on happiness has indeed found empirical evidence that an individual's happiness level is reduced when the average income of other persons increases. There is also convincing circumstantial evidence suggesting the same externality with respect to consumption, especially of luxury goods.

According to standard welfare economics, a tax may be warranted when an activity, for example the rise in income or consumption, imposes negative external effects on other people. The government should intervene to undo the welfare-decreasing differences in income or consumption.

The government may be unable or unwilling to tax high-income earners or consumption according to the positional externalities produced. It may well happen that the distribution is made even worse because the rich may be induced to exploit the larger opportunities to evade taxation they have compared to the middle and lower classes. Furthermore, increased tax revenues may increase waste in the government bureaucracy and may induce politicians to spend more money on welfare decreasing purposes.

The higher tax induces distorting effects in economy. According to the proposal, at first a negative incentive effect on work effort of the higher taxation of income or consumption is desired because it internalizes status externalities. However, raising taxes is

likely to induce individuals not only to supply less labor in the official economy, but also to evade taxes by switching to the shadow economy . In addition, cheating on taxes may increase. The induced distortions in resource allocation undermine the internalization of status externalities and may even cause overall welfare to decrease. The two aspects just described have been treated extensively in the economic literature and will not be discussed further here. The emphasis here is on a third aspect addressing an entirely different issue.

The scholars advocating taxes on positional externalities disregard an important consequence of the general desire for status differences: when one outlet for status is blocked, individuals actively seek other ways to differentiate themselves from others. Even if the taxation of income and consumption were successful in undoing the negative positional externalities, individuals would try to distinguish themselves from other individuals in other ways. The crucial question is whether the positional externalities in these other dimensions are weaker or stronger. If they are weak, the taxation of income and consumption differences may be warranted. On the other hand, if the negative external effects produced by differences in other dimensions are strong, the taxation of income and consumption differences may be ineffective or even counterproductive. If individuals find a way in which one person's rise in rank appreciably reduces the utility of those of lower rank, the proposed taxation decreases welfare.

Individuals actively seek new dimensions for distinction, often in creative and imaginative ways. As was discussed above, when the income and consumption dimensions are blocked by high taxation, individuals endeavor to differentiate themselves on other dimensions. Here are a few of the most important ones:

- Political: power The difference in rank with respect to political position is probably as old as mankind. There have always been "ins" and "outs," "powerful" and "powerless" persons.
- Awards: Some people acquire distinction by receiving orders, titles, medals, and other conferred signs of distinction; others receive none.
- Education: The better educated clearly have higher status.
- Other activities: Individuals can seek distinction by engaging in activities outside economics and politics. Important ways to acquire distinction are sports, the arts, scholarship, social and voluntary activities, and merely being a "celebrity."
- Leisure: when either income or consumption is taxed, individuals take more time for leisure. It is interesting to note that the evaluation of work time and leisure has changed dramatically over recent centuries. In the eighteenth

century and in much of the nineteenth century, upper-class people distinguished themselves by having substantially more leisure time than lower-class people, who had to work extremely long hours. Today, the opposite seems to be true: being overworked is taken as a sign of being important or "in demand," whereas having time free is considered close to being unemployed.

- Happiness: Individuals may seek to distinguish themselves by leading a "good life." They may engage in meditation or other philosophical, cultural, religious, and esoteric endeavors. Buddhism and other Eastern philosophies have recently become popular, and of course there is also a long Christian tradition exemplified by religious orders (Cistercians, Trappists, Carthusians, et al.). In contrast with some of the other dimensions mentioned above, individuals who practice these philosophies or religions rarely consider themselves to be of "higher rank," but they are certainly aware that they distinguish themselves from other individuals. Indeed, the latter are often willing to accept that those leading a "good life" are superior, and they rarely express any misgivings about this. Few positional externalities appear to be created by resorting to a "good life."
- Determinants of positional externalities: To assess the welfare consequences of substituting other dimensions when the positional externalities due to income and consumption are successfully blocked by taxation, one needs to know the factors determining the extent of external effects produced by the various ranking dimensions. A great many such determinants exist. For the purpose of our inquiry, it suffices to concentrate on two: acceptance and visibility.
- Acceptance of Differences: In traditional societies, people are taught and have learned to accept differences in positions of many kinds, including economic, political, and social. This attitude is strengthened by religions which proclaim that it is God's will that one should stay in the position into which one was born. When people see no way to alter this allocation of positions, they find it preferable to accept it. Individuals committed to modern market societies accept economic inequalities insofar as they result from differences in ability and hard work. High incomes and high consumption then have no negative external effects on other individuals. To some extent, the market ideology is also transferred to success in other areas. For example, successful athletes do not impose any positional externalities on others, because their rank is seen to be due to their own effort. The same does not hold to the same extent for

political positions and awards (such as orders and medals), because many feel that these are obtained not by ability and effort but by illegitimate means. Differences in status are resented by societies strongly committed to equality as it is propagated by the Enlightenment, by the French ("egalite") and American Revolutions, and by socialism in its multiple forms. Differences in all ranks create positional externalities, but this applies most strongly to income, consumption, and political power.

- **Visibility:** When status differences are evident, they are more likely to be resented and to create positional externalities. . The modern media, in the form of tabloids and popular television stations, work in the same direction. The positional externalities created refer not only to income and consumption but also to political power, and less so, apparently, to differences in status related to scholarly, athletic, artistic, and social activities. In some traditional and dictatorial societies, an effort is made to hide the high consumption of the leaders. This may occasionally be possible to some extent. However, in the case of the Nomenklatura in Communist countries, this effort largely failed; some people even believed that the consumption level of the leaders was higher than it was in reality. However, to the extent that the status differences are and remain hidden, no positional externalities are imposed.
- **Combining Acceptance and Visibility:** The acceptance and the visibility of status differences interact and must be considered jointly. The strongest positional externalities are produced when their acceptance is low and their visibility is high; this applies, for instance, in a modern open society committed to equality. The weakest positional externalities occur when such differences are accepted and hidden; this applies, for instance, to dictatorships in a traditional society. With high acceptance and strong visibility or low acceptance and low visibility, there are countervailing effects and the extent of positional externalities is not certain.

We can now turn back to the initial question: should positional externalities due to differences in income and consumption be (highly) taxed? The answer depends on the two well-known effects of taxation on work incentives and the capacity and willingness of the government to attain the desired reduction in the inequality of income via higher taxation: the larger the induced distorting effects of taxation, and the lower the government's ability and willingness, the more damage is done by intervening in the economy via such taxation. Even if these two conditions were fulfilled, the normative case against taxing positional

externalities would depend on whether individuals seek to re-establish their ingrained desire for status differences by substituting with dimensions that are subject to high positional externalities. The externalities created may even be higher than those for income and consumption. Positional externalities that relate to political positions, to awards, to education, to achievements in sports, the arts, and academia, to leisure, and to happiness itself also matter. The normative case for the taxation of positional externalities in income and consumption becomes weak if people transfer their drive for status to these other dimensions. On the other hand, taxing positional externalities is well taken if additional income taxes affect work incentives only weakly and if people react by resorting to dimensions with low positional externalities. The present extent of empirical knowledge in happiness research does not allow us to determine whether positional income externalities should be taxed. Moreover, no general answer applying to all countries and all periods is warranted. The policy approaches discussed so far share a common thread: they are based on the idea that government acts like a benevolent dictator. The next chapter argues that this approach takes a mistaken view of the politico-economic process. Instead, a constitutional approach should be followed in setting the institutions so that people can pursue their own way to happiness. Provided these institutions are well set, the ensuing processes among consumers, citizens, interest groups, organizations, and the government lead to outcomes in which individuals reap a high level of happiness.

3.2 Constitution

Individuals happiness is affected by the kind of political framework they live in. It is not out of the ordinary that individuals in constitutional democracies are more satisfied on the grounds that the politicians are spurred to administer as per their citizenry's advantage. On the off chance that they dismiss the wishes of the populace, the politicians and parties in a democracy fail to be reelected and lose their authority. Democratic institutions, specifically the right to participate in elections and vote on issues, along these lines add to citizens' happiness through a favorable outcome of the political procedure. In this section we examine different connections between democratic frameworks and subjective reported prosperity and we concentrate on a quantitative examination of the consequences for happiness of two specific constitutional devices: direct political cooperation of the citizens through popular referenda and federalist decentralization.

A constitution sets out the essential standards or central institutions as indicated by which the political framework should be run. Samples are:

- The extents of human rights and property rights.
- The extent to which the state is centralized or decentralized.
- The way the citizens' votes determine the people and parties elected into parliament (for example, proportional versus majority voting).
- Whether the government is directly elected by the voters or depends on the will of the parliament.
- The extent to which the citizens have a direct say on particular issues.

Over late years, economists have attempted to experimentally break down the conceivable impacts of democracy on economic factors. It has been demonstrated that economic growth is bolstered by all around created property rights. On the off chance that economic freedom is viewed more generally, the connection to economic growth relies on upon the measure utilized. Numerous specialists guess that democracy emphatically influences economic development. Notwithstanding, there is no unmistakable proof that the degree of democracy encourages economic improvement. A few studies find that nations that democratize grow faster, while those that turn out to be less democratic develop more slow than comparable nations. There is likewise confirm that an extreme absence of democracy by implication decreases growth by means of lower investments. More vital for development is the manner by which the democratic standards are actualized. In this way, government instability, political brutality and agitation, and policy unpredictability in reality have a tendency to interfere with growth. Political and civil liberties are likewise assessed concerning the distribution of wage. It has, for instance, been demonstrated that democracies pay higher wages. In a combined cross-section time series examination, the level of manufacturing wages has been appeared to be heartily higher in nations with extensive democracy. Average wages in Mexico would increment by 10 to 40 percent if that nation had a level of democracy practically identical to that in the United States.

Analysts on happiness have made a further step and have taken a gander at the interaction of democracy with happiness. The degree to which a constitution is fair and permits its citizens to settle on choices as indicated by their own particular inclinations can be caught by different indices of freedom. Figure 3 presents a graphical representation of a thorough measure of freedom, joined with a four item measure of happiness, in 38 countries (fundamentally developed ones) toward the start of the 1990s. A visual test uncovers that freedom (horizontal axis) and happiness (vertical axis) are decidedly related.

The complete index of the constitutional setup utilized as a part of this figure has been caught in three regions:

(a) Political freedom measures the possibility of citizens to engage in the democratic process or, conversely, the restrictions on political participation. It is composed of two sub-indices, the first relating to civil rights, such as freedom of speech (with 11 items), and the second to political rights (9 items).

(b) Economic freedom measures the opportunity of individuals to engage in the free exchange of goods, services, and labor. It is based on subindices (each in turn composed of a number of items), referring to the security of money, free enterprise, freedom from excessive taxation, and the possibility of undertaking monetary transfers.

(c) Personal freedom measures how free one is in one's private life-for example, to practice one's religion, to travel, or to get married.

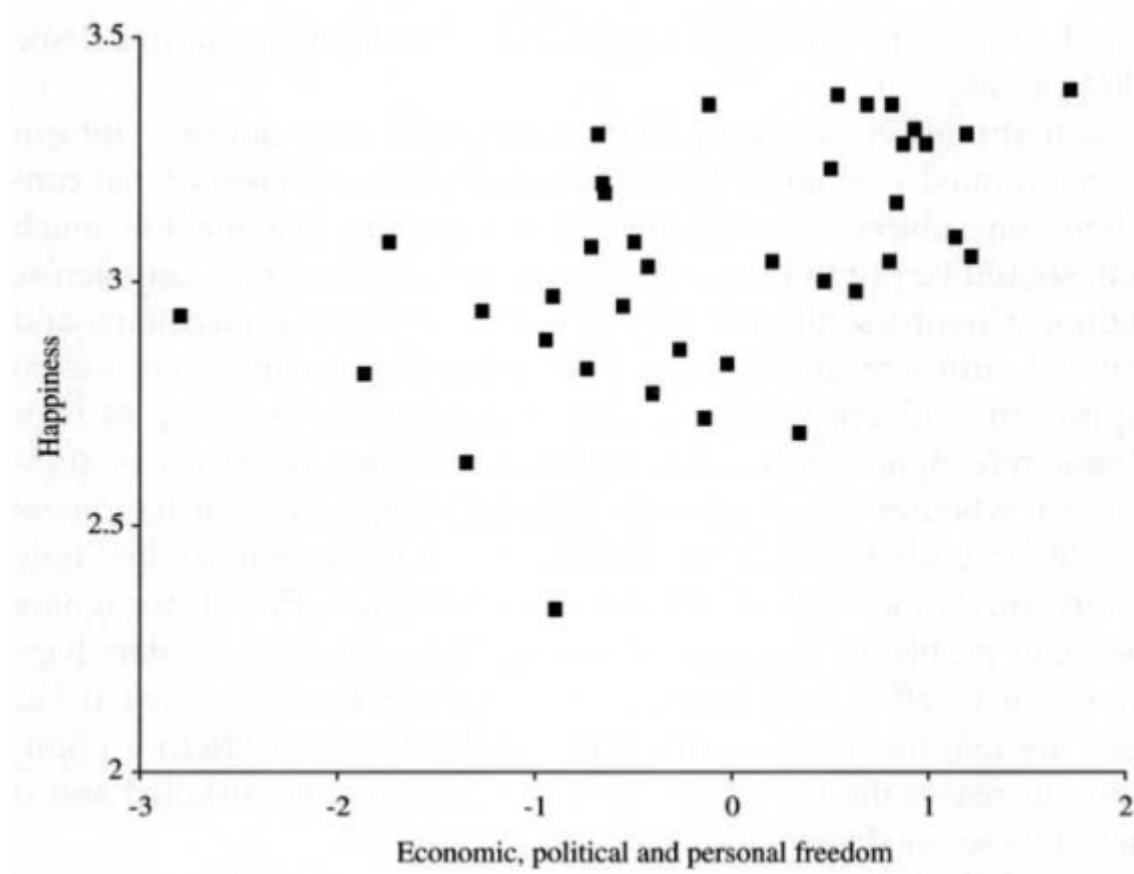


Figure3. Freedom and happiness across nations

To match the sub-indices, average z-scores are assessed. Every one of the three-political, economic, and private freedom are firmly correlated in a measurably critical manner with satisfaction in an example of 46 nations (primarily developed ones) in the early 1990s. Controlling for contrasts in per capita income, the connection with economic freedom however not political and individual freedoms remains statistically significant. Conversely, no relationship could be found in the middle of freedom and satisfaction in developing nations.

Such studies are surely illuminating, however they can just inform us limitedly about the impact of different constitutional conditions on subjective prosperity. One reason is that not all that much confidence ought to be placed in the similarity of happiness measures crosswise over countries. Nations vary from one another in numerous measurements, and it is not adequate just to control for unequal per capita income to catch the impact of democracy. Also, the importance of satisfaction might fundamentally differ between nations, so it's not clear whether extensive scale global examinations of happiness ought to be attempted by any means. At long last, the cross-section studies just report relationships and don't manage causation. Even if we ignore the other problems, it remains open whether democracy support happiness, or happiness is a precondition for democracy. It has been argued, for example, that high satisfaction with life in a nation increases the legitimacy of the political regime installed and it may foster democracy. So in the following, we therefore concentrate on specific institutions of democracy in one particular nation.

The possibility of citizens directly participating in politics is an important aspect of democracy. The constitutions of many nations allow popular referenda, but they are sometimes only used as a device to apprise the government when it no longer knows what to do. Sometimes it is used for the opposite purpose, as a plebiscite in which the voters are asked to support the government's policy. In other cases, it is restricted to local and sometimes trivial issues, while the decisions on relevant issues are reserved for the professional political actors in parliament and government. Anyhow, most members of the European Union have held referenda about entry into the union and its extension, such as the Maastricht Treaty or the introduction of a common currency. In the United States, there are many popular referenda on the local level likewise in some states, but the constitution does not allow them at a national level. The only state with an extensive set of direct political participation rights at all levels of government, and with respect to all issues, is Switzerland. Of the approximately 500 referenda made in all the countries in the world at the national level between 1793 and 1978, 300 (60%) were held in Switzerland. The second most severe use of referenda is in Australia, with just 40 referenda or 8 % of the total. A referendum in which all citizens have the possibility of participating meets the crucial requirement that it gives

decision power to individuals outside the group of politicians. Often in an initiative, the demands are clearly directed against the political party represented in parliament and government. Optional and obligatory referenda help more of a controlling function because, if successful, they overrule the decisions made at an executive or legislative level. Then, empirical evidence firmly suggests that referenda are indeed able to break the cartel among the politicians by getting through constitutional provisions and laws totally against the interests of the politic class. The following cases refer to Switzerland. The first two cases concern important historical episodes.

- (a) During the nineteenth century, the house of representatives (Nationalrat) was elected according to the majority rule. The largest party greatly benefited therefrom; for seven decades the Radical-Democratic Party secured a majority of the seats. When the idea was raised that the elections should follow proportional representation in order to allow small parties to enter parliament, the then politic class in the executive and judicial branches strongly rejected this proposal for obvious reasons of self-interest. Nevertheless, in 1918, the corresponding referendum was accepted by a majority of the population and cantons. In the subsequent elections, the Radical-Democratic Party lost no less than 40 percent of its seats.
- (b) Up to the Second World War, Urgent Federal Laws (dringliche Bundesbeschluesse) were not subject to the (optional) referendum. In order not to have to seek the population's approval, and in order to pursue policies in their own interests, the politic class in the government and parliament often declared federal laws to be "urgent" even if that was in fact not the case. In 1946, an initiative was started with the objective of preventing this disregard of the interests of the population. Again, the executive and legislative branches urged the voters to reject the initiative, an urging that was clearly an act of self-interest. However, the initiative was accepted by the voters, and the politicians are now forced to take the citizens' interests into account when they decide on federal laws.

Referenda weren't only able to break the politicians' cartel in the past. It still happens regularly, for example in two more recent cases: the referenda on Switzerland joining the United Nations (1986) and joining the European Economic Space (1992) had strong support by the politic class, but were nevertheless refused by the voters. The constitutional setting decides to a substantial degree what issues are put on the political agenda, and which are kept from appearing. In representative democracies, politicians are often very able at not letting

problems be discussed in the democratically legitimized institutions if it would be to their disadvantage. For instance, they usually succeed at not having their privileges (for example, their wage and pensions) discussed in open parliamentary sessions. In direct democracies, however, in which the citizens may bring any issue to the ballot, the agenda is much less under the control of the political class. Agenda setting power has a significant effect on vote outcomes.

An important feature of referenda is the discussion process stimulated among the population and between politicians and voters. Prereferendum discussion may be interpreted as an exchange of arguments among equal citizens, taking place under well defined rules. This institutionalized discussion meets various conditions of the ideal discourse process, but it has one crucial advantage, namely the exchange of arguments does not take the form of an academic seminar without consequence, since at the end the final decision is with the voters. The importance of the discussion for politics induces citizens to participate, depending on how relevant the issue in question is considered to be.

The main function of the prereferendum process is certainly to increment the level of information of the participants. Furthermore, the exchange of arguments also forms the participants' preferences. What matters, in our context, is that this preference formation—provided it happens at all, can be influenced but cannot be controlled by the political class in a constitutional state with freedom of the communication and media.

In a referendum, a political decision is formally made, but this does not necessarily mean that the politicians and the public administration take the appropriate action to realize it. The more legitimate the constitution is taken to be in a political system, the higher are the costs of not following it. The politicians may also be induced to act accordingly by the threat of not being reelected by the voters, but ultimately the extent of implementation depends on how far the constitutional rules are voluntarily complied by the people in power.

The effect of direct democracy on various aspects of society has been closely analyzed in a number of econometric studies for the United States:

- Government expenditure and government revenues are lower in institutions of direct democracy.
- Per capita debt is substantially lower with a referendum requiring a qualified majority.
- Land prices are higher because people find it attractive to live and work in such areas.
- Public expenditure on education is higher when a referendum is possible.

The following insights have been achieved on the basis of econometric studies for Switzerland:

- A comparison of Swiss communes, with different degrees of institutionalized forms of participation in political decisions, reveals that the outcomes correspond more closely to the voters' preferences, the more directly democratic they are.
- The growth of public expenditure is more strongly determined by demand factors (that is, by the citizens' willingness to pay) than by supply factors (in particular, by the politicians' and bureaucrats' own interests).
- Public supply is less costly, the more direct the democratic institutions are.
- Tax morale is better than in representative democracies.
- Per capita incomes in cantons with more strongly developed direct participation possibilities for citizens are significantly higher than in cantons with less developed forms of direct participation.

Every one of these results control for a considerable number of variables disconnected to direct democracy. They give solid proof that the deviations from the citizens' preferences are indeed altogether lower in a nation with referenda compared with a representative democracy. The institution of citizens directly deciding on an issue and the decentralization of decision making are tightly connected. On the one hand, federalism is an alternative means for better completion of the voters' preferences: people tend to leave dissatisfying jurisdictions, while they are allured to those caring for the populace's preferences at low cost. The chance to vote with one's feet tends to mine politicians' regional cartels, provided, naturally, that the people concerned have political rights.

In more relevant respects, on the other hand, federalism is a prerequisite for effectual referenda rather than a substitute. In little communities, much information required for informed political choice making is affected in everyday life: as producers, consumers, and individuals doing the housework, they are very much aware of the advantages and expenses of specific public programs and, as taxpayers, they quickly need to convey the weight, provided an adequate amount of fiscal equivalence exists. Referenda embraced on public and local issues offer the residents to assess political questions to be chosen at a higher federal level, and make referenda a more powerful institutions to mine politicians' cartels against the voters.

The influence of federalism and direct democracy on happiness is studied employing the data on reported subjective well-being for Switzerland in 1992-94. The main explanatory variable focused on is the institutionalized rights of individual political participation, which

vary considerably between the 26 Swiss cantons. Due to the federal structure of Switzerland, principal areas of competence are held by the cantons. As at a national level, direct democratic instruments exist besides representative democratic governments and parliaments. The major direct democratic instruments in cantons are the popular initiatives to change the canton's constitution or laws, a mandatory and optional referendum to prevent new laws or the changing of existing laws, and optional financial referenda to forewarn new state expenditure. Citizens' access to these instruments differ from canton to canton. Therefore, for instance, the number of signatures required to start an initiative or an optional referendum, or the time frame within which the signatures have to be collected varies. The referendum on public expenditures may be started at different levels of additional outlays. For the 26 cantons, we constructed an index designed to reflect the degree of direct democratic participation possibilities. This index is determined using a six point scale with 1 indicating the lowest, and 6 the highest degree of participation possibilities for the citizens. Figure 4 gives an overview. It reveals that there are relevant differences between cantons with respect to direct participation possibilities in politics. The weakest direct democratic institutions are found in canton Geneva, the strongest in canton Basel-Landschaft.

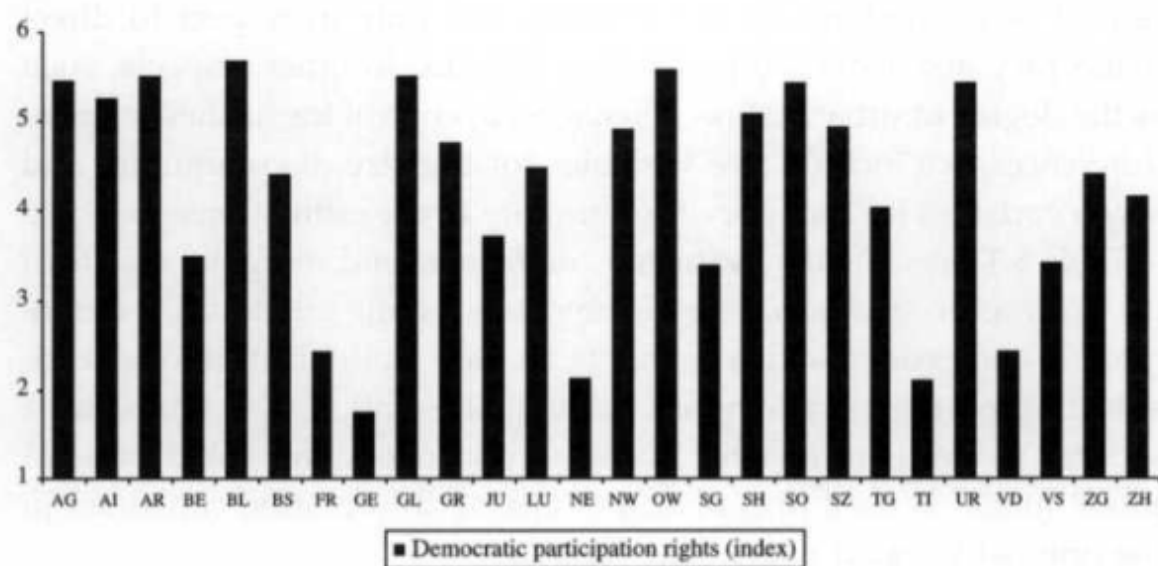


Figure 4. Direct democracy in Swiss Cantons: the figure shows the degree of direct democratic participation possibilities in the 26 Swiss Cantons.

The scope of our estimate is to show that the degree of direct democratic participation possibilities exerts a statistically significant, sizable, and robust effect on happiness over and above the demographic and economic determinants. We also intend to demonstrate that

institutional factors in the form of federalism are important for happiness. The division of competence between communities and the cantonal government reflects the federal structure of a canton or, from the municipalities' point of view, their autonomy. The degree of local autonomy is measured by an index. The index over the 26 cantons is based on survey results. Chief local administrators in 1,856 Swiss municipalities were asked to report how they perceived their local autonomy on a 10-point scale, with 1 indicating “no autonomy at all”, and 10 “very high ” communal autonomy. Again, relevant variation exists across cantons. The two focal variables included in the estimation models are

- The index for democratic participation rights.
- The index for the degree of local autonomy.

The two variables refer to the 26 cantons in Switzerland. The structure of Swiss cantons, however, differs not only in respect to direct democracy and federal organization, but also in other respects, for instance the extent of urbanization. Thus, to control for further regional differences, we include five variables for the size of community and seven variables for the type of community in the estimation equations.

Table 3 presents the estimated coefficients and marginal effects of two microeconomic happiness functions, taking into account demographic and economic determinants, as well as the institutional variable of direct democratic rights. In the first equation, a weighted least squares model is estimated. In the second one, a weighted ordered probit model is used to exploit the ranking information contained in the originally scaled dependent variable. The index for democratic participation rights has a highly significant

| | <i>Weighted Least Squares</i> | <i>Weighted Ordered Probit</i> | |
|--|-------------------------------|--------------------------------|--|
| | <i>Coefficient (t-Value)</i> | <i>Coefficient (t-Value)</i> | <i>Marginal Effect for Score of 10</i> |
| Democratic participation rights | 0.114 (2.82) | 0.081 (3.01) | 0.028 |
| Socio-demographic factors | Included | Included | |
| Socio-economic factors | Included | Included | |
| Observations | 6,137 | 6,137 | |

Table 3. Democratic participation rights and satisfaction with life in Switzerland, 1992-94

positive effect on happiness. An increase in the index of direct democracy by one point raises average satisfaction by 0.11 units (weighted least squares estimation) and the proportion of persons indicating very high satisfaction with life by 2.8 percentage points. This

result is consistent with our hypothesis that the institutions of direct democracy raise reported subjective well-being.

The effect of democracy on happiness is sizable:

- (i) The marginal effect of direct democratic rights on happiness is as large as the effect of living in the second-bottom income category (Sfr. 2,000-3,000) instead of the bottom income category (under Sfr. 2,000).
- (ii) The effect is even larger when the full range of the institutional variable is considered—that is, when individuals in canton Basel-Landschaft (with the highest democracy index of 5.69) are compared to citizens in canton Geneva (with the lowest direct participation rights of 1.75). The inhabitants of the former state have an 11-percentage-points higher probability that they are completely satisfied.
- (iii) The improvement affects everybody—that is, the institutional factor is important in an aggregate sense. In comparison, getting a job "only" raises the subjective well-being of the unemployed.

Does the causality between direct democracy and subjective well-being work in reverse? So do happy people choose direct democratic institutions? Direct democratic participation possibilities, in the form of referenda and initiatives in Switzerland, started to develop in the middle of the nineteenth century. The adoption of some of the instruments of direct popular participation reflects the spread of the spirit and ideas behind the American and French revolutions. Equally important were political movements within the citizenry. Citizens fought for direct democratic instruments to gain political power against arbitrary decisions by parliaments and the influence of industrial pressure groups on these authorities in the cantons. This historic perspective indicates that the democratic institutions are not simply the result of happy and satisfied citizens. Especially during the past decades institutional conditions in Swiss cantons have been fairly stable, which suggests that causality runs unambiguously from direct democratic rights to satisfaction with life.

Table 4 focuses on federalism in the sense of devolution as a second important political institution hypothesized to raise fulfillment. Therefore, the variable "local autonomy" is added to the demographic and economic factors in the happiness equation. For simplicity, once again only the coefficients for variables of interest are shown. The coefficients of the variables discussed before remain almost unaltered. The estimate reveals a statistically significant positive effect on subjective well-being. For local autonomy, the

proportion of individuals indicating being completely satisfied increases by 3.2 percentage points, compared to a situation in which the communes are one index point less autonomous vis-a-vis their canton. Local autonomy and direct democracy are not independent of each other.

| | <i>Weighted Ordered Probit</i> | | | |
|---------------------------------|--------------------------------|----------------|--------------------|----------------|
| | <i>(1)</i> | | <i>(2)</i> | |
| | <i>Coefficient</i> | <i>t-Value</i> | <i>Coefficient</i> | <i>t-Value</i> |
| Local autonomy | 0.094 | 2.84 | 0.032 | 0.90 |
| Democratic participation rights | | | 0.071 | 2.29 |
| Socio-demographic factors | Included | | Included | |
| Socio-economic factors | Included | | Included | |
| Observations | 6,137 | | 6,137 | |

Table 4. Federalism and satisfaction with life in Switzerland, 1992-94

On the one hand, direct democracy promotes federal structures at the national and state levels because citizens-in contrast to politicians-are most interested in strong federalism. On the other hand, the people bearing the costs and benefits of government action are better identifiable in a decentralized system. Direct legislation, therefore, leads to better political decisions, and federalism preserves direct democracy. As a result, the indices for direct democratic rights and local autonomy are correlated ($r = 0.605$). This makes it impossible to clearly separate the effects of the two variables in one model. The second equation in Table 4 jointly includes the two constitutional factors: local autonomy and direct democratic rights. The coefficient for the variable measuring federalism is roughly one-third as large as when it is taken alone and it loses its statistical significance. The index for direct democracy has only a slightly smaller marginal effect on life satisfaction than estimated in Table 3 -namely, 0.024 instead of 0.028. In an adjusted Wald test, the two institutional factors together are significant at the 5 percent level ($\text{Prob} > F = 0.014$). Direct democracy and federalism in Switzerland therefore seem to be complements rather than economic substitutes.

Overall, our analysis indicates that direct democracy is not used to discriminate against certain groups within society. The benefits are distributed rather evenly among social classes. However, as in other countries, a large proportion of residents-namely, foreigners-is formally excluded from participation in the direct democratic process.

Research has revealed that political, economic, and personal freedom are positively related to happiness in developed countries. No such correlation can be identified for developing countries. However, the analysis of this relationship is wrought with difficulties. It is questionable whether happiness data can be compared effectively in cross-country analysis. But more importantly, causality may run in the reverse direction, in fact it may well be that happy citizens are politically more active and therefore achieve more freedom.

3.3 Participation rights

A considerable literature in the social sciences attributes a relevant value to participation, as it enhances individuals' perceptions of self-determination. It is important to distinguish actual participation from the right to participate. The former refers to the decision of individuals as to whether they choose to engage themselves. The traditional calculus of voting based on expected utility maximization solely considers outcome utility. It suggests that rational voters never participate in political decisions, because the probability of affecting the outcome is close to zero with most sizes of electorates, while there are participation costs. However, this prediction is inconsistent with the empirical observations that citizens do indeed cast their votes, even if their expected impact is practically nil. This casts doubt on the rational decision approach as traditionally formulated. Therefore some authors have identified the various procedural utilities that voters may get from political participation, for example, a sense of civic duty or the value of expressing an ideological view.

The privilege to take part in political choices accords the citizens more encompassing self-determination, because the decision of whether to participate or not is left up to the individual. Individuals may value the right to participate even if they seldom, if ever, actually exercise it. What makes a difference is that they can participate if they find it appropriate. It may consequently be hypothesized that participation rights reflect procedural utility stronger than actual participation does. In most nations, the status of a national differs fundamentally from that of foreigners because nationals have the right to vote. In numerous other ways, the principle of the rule of law demands that the two groups be treated equally. So, for example, they have the same human rights and, once admitted into the country, foreigners have (with few exceptions) the same rights as nationals to participate in economic affairs. It cannot, naturally, be denied that national legislation and political decisions tend to be rigged in favor of nationals. But what matters for the approach used here is that the result of the democratic

political process is much more equally distributed between nationals and foreigners than are the formal participation rights. It follows that, normally, the nationals derive more utility from political participation rights than do foreigners, provided that nationals enjoy both outcome and process utilities, while the foreigners only enjoy outcome utility. The distinction between nationals and foreigners is largely exogenous. Whether an individual may become a citizen of the country or not is determined by law, in particular, the need to have stayed in the host country for a sufficient number of years and to have sufficient knowledge of the local language and the content of the constitution. Only after these very strict requirements have been achieved does an individual have the choice of becoming a nationalized citizen. Of course, whether people eligible for citizenship indeed accept it also depends on their expected procedural utility, so their wish to become a community member with full participation rights. Therefore, some will decide not to change their citizenship. Becoming a naturalized citizen is practically automatic for young people and spouses once the head of the family has decided to do so. Resident citizens have no possibility of choosing their status of citizenship, they cannot give up their current citizenship without relocation. The distribution of residents in a country between the two categories (foreigners and nationals) strongly reflects formal exogenous criteria for citizenship and not revealed preferences for procedural goods. As a result of these considerations, one may assume that the distinction between nationals and foreigners influences the degree to which one benefits from outcome and process utility, while the reverse causation can safely be neglected.

On the basis of our discussion, two empirically testable hypotheses can be assessed:

- The utility derived from the rights to participate in the political process (measured by the extent of direct democratic rights across regions) supports the subjective well-being of the citizens. The foreigners living in the same region, who are excluded from this process, experience lower happiness compared to the citizens.
- Actual political participation (measured by the differential participation rates between regions in national ballots) is less connected with procedural utility than is the right to political participation.

In both hypotheses, the strategy to identify procedural utility is based on the clear distinction between citizens and foreigners. In a crude formulation then, procedural utility is the additional positive effect of more extended participation rights for citizens' compared to the foreigners' well-being (first hypothesis). With actual participation, procedural utility is the difference between the increase in reported subjective well-being of citizens and noncitizens due to citizens' higher participation rates (second hypothesis).

The individual rights of political participation are the first source of procedural utility proposed. There are some possibilities of directly engaging in three state levels in the political process, in addition to elections, in Switzerland. The most important are the direct democratic instruments. They exist at the national level as well as at the level of the 26 cantons (states). Here again, the cantonal level is taken into consideration, because the participation rights on the national level apply equally across the country, and the same indicator for the degree of direct democratic participation rights in the 26 cantons is used as in previous empirical analysis. According to the first hypothesis, more extended democratic participation rights are expected to increase reported satisfaction with life, due to a larger gain in procedural utility. In Table 5, the difference in life fulfillment between residents living in cantons with weak participation rights (cantons where the index of participation rights is lower than 4) and cantons with strong participation rights is expressed. A cutoff point of 4 is set in order to split the sample into two subsamples, with an approximately equal number of individual observations. On average, residents with strong participation rights report a 0.22 point higher level of well-being. Nevertheless, this difference may also be due to a favorable result of the political process. The result of the political process is closer to the wishes of the residents in more direct democratic jurisdictions. To separate outcome and procedural utility, the proposed identification criteria, namely people's nationality, is taken into account. As foreigners are excluded from political participation rights but not from the result of the political process, differences in levels of satisfaction between citizens and foreigners in cantons with strong and with weak democratic participation rights have to be analyzed. Where participation rights are weak, a difference in well-being between Swiss citizens and foreigners of 0.55 points is measured, while the respective difference in cantons with extended direct democratic rights is 0.80 points. So, both gaps in subjective well-being are due to differences in individual characteristics, incomplete assimilation, and, above all, citizens' opportunity to

| | <i>Participation Rights</i> | | |
|---|-----------------------------|------------------|-------------------|
| | <i>Weak</i> | <i>Strong</i> | <i>Difference</i> |
| Whole sample | 8.099 (0.033) | 8.318 (0.029) | 0.218 (0.044) |
| Foreigners | 7.625 (0.090) | 7.602 (0.104) | -0.023 (0.136) |
| Swiss citizens | 8.176 (0.036) | 8.402 (0.029) | 0.226 (0.046) |
| Difference (Swiss citizens – foreigners) | 0.551 (0.096) | 0.800 (0.092) | 0.249 (0.133) |

Table 5. Satisfaction with life and participation rights in Switzerland, 1992-94

raise procedural utility.

The difference in differences between cantons with weak and strong participation rights then reflects the gain in procedural utility of citizens caused by more extended participation rights. The raw data show that the effect of procedural utility is large in terms of reported satisfaction with life (0.25 points). We can use a multiple regression analysis to test whether this result still holds if individual characteristics are controlled for. Actual participation is hypothesized to contribute to people's feeling of self-determination and therefore their experienced procedural utility. Here, participation in national ballots is taken into account, in order to keep the content of the ballots equal for all voters. This does not imply that the expected outcome utility of the voting decision is equally distributed across jurisdictions, consequently we use again a differences-in-differences approach to give a descriptive analysis of the second proposed hypothesis.

The participation rate is tested at the cantonal level. Average actual participation is calculated from 45 national ballots on referenda and initiatives. These ballots were held between 19/02/1992 and 04/12/1994, so during the same years that the personal interviews were conducted. For the analysis in Table 6, the data set is separated into two subsamples. In the left column, the subsample consists of individuals living in cantons with an average participation rate below 49.1 percent; in the right column are those in cantons with an average participation rate above 49.1 percent. A cutoff point of 49.1 is selected in order to split the sample into two subsamples with an approximately equal number of individual observations. For the whole example, a higher reported well-being of 0.14 points is measured in jurisdictions with more active voters. This positive relationship between actual participation and life satisfaction can either be due to spatially different material consequences of the legislative proposals that stimulated participation, or be due to procedural utility. If the difference in well-being is tested separately for foreigners and citizens, the effects of outcome and procedural utility can be distinguished. As foreigners have no direct democratic participation rights, their procedural utility is expected to be close to nil. Therefore, foreigners' higher life satisfaction of 0.13 points in cantons with high participation rates, in comparison to those living in cantons with low participation rates, is attributed to outcome utility. For citizens, a similar positive difference of 0.13 is computed. A first empirical test thus gives no evidence for procedural utility through more active political participation. The difference in differences is -0.01 points and thus very close to zero. In the next section, a detailed analysis of the relationship between participation rates and subjective well-being is explained. A multiple ordered probit regression then allows for the control of correlated effects.

| | <i>Rate of Active Participation</i> | | |
|---|-------------------------------------|-------------------------|--------------------------|
| | <i>Low</i> | <i>High</i> | <i>Difference</i> |
| Whole sample | 8.143 (0.032) | 8.287 (0.030) | 0.143 (0.044) |
| Foreigners | 7.556 (0.092) | 7.688 (0.101) | 0.132 (0.137) |
| Swiss citizens | 8.235 (0.033) | 8.360 (0.031) | 0.125 (0.046) |
| Difference (Swiss citizens – foreigners) | 0.679 (0.092) | 0.672 (0.097) | –0.007 (0.134) |

Table 6. Satisfaction with life and rate of active participation in Switzerland, 1992-94

The descriptive analysis just considered offers preliminary evidence of positive procedural utility caused by stronger participation rights, but no evidence of process utility due to higher actual participation. A multiple regression analysis is needed in order to show whether these results are robust. Once more a differences-in-differences estimation strategy is applied to identify procedural utility. Technically, an interaction term is included in the estimation equation, combining the variable that captures the proposed source of procedural utility with the identifying criteria. Here, the identifying characteristic is being a foreigner.

The first hypothesis is tested by estimating a microeconomic happiness function, using a weighted ordered probit model. It takes democratic participation rights into account. Table 7 presents the coefficients and marginal effects for the variable we focus on here, participation rights.

The estimation results indicate sizable effects for both variables considered in the first hypothesis. The overall effect of participation rights on reported satisfaction with life is positive. In the ordered probit estimation, a positive coefficient indicates the probability of stating that well-being is greater than, or equal to, any given level of increases. The positive effect can be attributed to a gain in outcome or procedural utility in cantons with more extended participation rights. The interaction term in the second row reveals the difference in the positive effects for Swiss citizens and foreigners. The negative coefficient indicates that foreigners gain less from stronger participation rights than the people in the reference group (the citizens). This result is consistent with the first hypothesis that foreigners receive less procedural utility from direct democratic participation rights than Swiss nationals. If it is

further assumed that foreigners do not reach any procedural utility at all but cannot be excluded from the outcome of the political process, the relative size of procedural utility can be assessed. Comparing the negative coefficient of the interaction variable, which under these assumptions captures procedural utility, with the coefficient for the variable participation rights, two-thirds of the positive effect of more extended direct democratic participation rights is due to procedural utility and one-third stems from outcome utility.

| | <i>Weighted Ordered Probit</i> | | |
|---|--------------------------------|----------------|--|
| | <i>Coefficient</i> | <i>t-Value</i> | <i>Marginal Effect for Score of 10</i> |
| Democratic participation rights | 0.096 | 3.25 | 0.033 |
| Democratic participation rights × foreigner | -0.071 | -1.71 | -0.024 |
| Foreigner | -0.055 | -0.34 | -0.019 |
| Socio-demographic factors | Included | | |
| Socio-economic factors | Included | | |
| Observations | 6,137 | | |

Table 7. Procedural utility and participation rights in Switzerland, 1992-94

An absolute interpretation of the size of the effects is provided by the marginal effects. The marginal effect implies the change in the proportion of people belonging to a stated satisfaction level when the independent variable increases by one unit. In the case of a dummy variable, such as being or not being a foreigner, the marginal effect is evaluated with regard to the reference group. For simplicity, only the marginal effects for the top group expressing complete satisfaction with life (score of 10) are shown in Table 7. An increase in the index of participation rights by one point raises the proportion of people indicating very high satisfaction with life by 3.3 percentage points. For foreigners, however, this effect is smaller, as the interaction term has to be considered; 2.4 percentage points of the increased probability to report maximum subjective well-being cannot be reaped by the foreigners. Probably this is because they are excluded from the political process and thus from procedural utility. The effect of procedural utility as reflected in reported life satisfaction itself is sizable. This can be seen when compared to the marginal effects of control variables. For example, the marginal effect capturing procedural utility is almost as large as the effect of living in the second-lowest income category (Sfr. 2,000-3,000) instead of the lowest income category (under Sfr.

2,000). If the total variation in participation rights is considered—that is, when citizens in canton Basel-Landschaft (with the highest democracy index of 5.69) are compared to citizens in canton Geneva (with the lowest direct participation rights of 1.75)—the effect is even larger. The former enjoy procedural utility that increments their probability to be completely satisfied by approximately 12.3 percentage points. In the next section, this procedural effect of participation rights on subjective well-being comes face to face with the effect of actual participation on satisfaction with life. Participation in political decision making is often explained by the procedural utility gained. The second hypothesis argues, however, that citizens value the right to participate even more. Here, as a first step, the effect on subjective well-being of average actual participation across cantons is estimated. In the test performed, ballots at the national level are considered in order to guarantee that participation rights are equal to all citizens. If evidence for procedural utility is detected, an estimation including participation rights, as well as actual participation rates, will be conducted to assess the relative importance of the two measures.

Table 8 shows the results for an ordered probit model. The first variable tests for a partial correlation between average participation rate and reported satisfaction with life. According to the very small and statistically insignificant coefficient, there is no such relationship in the data set at hand. Whether this negligible correlation is due to a net effect that equalizes a positive effect due to procedural utility, and a negative effect caused by low outcome utility in cantons with high participation rates, is tested with the interaction variable. The interaction term between participation rate and being a foreigner identifies the contribution of active participation to subjective well-being that is independent of any outcome considerations.

| | <i>Weighted Ordered Probit</i> | | |
|--|--------------------------------|----------------|--|
| | <i>Coefficient</i> | <i>t-Value</i> | <i>Marginal Effect for Score of 10</i> |
| Actual participation rate/10 | 0.119 | 1.28 | 0.041 |
| Actual participation rate/ 10 × foreigner | −0.012 | −0.13 | −0.004 |
| Foreigner | −0.266 | −0.62 | −0.085 |
| Socio-demographic factors | Included | | |
| Socio-economic factors | Included | | |
| Observations | 6,137 | | |

Table 8. Procedural utility and actual participation in Switzerland, 1992-94

However, the coefficient of the interaction term is quantitatively negligible and gives no evidence for any procedural utility reached from actual participation. It is, therefore, superfluous to combine the two measures of political participation to test the second hypothesis. There is great evidence consistent with the sizable procedural utility reaped from the possibility of participating in the directly democratic political process. However, no statistical evidence is found for procedural utility from actual participation.

To check the sensitivity of the results, two tests for robustness are performed. First, the characteristics known about each individual are taken into consideration in order to control for correlated and contextual textual effects. Second, aggregate variables are included in the estimation equation to test two alternative hypotheses. As there is no evidence of procedural utility in actual participation, we do not perform form any robustness tests based on that result. In order to test for correlated related or contextual effects, four variables are included that control for three potential alternative explanations. First, a dummy variable for people's participation in sports or music clubs or neighborhood associations is used to test whether citizens may have accumulated more social capital in cantons with stronger participation rights, and therefore enjoy higher subjective well-being than citizens in cantons with less extended democratic rights. Second, a variable for residence in an urban area is included, in order to investigate the thesis that direct democratic rights could be weaker in urban areas where most of the foreigners live, and therefore the raw effect may reflect urbanization. Third, dummies for the language that is spoken in the canton are included in order to test whether the patterns in the descriptive statistics may capture cultural differences within Switzerland instead of institutional variation. Table 9 shows the results of an extended estimation equation.

A comparison of the results in Tables 7 and 9 indicates that the procedural utility reached from democratic participation rights remains similar in magnitude if four additional control variables are included. The control factors themselves have a positive effect on reported satisfaction with life in the case of being a member of associations and living in the Italian-speaking canton Ticino. There is no sizable effect of urbanization or of living in a French-speaking canton. For the aggregate control variables, the first alternative hypothesis refers to the distribution of foreigners across cantons: Foreigners report lower life satisfaction than citizens in cantons with stronger participation rights, because the foreigners are a small minority in these cantons. In order to test this hypothesis, two variables are additionally included in the regression model: the average percentage of foreigners in a canton and an interaction term between the percentage of foreigners and being a foreigner. The overall proportion of foreigners in the total population in Switzerland was 18.5 percent between 1992

and 1994. It varied considerably between cantons, the highest percentage being in canton Geneva with 37.5 percent and the lowest in canton Nidwalden with 7.9 percent. The estimation results in column 1 in Table 10 show that the coefficient that identifies procedural utility hardly changes (from -0.071 in Table 7 to -0.076). Thus, the distribution of foreigners across cantons cannot explain the different effects of participation rights on subjective well-being for citizens and foreigners. A second alternative hypothesis dilutes the assumption that foreigners cannot be discriminated against by the outcome of the political process: Cantons with higher income per capita provide public services that serve the citizens' preferences to a larger extent. In order to test this alternative explanation, estimation 2 in Table 10 includes a variable for national income per capita for each individual canton, as well as an interaction variable combining income per capita and being a foreigner. The estimation results reveal that the institutional influence on subjective well-being is not affected. The gain in life satisfaction restricted to citizens due to more extended participation rights is thus a fairly robust result.

| | <i>Weighted Ordered Probit</i> | | |
|---|--------------------------------|----------------|--|
| | <i>Coefficient</i> | <i>t-Value</i> | <i>Marginal Effect for Score of 10</i> |
| Democratic participation rights | 0.087 | 2.86 | 0.030 |
| Democratic participation rights × foreigner | -0.071 | -1.74 | -0.024 |
| Foreigner | -0.015 | -0.10 | -0.005 |
| Membership in associations | 0.159 | 6.41 | 0.054 |
| Urbanization | -0.051 | -0.51 | -0.017 |
| French-speaking canton | -0.094 | -1.60 | -0.032 |
| Italian-speaking canton | 0.249 | 3.70 | 0.089 |
| Socio-demographic factors | Included | | |
| Socio-economic factors | Included | | |
| Observations | 6,124 | | |

Table 9 . Sensitivity analysis: correlated and contextual effects

The concept of procedural utility represents a completely different approach to human well-being than the standard outcome-oriented approaches in social science research. The latter approaches use Bentham's concept of "experienced utility" or, in modern economics, employ "decision utility," which is inferred from observed choices. In contrast, procedural utility looks at the subjective well-being that people gain from the decision-making process itself, irrespective of the outcome. In this chapter, participatory decision making in politics is considered a possible source of procedural utility. Rights to directly participate in the

| | <i>Weighted Ordered Probit</i> | | | |
|---|--------------------------------|----------------|--------------------|----------------|
| | (1) | | (2) | |
| | <i>Coefficient</i> | <i>t-Value</i> | <i>Coefficient</i> | <i>t-Value</i> |
| Democratic participation rights | 0.092 | 3.18 | 0.101 | 3.42 |
| Democratic participation rights × foreigner | -0.076 | -1.12 | -0.071 | -1.72 |
| Foreigner | -0.024 | -0.05 | -0.041 | -0.12 |
| Share of foreigners | -0.002 | -0.39 | | |
| Share of foreigners × foreigner | -0.001 | -0.05 | | |
| National income per capita/1000 | | | -0.004 | -1.29 |
| National income per capita/1000 × foreigner | | | -0.3e-3 | -0.04 |
| Socio-demographic factors | Included | | Included | |
| Socio-economic factors | Included | | Included | |
| Observations | 6,137 | | 6,137 | |

Table 10. Sensitivity analysis: aggregate control variables

democratic process give citizens the feeling and the cognitive understanding that their preferences are seriously taken into account in a fair political process. Foreigners, who are excluded from political decision making, cannot reap such procedural utility. The results of our empirical analysis are consistent with this notion of procedural utility. Citizens, as well as foreigners, who live in jurisdictions with more extended political participation rights, enjoy higher levels of subjective well-being. The positive effect on reported satisfaction with life is, however, smaller for foreigners, reflecting their exclusion from procedural utility. It is thus empirically feasible to distinguish between outcome and process utility. Moreover, it is possible to get a notion of the relative sizes of outcome and process utility. The positive effect of participation rights is three times larger for the citizens than it is for the foreigners—that is, a major part of the welfare gain from the favorable political process is due to procedural utility. Actual political participation is often rationalized by individuals' experience of procedural utility. Here it is argued that participation rights are more important in terms of a feeling of control, self-determination, or influence in the political sphere than actual participation. We indeed find neither statistically significant nor sizable positive effects on individual well-being of high participation rates. Overall, the evidence suggests that individuals value both outcomes and procedures and, in particular, that they derive substantial utility from political participation rights.

4. HAPPINESS AND SOCIO-DEMOGRAPHIC ASPECTS

4.1 Fiduciary relationship

In 1986, Martha Nussbaum presented her well-known argument of the so called 'fragility of goodness' (Nussbaum 1986). According to her reading of Aristotle's theory of eudaimonia, the pursuit of the good life, which ultimately leads to happiness, is doomed to be subject to the will of fate. Since, in fact one of the constitutive components of such an enterprise is the likelihood of building meaningful interpersonal relationships, and the quality of such relationships is necessarily a function of others' behavior and such a behavior is, thusly, out of the control of the subject itself, our own happiness is ultimately in others' hands. That is one reason why our own happiness has always been so unequivocally seen as identified with luck. In any case, a basic point in Nussbaum's argument is that, while ego can just choose to open his/her life to the impact of alter before knowing whether such an impact will be positive or negative, that is to uncover him/herself to the danger of opportunism, in the meantime, it is verifiably accepted that such trustful conduct does not change in any regard the nature of the relationship, that is that alter's preferences are stable over time and unresponsive to ego's own actions. In this section we might test such a supposition by arguing, to the point that more often than not people are without a doubt receptive to others' conduct and that is especially obvious in the area of fiduciary relationship. The essential thought is that trustful actions have a tendency to inspire trustworthy reactions. That component discovers its roots in what Smith characterized as a natural desire for the good opinion of other, which creates a specific tendency to satisfy certain expectations that a given class of practices (that is, trustfulness) might believably signal. If we trust Aristotle, happiness springs from a 'good life' and such a good life has among its most vital fixings others' friendship. A happy individual is a man with friends, in light of the fact that a veritable friendship (*philia*) is the support of our own virtues. In any case a significant interpersonal relationship incorporates freedom of action and the impossibility of controlling others' activities, some of which could, hence, end up being harmful for the individual, accordingly frustrating the individual's desire to satisfaction. Accordingly emerges the focal paradox of happiness: happiness is a social item however by carrying on with a social life the individual is presented to the, not always beneficial, will of others.

This paradox speaks to the quintessence of the Greek tragedy tradition. Consider, for instance, Sophocles' *Antigone*. In the darkest point of the story, close to the end, when the

action is by all accounts paralysed, a weak beam of hope originates from an old blind man, Tiresia, and his young friend. They are the main characters, despite the fact that their moving appears to be contrary to any logic in light of the fact that the young does not know where to go and the old man does not know how. The old needs the young's eyes and the young needs the old man's experience. They can survive due to their shared trust. In that lies a hint of the comprehension of the mystery of happiness in the event that we attempt to unravel the dynamics of such a collaboration. But how can reciprocal trust constitute the way out of the paradox when it is well known that the trust may be painfully betrayed? What's more, actually, this is the reason Nussbaum (1986) considers that a good and cheerful life is within reach, but at the same time extremely fragile. Her argument lays on an implicit assumption of agent's preferences, in particular that agents' inclinations are stable and unresponsive. Behind this assumption there is the acknowledgment that the mechanism that produces individuals' behavior is the same in both parametric and strategic choice problems, which is, on closer investigation, the same core assumption of classical game theory. In any case, such a supposition is empirically ungrounded and we shall challenge it by considering the ramifications of the likelihood that agents' inclinations are responsive, that is, endogenously created in an interpersonal relationship. This implies that choices in a parametric or a strategic environment are guided by various motivational mechanism. Before expanding that thought further we should first consider in more formal terms the relationship in the middle of Tiresia and his young friend, which we take as a symbol of the issue of trust. The term 'trust' will essentially be a concept that implies the following elements characterizing the behaviors open to agents involved in a fiduciary interaction:

1. potential negative consequences
2. risk of opportunism
3. lack of control

Consider the relationship between the old man, Tiresia, and the young man in Antigone. That circumstance has each of the three components specified previously. The relationship is symmetric and by going into it, each of the agents opens himself to the danger of opportunistic conduct which emerges on account of the flawed control that can be applied on each other's activities. The potential negative results alludes to the way that entering a trustful activity might prompt results both preferable and worse than those feasible in isolation. All these elements are summarized in the 'trust game' (TG) depicted in Figure 5:

- point 1 is described by $b < a$;
- point 2 depends on $e > f$;

- point 3 is obtained by modelling the game as a non-cooperative, twostage sequential game.

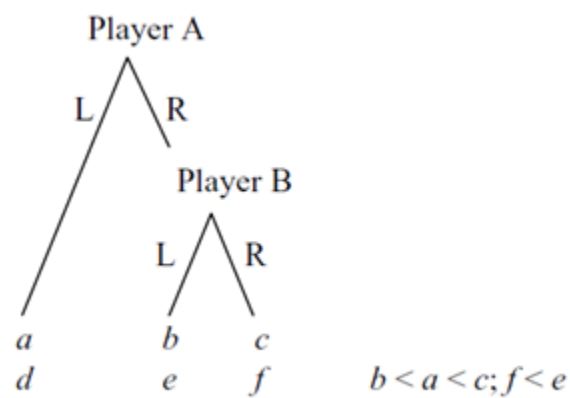


Figure 5. The trust game: the basic elements of a trusting interaction

Player A chooses first either L or R; in choosing L, players get a payoff pair equal to (a, d). But if A chooses R, the choice passes to B, who, in turn, can choose either L or R. In the first case B gets e and A, b; in the second case B gets f and A gets c. Given such a payoff matrix and the relations between its elements, the game-theoretical advice for a rational course of action will be for A to choose L and stop the game there. A's reasoning goes backward as follows: 'If I play R, B will play L (because by doing so, B gets $e > f$) and I would get b which is the worst of all possible outcomes [from A's perspective]; therefore in playing L, if not c, at least I can get a, which is better than b'. Although A's preferred outcome in this game would be that described by (c, f), such a situation is not an equilibrium outcome and, in fact, it is achievable only when both player A deviates from his/her individually rational course of action L choosing R, and player B renounces his/her rational strategy L, by opting for R. On the contrary, the rational strategy that emerges by backward induction is described by the concept of subgame perfect Nash equilibrium which yields the outcome (a, d). If an out-of-equilibrium pair of strategies like (R, R) is selected, we would say that A trusts B (not to be opportunistic) and that, on the other side, B repays such a trust by behaving in a non-opportunistic way. The definitional problem at this stage can be confronted only at a behavioral level. It is important to give a clear characterization of trustful and trustworthy behaviors and that is only possible by referring to observational considerations. Formally, subject A's behavior is trustful when: (i) in a situation that can be modelled as a TG; and (ii) player A plays R. Correspondingly B's behavior is trustworthy when: (i) and (ii) apply, and (iii) player B plays R. The strategies described in (ii) and (iii) can be interpreted,

respectively, as trustful and trustworthy because the former implies that player A exposes him/herself to the risk of B's opportunistic behavior, and the latter implies that player B's choice attributes to A, a payoff greater than he/she would have got by playing an equilibrium strategy.

In circumstances such as that depicted by the trust game, standard game theory suggests a game-plan that prompts suboptimal outcomes. Nevertheless, in a number of experimental circumstances a different pattern of behavior emerges. A significant number of As, in fact, prefer to give the move to the Bs by playing R, and a significant number of Bs resist the temptation of the opportunistic choice (L) by playing R. Such a combination of behaviors (A chooses R and B chooses R) may be described as trustful and trustworthy (T&T). These 'anomalous' behaviors cannot be satisfactorily accounted for by traditional theories⁴ based on self-interest, the role of reputation, bounded rationality, or on the re-description (cognitive or revealed preferences type) of the payoffs in the game. In what follows we shall focus on models that assume that players are motivated not only by their self-interest, but also by some form of otherregarding considerations. In a portion of the models such additional components are brought into an extended utility function that the players go for maximizing in the usual way. Such models might be characterized as 'consequentialist', since in fact, players' decisions are orientated just by their consequences. Then again, different models develop new solution concepts that formalize an agent actuated not just by the outcomes of his/her choices but also by the way such consequences are achieved. These models can in this manner be characterized as 'procedural'. In the former class are models based on the idea of altruism and inequity aversion, while the latter are built around the ideas of reciprocity, group thinking and trust responsiveness. These models are applicable for the present discussion in light of the fact that, in somehow, they are all able to rationalize a sequence of T&T practices.

Tiresia's and his young companion's cooperative conduct might emerge for various reasons: for example, from their both being altruists and each worried about the other's welfare. Be that as it may, they might likewise be bound together by their sense of reciprocity: since one is being kind to the other, the latter responds and is kind thusly. A third clarification might be founded on the agents' taste for equality. They are both in need and go for enhancing their condition however this is done without, constextually, expanding the distance between them. A fourth plausibility might be that the two agents have a tendency to recognize themselves as a team and to act as per an arrangement that the team needs to seek after. A fifth and last clarification for the two agents' conduct depends on the impact that a manifest reliance might apply in motivating trustworthiness. Let's concentrate on the fifth , because

this has already been formalized in well-known game-theoretical models and on the principle of trust responsiveness, which provides satisfactory picture of what is going on between the two characters in *Antigone* and in general in any trusting relationship. A first reason lies in the fact that, as empirically established, individuals are interested not only in the outcome of their choices, but also in the process chosen to produce certain consequences. This consideration leads us to favour the procedural theories over the consequentialist ones. Second, we can believe Tiresias's and his friend's behaviour is motivated by something more pristine and unconditional, rather than mere reciprocity or team membership. While these reasons might be some way or another conceivable, it is ultimately an empirical issue. Each of the five theories are, truth be told, empirically identical: they are all reliable with observing both A and B playing R in a trust game. Now we'll build up a test equipped for separating between all the alternative behavioral principles, and to do that we first quickly sketch the contentions underlying each of the models. In the first model consider here, the agent is motivated by altruistic concerns. An altruistic subject can be characterized as one whose utility increments as others' welfare increments, and declines as others' welfare diminishes. Since altruistic agents are self-centred agents, such variations are normally weighted in a way that ego credits more significance to his/her own utility with respect to that of alter. This allows to depict observable and testable hypothesis. In a TG, if B is roused firmly enough by altruism, then it could be rational for him/her to oppose the opportunistic decision of L and play R. In this manner, actually, B will profit by a indirect increment in utility getting from the expansion of A's utility. With such an altruistic state of mind, it becomes rational for A to be trustful by playing R. It is worth noting that such a class of models is based on a purely forward-looking logic, as players are spurred exclusively by the outcomes their actions would produce and not by others' choice.

Another class of theories that can be used to explain the evidence at issue is based on the idea of inequity aversion. Agents are inequity averse when they are endowed with a preference for distributional fairness in a manner that they point both at maximizing their payoff and minimizing the difference between their own payoff and those of others. The hidden thought is that people dislike being part of an unequal distribution of wealth but, in such an unequal distribution, they dislike even more being in a disadvantageous position rather than in an advantageous one. This sort of theory can clarify the decision of (R, R) in games such as the TG, gave that the weight connected to inequity considerations is sufficiently solid, since player B is inspired to play R keeping in mind the end goal to determine a circumstance (c, f) which is less unequal than the option one (b, e). With respect

to theories of altruism, in inequity aversion based theories, agents are forward looking, that is, they are inspired only by the elements of the outcomes that their action could determine.

While the two classes of theories based on altruism and inequity aversion depicted above represent a sophistication of the conventional theory of games, but ultimately are based on minor departures from its basic structure, the following theories discharge some of the core assumptions of traditional game theory. While the two previous principles influence subjects' preference orderings, however the agents keep on being instrumentally rational and pick actions that realize their most favored outcome, changing to team thinking implies for the subjects a sort of inclination and thinking that can't be portrayed inside of the traditional framework of instrumental rationality. Specifically, what is profoundly diverse is the association existing in the middle of preferences and actions, that is, the way the former determine the latter. This hypothesis encapsulates a model of agents that see themselves as individuals from a team. Such participation suggests the presence of specific sorts of preferences, in particular 'team preferences'. While altruism and different theories influence the inclination formation process, the hypotheses of team thinking hypothesize an alternate, non-instrumentally rational, method for fulfilling group preferences.

In these theories, agents pick a strategy that, in spite of the fact that it might show up as non-instrumentally rational, constitutes, all things considered, 'their part' in fulfilling the preferences of the team they relate to. In these theories the agent, truth be told, embraces a strategy that regardless of not being individually optimal, represents his/her part in the combination of actions that is best for the group, gave that the various members take after the same thinking style. The most crucial and distinctive element of team-thinking reasoning is the manner by which utility determines singular action. While agents are instrumentally rational when they seek after action that prompt the expansion of their individual utility, group thinkers are viewed as rational when they pick actions that are a piece of the team plan, regardless of their property of prompting individually optimal outcomes. This is somehow bewildering, but for a group thinker, aggregate good results are reasons for actions by the team, however not explanations behind actions by individual agents; for individual agents, they are contingent consequences of good plans.

Given such a measure of rationality we might expect that if in the TG the two players A and B see themselves as belonging to the same group, what will become crucial therefore, is no more the maximization of the individual utility of every subject except picking the actions that are seen as a part of the group plan to accomplish the group objective. On the off chance that the group goal is to pick up as much as it can, in a 2-player game like the TG, the objective of the group could be operationalized as the maximizations of an expanding and

symmetric function of the payoffs of the two players. For the individuals from a group the strategies (R, R) are the best choice in light of the fact that the B player likewise adds to the group objective, similarly as an out-of-condition football player would surrender his/her place in the last match to a fellow team member who is in a better shape.

Another well-known class of hypotheses that can be utilized as a clarification of the phenomenon of trust is that taking into account the thought of reciprocity. Such hypotheses join the thought that agents are willing to give up some portion of their material wealth with a specific end goal to be kind to the individuals who have shown kindness to them and to punish the individuals who have been mean. In this case payoffs depend not only on players' actions, as in the classical theory, but also on players' intentions, beliefs and emotions. The games where such factors affect players' behavior are defined as psychological games.

Consider two players, A and B. In a psychological game, A's ex ante utility depends not only on what A does and what A believes B will do, but also on A's belief about B's belief about what A will do. This framework introduces the idea of 'reciprocating fairness' in such a way that players evaluate other players' choices not only on the basis of the payoffs they lead to, but also on the basis of the 'degree of kindness' incorporated in, or manifested by, certain choices. Such a degree of kindness is measured using as a benchmark, a particular value called an 'equitable payoff'. When the payoff A actually gets by playing his/her equilibrium strategy is higher (lower) than the equitable payoff, B has been kind (mean) towards A.

In this framework players' responses depend, via the reciprocating kindness assumption, on the intentions incorporated in each choice, in the sense that the same choice can be assessed (eliciting different responses) depending on the motives or intentions that underlie it. Motives can be inferred from a player's choice of strategy from among those choices he has, so which strategy a player could have chosen (but did not) can be as important as which strategy he actually chooses. Players aim to maximize a utility function that is made up of a material part and a psychological part. The latter is given by the product between one's own kindness and the belief about the other's kindness. Thus A's being kind (mean) to B, when he/she expects A to be kind (mean), positively contributes to both A's and B's utility, while mixed situations are a source of disutility. One obtains a fairness equilibrium when both players maximize their own utility, given that their first- and second-order expectations about the other's first- and second-order expectations are confirmed in equilibrium.

It is reasonable to think that with respect to the problem of trust, the expectation of a reciprocating behavior could well be the rationale for behaviors like (R, R) in the TG. And in

fact, that is intuitively plausible. But when we consider such a situation more deeply, we see that things are more complicated and this model presents some problems. First, the model is intended only for strategic form, 2-person, complete information games, that is, it is not directly applicable to sequential games like the trust game. Second and more substantial flaw that affects the model: although a pair of strategies (R, R) seems coherent with the logic of reciprocating fairness, it is not a formal implication of the model: it does not constitute a fairness equilibrium.

Therefore to apply it, the model has to be amended in different respects. For example in order to overcome the original model's limitations, substituting, as a reference point for the measurement of kindness, the value of the Nash payoff for equitable payoff. The intuition behind such an amendment is: 'If you provide a benefit to me in playing your materially self-interested equilibrium strategy, then you are not being kind to me, and there is nothing unfair if I pursue my own material self-interest'. Given such an amendment, A's trustful choice is now perceived by B as incorporating a positive degree of kindness. That would justify B's trustworthy response.

The last theory is based on the idea of 'trust responsiveness', which implies that, given the subject's prior preference structures, the mere fact of being the object of someone's trust, may alter the prior preferences and provide an additional reason to behave trustworthily. At the core of the trust responsiveness mechanism we find two basic elements: first, Aristotle's theory of *philia*, which considers self-knowledge as a product of a friendly relationship, and second, what Smith considers, in his *Theory of Moral Sentiments*, as the most basic motive of social action, that is, the need for recognition, namely, the desire to be loved and approved of.

The desire to be praised but also, praiseworthy along with the aversion to being the object of others' resentment, constitutes the ground from which a trustworthy attitude may spring. Consider an interaction like the TG. If we reason forward, assuming our fellow player is rational, and we observe him/her playing trustfully, we may infer that he/she expects, at the end of the day, to get a payoff no worse than he/she would have got playing Nash. The player's actions therefore, may be taken as a signal of his/her expectations. Moreover such a signal is credible because it is costly. The cost being represented, in fact, by the risk of a potential opportunistic and detrimental choice. The player knows that, and he/she knows I know. And I know that he/she knows that I know, and so on.

At this point, although an opportunistic choice may lead to a higher material payoff, such a choice is necessarily associated with a conscious frustration of the other player's expectations which, in turn, generates psychological disutility. The opposite is true for a trustworthy choice, from which one gets material loss and psychological gain. Therefore, the

actual decision will be the epiphenomenon of such an internal struggle between material (wealth generated) and psychological (socially generated) concerns. Summing up it may be said that:

- the principle of trust responsiveness assumes that players are sensitive to others' expectations;
- such expectations are revealed by choices; and
- that kind of mechanism implies a model of forward-looking reasoning.

So, after have considered this theories, it can be said that trust is perceived to be crucial for happiness because one cannot be happy in isolation.

Second, trust, at least in the narrow sense of trustworthiness that we considered here, seems to be based on the desire to be praised and praiseworthy. Finally, such a desire to be loved, as Smith emphasizes, contributes to happiness both indirectly, by providing reasons for trustworthiness, and directly, by providing fulfillment of one of our most basic needs.

4.2 Relational goods

Subjective well-being, regularly called happiness, is arousing increasing interest among economists through continued investigation of the Benthamite way to deal with utility . A fundamental explanation behind this interest is that per capita income has progressively turned into an overoptimistic proxy for well-being, particularly in the affluent economies. The most precise proof on this issue is given by survey research on self-reported happiness. Further huge and more emotional proof rises up out of the multiplication of particular types of malaise, for example, mental depression and suicides. A subjective well-being paradox can be all the more definitely identified in the wealthiest nations during recent decades. Give us initial a chance to characterize subjective wellbeing (SWB) as including both an cognitive judgment on fulfillment with one's present life, and one's prevalent affective state. A paradox emerges on the grounds that the different indices of SWB show little improvement or even decay, while per capita wage, which is the primary proxy for material well-being, shows an definite rising pattern. The paradox is elevated by the way that the failure of salary to yield SWB has not substantially discouraged people from supplying their labor. As such, technical advancement is, all things considered, not used to accomplish more leisure and subsequently decelerate income growth. By contrast, effort, if not working time, is supplied to a greater amount, and with subsequent more noteworthy stress. The primary clarification for the

paradox offered by economic literature depends on the Duesenberry (1949) type of comparative effect. Easterlin gives the prime sample of the use of this methodology. He first accepts that SWB positively depends on current income and adversely on aspirations about future income, and that aspirations depend on past wage. He then guesses, and supports with some evidence, that material aspirations change over the life cycle roughly in proportion to salary. Therefore, SWB might stay constant while wage increments, and work effort is not discouraged. Despite the fact that this clarification is intriguing, it is inadequate in a major respect which has a discouraging effect on active policies. It neglects to clarify why the recent deterioration of SWB is such a noteworthy phenomenon. This failure totally changes the issue of insufficiency of per capita income as a proxy for SWB. The suspicion that self-reported SWB is downwardly biased due to measurement and different issues transforms into the intuition that SWB is influenced by some significant factor which is not caught by income and which is deteriorating. Easterlin's clarification of constant SWB reveals the drawback to analysis which considers just income. It overlooks the fact that a constant gap in the middle of aspirations and realizations infers that people don't learn, and that they commit systematic errors, with the further uncomfortable result that deteriorating SWB involves an inclination to commit more serious mistakes. In addition, the inability to perceive that SWB deteriorates in some critical instances changes the essential approach from less inaction to urgent intervention. Ethical reasons would suffice, but the economic impacts of deteriorated SWB ought to be additionally considered.

Some economists have recently perceived that both the exchange of economic goods and the underlying personal relationships matter in economic interaction among people. The production and consumption of other distinctive products, to be specific "relational goods" (RGs), are in this way recognized in the literature. This section applies it to taking care of a macroeconomic issue, so that assumptions that greatly simplify the examination become particularly attractive. There are primarily two of these simplifying assumptions. The first is that the production/consumption of RGs is because of a final intentional behavior which is particular and different from all the other more usual economic behaviors. In reality, this distinction is not all that obvious. For instance, the exchange of work hours for a salary is truth be told not a simply material transaction as is accepted here. This is on the grounds that nearby individual connections are significantly more important amid leisure time than they are amid working time. The second simplifying supposition is proposed to catch a disregarded part of human nature in personal relationship: feelings and emotions. It is assumed that people can't foresee precisely – not even on the basis of past experience – how much SWB will be yielded when spent on closely relating to others.

Feelings and emotions render encounters invariably to some degree surprising. By contrast, it is accepted that people can anticipate the utility getting from traditional economic goods with precision. Notwithstanding these simplifying suppositions the examination is still complex, not least because psychology obviously does not have a formally rigorous and widely theory of SWB. Also, numerous studies in psychology, psychiatry, neurobiology and sociology highlight parts of interest to the present investigation on the basis of survey and experimental data, and in addition of clinical based research and informal explanations. In order to resolve the paradox, therefore, this chapter integrates the diverse contributions of these various disciplines into a single framework, attempting to provide an analysis which is rigorous but still exploratory and informal.

In order to explain the SWB paradox a model is proposed which includes both economic goods and RGs as representative of close personal relationships. After the model has been closed with a simple production side, it can be described as an extension in some crucial directions of the standard labour/leisure model explaining labor supply. The model will be built step by step in the following subsections.

Let us assume that the economy is characterized as follows:

1. Many identical firms compete to produce one good only, called 'economic good'.
2. A single production technique is available, and it employs only labor with constant returns.
3. The population comprises workers and a fixed proportion of younger individuals who have not yet entered the labor market; births, new workers and deaths are the same in number for each given period.
4. The working population atomistically competes to supply homogeneous units of labor for a wage.
5. The utility function is the same for both workers and young individuals, it is concave in two complementary arguments: an economic good, and a 'relational good', both of them fixed baskets of goods.
6. Each worker is endowed with a fixed amount of time, which can be devoted either to work and producing the economic good, or to consuming/ producing the 'relational good'.
7. Workers provide the economic goods to young individuals for free, as demanded by the latter.

The results deriving from these assumptions are that the productive technique fixes labor productivity per time unit, which is equal to the (real) wage rate per time unit, and that utility maximization yields the individual and aggregate participation rate in production of the economic good, and the amount of income earned, which is totally spent on the economic good. Thus determined is the economic/‘relational’ goods composition. This closely resembles the standard model of labor supply, if leisure replaces the ‘relational good’. Note, however, the effects on the labor supply due to the assumption of complementarity in both the consumption/ leisure case and the economic/‘relational’ goods case. An innovation in the production technique, and thus an increase in the wage rate per time unit, reduces the labor supply or the participation rate, while it increases both consumption and leisure, that is, both kinds of goods. To obtain an outcome consistent with the SWB paradox, further assumptions will be added in the next subsections.

The first crucial change proposed to the standard model is the replacement of leisure with RGs. This concept is new in the literature, although the importance of human relationships in economic life and well-being has been emphasized since Adam Smith. The recent endeavour has been to treat personal relationships in a way which is directly comparable to economic goods. RGs are defined as a subset of local public goods, as they enter two or more persons’ utility functions. In fact, they can only be enjoyed with some others, because with RGs the jointness of consumption itself provides a benefit. This benefit can be measured, and it may be highly asymmetric between the partners. The production and consumption of RGs coincide, so that they are not an exchange of pre-existing economic goods. Finally, RGs are to some extent noncontractible, as favourable reciprocal dispositions cannot be effectively secured throughout monetary incentives. Therefore, they can be defined as not marketable.

In this chapter the definition of RGs is restricted in three ways. First, RGs are considered to be pure goods, that is, they are excluded from and unrelated to the production and exchange of economic goods. Second, they are considered to be flow goods which cannot be accumulated. This restriction makes the analysis simpler, but it does not appear crucial. Third, RGs are a matter of intentional choice in the same way as economic goods are, because they can be evaluated when they take place. However, unlike economic goods, they yield a benefit which the individual cannot predict with any accuracy. The second crucial change proposed to the standard labor/leisure model is application of the comparison approach as developed by several economists and psychologists. The idea that individuals compare their spendings against some prior standard was introduced by Duesenberry (1949) with his relative income hypothesis.

In this chapter, SWB will be simply used for 'utility', so that aspirations refer to SWB derived from consuming the various goods. Namely:

8. Decisions for maximizing future SWB are based on aspirations, rather than on mechanistic predictions extrapolated from past SWB obtained from similar goods, or from the observation of the SWB of other people. Aspirations emphasize the role of affects.

Several psychologists and neurobiologists have studied the importance of affects in an individual's motivation and behavior. An interesting finding is that depression or happiness, and personal affective traits like extroversion and neuroticism, significantly influence individuals' selection and evaluation of the information relevant to their aspirations. In particular, social comparison proves to be subjective and upwardly biased .

It may be said that a higher content of affect in the aspirations for RGs than for economic goods infers that also forecast of future SWB is more uncertain in the previous case. Learning the consumption of economic goods is normally highly effective as well as from experiences of others. The same conclusion can't be effectively supported as to the consumption of RGs. The following assumption is in this manner made:

9. Realized SWB and aspirations for future SWB coincide for economic goods, while the possible gap between them is maintained for RGs.

Unluckily, there is not a lot of observational proof particularly acquired from testing this assumption. Be that as it may, van Dijk and Zeelenberg find that people respond to personal related disappointment very differently from the way in which they react to outcome-related disappointment. In the previous case people have a tendency to avoid experiences with others, in the last case they continue in their behavior. Hence, what is important is not the degree of uncertainty in the forecast of RGs versus economic goods, but the kind and the effects of uncertainty.

The idea that SWB is determined by the gap between aspirations and realizations, and 9. which limits the existence of the gap to RGs suggest specification of the following 'SWB function', which complements the specification in 5.:

10. (Experienced) SWB depends positively and multiplicatively on economic goods and on realized RGs, and negatively on the gap between aspirations and realization of RGs.

Note that SWB maximization is pursued on the basis of the expected levels of the variables. In particular, the expected gap may be extrapolated from experience of past gaps.

When SWB is actually experienced, the gap is realized. More precisely, it can be defined a 'disappointment' when aspirations are not completely realized (overprediction), and an 'elation' when aspirations prove to be too conservative (underprediction). Therefore, a disappointment affects the SWB negatively, and an elation affects it positively.

However, to the extent that aspirations for RGs are not realized as they have been in the past, SWB is not maximized. In the case of overprediction, SWB is lower than it would be if aspirations were completely realized. To maximize SWB, the allocation of time would have to be more favorable for the production of the economic good, since well-being from RGs would have been experienced as smaller. By contrast, if underprediction is the case, elation arises, and hence SWB is greater but not optimal. One may expect an allocation of time more favorable to RGs to yield even greater SWB. In the SWB function, the two kinds of goods are complementary (5.), that is, greater consumption of economic goods increases aspirations for additional RGs. This means that economic goods embody an instrumental value. Examples are transport and communications goods and services, which can be bought for the purpose of enjoying close personal relationships.

In any case, complementarity would likewise infer that the supply of individual work is diminishing for rising wages, contrary to the SWB paradox. We are currently ready to express that it is more right to refer to complementarity between economic goods and aspirations (rather than realizations) for RGs, and that the disappointment of aspirations might prompt a person to turn complementarity between the two goods into their substitutability.

Time is not the only obvious input for RGs, in fact individual characteristics and economic goods can also be included among such inputs. Their treatment here is original, however. The consumption of economic goods affects the production of RGs both as a level, through 10. on the multiplicative specification of the SWB function, and as a change, through the complementarity assumption 5. Individual characteristics are clearly involved in the production of RGs, in so far as they can be evaluated along the dimension of disposition towards RGs. This is a positive, pro-social affect, inclusive of feeling, disclosure and responsiveness, that can be seen as a mood or as a personality trait sometimes synthesized by the terms extroversion and neuroticism . Moreover, a distinctive technique linking the inputs and the output of RGs can be identified in the interaction among persons. This is the main source of emotions and feelings. Let us therefore assume:

11. RGs per time unit for an individual positively depend on the level of and changes in the economic goods used, on the individual's and his/her partner's dispositions towards RGs, and on the interaction among all the individuals involved.

This chapter starts from the observation that the prediction of future well-being from RGs is uncertain: more specifically, it is uncertain in an endogenous way and to an unknown and variable extent. In fact, RGs depend, among other things 11., on an individual's disposition towards RGs and on his/her interaction with others. However, the strength of these determinants is partially unknown to the individual in advance, because the disposition and the reaction to others are imbued with emotions and feelings, which essentially arise unconsciously.

Moreover, past experiences vary greatly, and homogeneous information is scarce. Therefore, the available information with which the individual can build the subjective probability distribution of the expected level of RGs produced/ consumed per time unit will yield a fat tails distribution. Nor will information updating greatly reduce errors in prediction. The following assumption may thus be stated:

12. The probability that an individual realizes aspirations for RGs remains low over his/her life cycle.

The affective component of desires is not constant over the life cycle but rather diminishes with age. Newborn children don't make cold forecasts taking into account past experience; they basically 'hope to find a breast' and depend altogether on other individuals for fulfillment of both their physiological needs and their psychic desires. Unfortunately, since physiological needs are more tangible, they are typically all the more totally fulfilled. Disappointments from personal relationship in this way ensue. Young people commonly have high aspirations, while adults report a closer gap in the middle of aspirations and realizations. This is confirmed by normal knowledge but also by specific studies. The following assumption can thus be stated:

13. The younger age group of the population exhibits the greatest positive gap between aspirations and realizations of RGs.

Therefore, the prediction of future well-being from RGs is not simply wrong with a high probability but tends to be biased upwards. This implies that updating the probability distribution of the expected level of RGs per time unit through their realizations means a leftward correction of the distribution, where RGs are lower.

When people are disappointed by close personal relationships, they usually react in some way. Three reactions can be stated:

14. Reducing the time devoted to RGs.
15. Reducing the disposition towards RGs.
16. Reducing aspirations for RGs.

This subsection talks about the first reaction; the other two are managed in the following subsections. Diminishing the time given to RGs is a reaction ordinary of adults, who are able to change the time distribution previously chosen in an attempt to diminish disappointment in the future. This is a response because of a dynamic maximization which affects adults to look for more consumption of economic goods. Likewise young people might consume more economic goods as a result of frustration from close personal relationship: they request more economic goods from adults, who will thusly work harder. Babies frequently simultaneously experience both disappointment and over attention by adults to their physiological needs. This change is significantly stimulated by advertising and fashion. These facts are contemplated by the literature on the push to materialism in affluent economies. But this literature also concludes that individuals who emphasize materialism yield less SWB than the others. This is a cross-individual version of the SWB paradox, which can be explained by the model starting from 10, 13 and 14. It in fact follows that the greater the disappointment from RGs experienced by an individual, the less his/her SWB and the greater his/her push to materialism.

Be that as it may, there is likewise much evidence to demonstrate that SWB diminishes with age, despite the fact that its dynamics after the age of 40 needs further examination. Studies in clinical psychology, psychiatry and psychotherapy agree that infancy and youth are critical ages, because disappointments and other problems particularly depress the well-being of individuals. A few econometric studies find that SWB diminishes from the age of around 20 to the age of around 40, and after that moderately increments. Notwithstanding, these studies likewise demonstrate that the individual's marital status has by a wide margin the most essential impact on SWB. Separation, divorce and widowhood drastically lessen SWB. Moreover, the finding that SWB is U-shaped with age has been criticized because it is not based on panel data, and it may be due to a composition effect across different generations. If SWB is followed along the same cohorts, a constant or even a declining trend emerges from 21–30 to 85–90. Finally, studies on suicide report the highest rates in the group of oldest people. In particular, in the US this suicide rate incremented from 24.9 to 42.0 per 100,000 residents during the 1990–98 period, while among the white widowed men the rate reached 84.0.

This evidence is thus consistent with the SWB paradox on time basis, but its explanation requires further analysis.

The second response to dissatisfaction is a decrease in the disposition towards RGs, in spite of the fact that this by and large happens unconsciously. This reaction makes the uncertainty in predicting future RGs special: in fact, an unconscious reduction in dispositions

towards RGs means that the realized RGs update the subjective probability distribution of RGs only partially. If the reduction in the disposition were fully known, the probability distribution would be further corrected to the left. Unconscious information on RGs thus explains the tendency to over-predict SWB from RGs, and the difficulty of learning from past errors. The reduction in the disposition toward RGs is not just a one-stage impact; it triggers a vicious circle through 11: from dissatisfaction to less disposition, from less disposition to less well-being from realized RGs, and henceforth to further dissatisfaction. This is the vicious circle of depression.

The third response to disappointment from RGs is a reduction in aspirations for RGs. This response both decreases the negative impact on SWB (10), and decelerates the vicious circle of depression. It can be represented as a decrease in the preferences for RGs, in this way changing the SWB function. This response appears truth be told successful to some extent, in so far as the proof of the recovery of SWB from around the age of 40 onwards is reliable. More precisely, the phenomenon has been explained as a change of reaction with age, that is, as a gradual shift from assimilative, namely, changing life circumstances to personal preferences, to accommodative, namely, adjusting preferences to given situational constraints mode of coping with increasing age. However, some individuals may be particularly able to reduce aspirations and thereby completely prevent depression. They succeed if they are able to cancel any aspiration for RGs and thus prevent disappointment itself. However, this means that they must desensitize themselves to any outcome deriving from personal relationships. Desensitization is known in 'adaptation theory' as a structural form of adaptation, while it has been called 'anaffectivity' in psychopathology when it deals with personal relationships. In this case, the reduction in the preferences for RGs is substantial, eventually changing the relationship between RGs and economic goods from complementarity to substitutability. As a consequence, materialism has greatly increased, and economic goods become more final, and eventually cease being instrumental in raising RGs.

Therefore, the individuals who deliberately attempt to reduce their aspirations for RGs eventually appear to be more materialist, and thus with lower SWB than others. Moreover, radical desensitization to RGs may bring the individual to the dangerous point of losing touch with human values, attempting physical as well as mental violence against others and him/herself. However, even if the individual is able to prevent depression and enjoy great SWB from economic goods by substantially reducing his/her aspirations for RGs, s/he cannot avoid, as a product of desensitization, causing more severe disappointments for his/her children than s/he originally experienced.

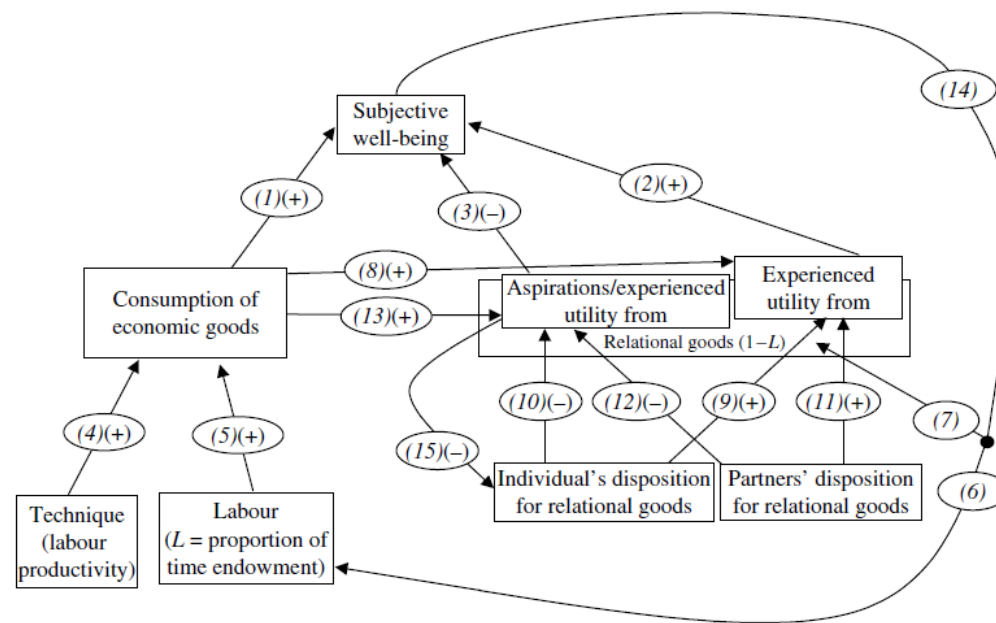


Figure 6. Flow chart of the model

In this subsection the model will be completely assembled and recapitulated by means of the flow-chart in Figure 6, and its dynamics will be studied. The causal links are represented in the figure by arrows, and the signs of the links appear in the label on the arrow line (see Figure 6). The SWB depends on (1) the consumption of economic goods, on (2) the realization of RGs, and on (3) the aspirations/realization gap of RGs. Economic goods are produced by (4) adopting a technique, and by (5) employing labor time in a proportion L of the individual's fixed (unitary) endowment. RGs are produced/consumed by using the proportion of time left ($1 - L$). The realization of RGs depends on (8) the consumption of economic goods, and on the disposition towards RGs, both that of the individual (9 and 10) and that of the partners (11 and 12). Note that links (10) and (12) negatively enter determination of the gap.

The static solution of the model is obtained by temporarily assuming that aspirations for RGs are completely realized, and that productive techniques and all the dispositions towards RGs are given. SWB can thus be maximized, and the time allocation for the individual can be determined (14). Let us then shock the model with 12 on the excess of aspirations by young individuals. The three reactions (13–15) thus follow the disappointment. First, the negative effect on SWB (through (3)) induces the individual to reduce the time devoted to RGs ($1 - L$) (through (7)), and, conversely, to increase working time (L) (through (6)), and hence consumption of economic goods (through (5)). Second, disappointment induces the individual unintentionally to reduce his/her disposition towards RGs (through

(15)), which feeds back to the realization of RGs, and to disappointment (through (10)), thus triggering the vicious circle of depression. Third, aspirations for RGs will be slowly reduced until the gap with respect to realizations has been closed, and the vicious circle will be halted. As a result, income and the consumption of economic goods increase, whereas SWB increases less, or even decreases if the reduction of the realization of RGs is sufficiently great.

Finally, explaining the SWB paradox requires the aggregation of individual dynamics both within and across generations. The fact that an individual's aspirations are generally 'excessive' in the first part of the life cycle can explain why average income within generations increases over time, and why SWB on average increases less or decreases. These dynamics also take place across generations because depressed and "anaffective" individuals pass on to their children the cumulated effects of their disappointments, that is, they induce greater disappointments.

Presenting technical advancement as an expansion in labor productivity fortifies the primary aftereffect of the model. Actually, the resulting increment in the wage rate empowers people to consume more economic goods (through (4)), along these lines augmenting the gap with the more sluggish dynamic of SWB. Nonetheless, the tendency of working time to increment is damped by technical advancement. Yet this is reliable with the proof, which does not generally demonstrate that individual working time is increasing, as witness the European nation. When working time is determined by collective agreements, which thus restrict individuals' choice, they will work with greater effort for higher wages and, possibly, with greater stress. The conclusion of the model should be modified only slightly. The dynamics of the model are further strengthened by an assumption on the complementarity between the two kinds of goods:

17. An increase in the consumption of economic goods induces a greater positive effect on aspirations than on realizations of RGs (through (8) and (13)).

This assumption may be justified on the same basis as 12 on excessive aspirations by young individuals. High aspirations for RGs probably imply the prediction of the marked instrumentality of economic goods for improved personal relationships. In this possible case, disappointments are strengthened, which fuels the overall dynamics of the model even further. A new vicious circle is added through (13)–(3)–(14)–(6)–(5).

Per capita salary has had a tendency to develop in the advanced nations even in the latest decades, despite everything it remains the last goal of economic policy. At the point when wage rises, truth be told, various problems disappear or are alleviated. The objective indices of well-being, like equality of income distribution or the number of ecological treaties,

appear to be positively and significantly correlated with per capita income. Be that as it may, self-reported SWB and per capita income in the advanced nations are not connected over time (or across countries). Sociologists and analysts report expanding signs of serious malaise in the affluent societies. The main examples are increasing rates of mental depression and high suicide rates. The paradox therefore arises that further increases in material wealth do not make people happier, and yet this does not dissuade them from working harder. Economists have also now turned their attention to this problem. This chapter takes the implications of SWB data seriously and has accordingly sought an explanation for them. Psychological studies, both social and clinical, show that the main determinant of SWB is close personal relationships. This is confirmed by econometric studies, with the consequence that this chapter has moved in this direction rather than towards those more usual for economists, like the effects of unemployment and inflation on SWB. The sluggish or deteriorating SWB over recent decades highlighted by various indices of personal relationships suggests that structural rather than cyclical factors are at work.

A model has therefore been proposed which, although exploratory in character, elaborates the standard labor/leisure model by replacing leisure with time spent on close personal relationships. The latter have been analyzed as relational goods which spring from an individual's particular disposition towards others, and they are consumed through human interaction, thus developing emotions and feelings. Unlike economic goods, the well-being obtained from RGs is very difficult to predict. Nor is past experience of much help, because persistent originality within close personal relationships is due to the unconscious component of both dispositions and emotive interactions among people. The dynamics of the model are triggered by the reactions of individuals to the disappointment caused by over-predicting RGs. The various aspects of this phenomenon have been described by the psychology and other literature. Children and young people are more prone to disappointment, and adjusting to it may take their entire lives. The first reaction, which is mainly intentional, is to substitute RGs with economic goods, being encouraged to do so by parents when young, and then to increase working time and effort. The second reaction, which is mainly emotional, is to reduce one's disposition towards RGs, thus fuelling further disappointment and generating a vicious circle of depression. The third reaction is to reduce aspirations for personal relationships. This enables the person to decelerate and halt the vicious circle of depression – or even avoid it, but at the cost of radical desensitization (that is, a great reduction in the preference for RGs) and a switch from complementarity between economic goods and RGs to their substitutability. Therefore, the SWB resulting from RGs generally deteriorates over the life cycle of individuals, although economic SWB increases. The SWB paradox can thus be

resolved. Unintentional mechanisms play an important role at the individual level, while the transmission of greater disappointments to subsequent generations is the crucial mechanism at the aggregate intergenerational level. Policy implications can only be outlined here in the form of two general observations. Many resources should be devoted to education and, in particular, to the development of personal relationships among children, whose disposition towards RGs is generally greater. Second, formal knowledge about personal relationships should be increased by interdisciplinary research within and between the social and human sciences, and with special attention paid to the contribution of the arts.

5. TO SUM UP: MAIN DETERMINANTS OF HAPPINESS

The use of satisfaction questions as a proxy measure of utility has been mostly used to understand individuals' preferences over theoretical and policy relevant problems, such as preferences over income, employment, job amenities, health determinants, inflation, and inequality. Although an exhaustive review of all the results and its implications is a difficult if not impossible endeavor, in what follows we'll go through the main evidence on the determinants of satisfaction. One of the main and earliest interests in this literature has been to understand the relationship between income and life satisfaction. The main result is that the relationship between individual income and self-reported satisfaction is rather small (although always statistically different from zero) and this is even more so when controlling for individual fixed effects. The magnitude of the income coefficient on a satisfaction regression is fairly small when compared to the coefficients of other variables such as unemployment or marriage. In a cross-country comparison study for example, a survey allow for some heterogeneity and show that the effect of income on happiness differs across countries and it depends on individual characteristics as well. This result implies that not everybody translates money into fulfillment in the same way. When using macro data, most of the studies have also found a very weak relationship between country average GDP per capita and average self-reported satisfaction, although there are a few exceptions. These findings contradict not only most existing theories but also challenge our common sense as well as individuals' observed behavior. This "paradox" has stimulated researchers in the field to test empirically the different existing explanations for these findings, notably the relative nature of income and individuals' adaptation patterns. If individuals were to derive happiness depending on how well they perform as compared to others, equally distributed income increments would not lead to substantial happiness changes, which would explain the weak relationship between happiness and income found in the literature. In economics, as in many other disciplines, there is a sizeable amount of work on the interdependence of preferences to examine, for example, the effect that comparing to others has on individual consumption and other behavior. The use of satisfaction measures has allowed researchers to test empirically the relevance of relative income (i.e., relative to the others) for own satisfaction, a theoretical idea that has a long tradition in economics. Although based only on few observations obtained from a survey carried out in 1995 among faculty, students, and staff at the Harvard School of Public Health, it is interesting to mention the results of a research who report that about 50% of the respondents in their survey preferred a world in which their relative income was higher and their own income lower to one with opposite characteristics. The existing literature using

large panel data sets shows that in developed countries there is a negative and statistically significant correlation between own happiness and the wage of the reference group. This seems to indicate not necessarily that individuals are envious but that they use the others to assess how good their own wage is. Since the size of the reference income coefficient is in some cases similar to the one for own income, if incomes grew in a similar way for all individuals in the same reference group, no one would get much happier from it.

There is another branch of the literature emphasizing that, in some cases, individuals compare their income to that of others, not to evaluate their own position but to acquire information about their own future income prospects. In these scenarios, the income of others is a proxy for “expectations about future income” and therefore has a positive sign in the happiness regression. For a set of less developed countries Stutzer finds such a positive sign of the reference income and argues that this is an indication that individuals in these countries who face high uncertainty take the reference income as a signal about own income expectations. Similarly, Clark et al. find with linked Danish employer–employee data a positive effect of the income of other workers in the firm on own satisfaction and appeal to similar arguments. In a recent study, Clark show empirically that the income of your direct neighborhood (in their study a neighborhood has around 9,000 individuals) actually has a positive effect on self-reported happiness. The authors argue that the positive effect may be due to the link between the quality of the local conditions and the average income of the neighborhood. To separate this from the comparison effect, the authors include a variable that indicates the income rank of the individual in the neighborhood. The results show that the higher the individuals are in the “local income rank”, the more satisfied they are, while the effect of the median income of the neighborhood remains positive. An important limitation of all these studies is that the reference group is defined in a rather ad hoc way by the researcher, usually taking education, age, region, and occupation as the variables defining the reference group. Very recently, the European Social Survey included some questions in the 2006/2007 wave in which respondents were asked to define how much and with whom they were comparing themselves. Clark and Senik analyze these questions in great detail and conclude that the intensity of income comparisons decreases with income (i.e., richer individuals compare less), people who compare the most are the least happy, and that there is a large diversity of groups (for example, colleagues and family members) to which individuals compare themselves. The way in which individuals form their reference groups and to which degree this is an endogenous process (for example, if individuals would choose their reference groups so as to maximize happiness) is not yet understood. There are also very few studies that rely on laboratory experiments to understand this complex relationship between income

and happiness. In these papers, individuals are faced with different experimental settings and asked about their satisfaction. McBride finds that expectations and comparisons impact reported satisfaction negatively, although its effects are smaller than the one of own income. These results are consistent with the findings based on survey data, even though subjective data tends to find that others' income is about as important as own income. In another experiment, Charness and Grosskopf find that individuals' behavior in the lab was driven by achieving higher social payoffs rather than by increasing their relative payoffs and that was independently of their reported happiness level. In other words, their participants showed little relative concerns. Nevertheless, individuals with low reported level of happiness were showing a larger willingness to lower other participants' payoffs if they were larger than theirs. Another alternative explanation for the small income coefficient found in happiness regressions is based on the inability of individuals to foresee to what extent they will adapt to a new situation by changing their norms about what is a good and a bad income. The importance of adaptation to income and other life events has been tested with subjective measures since the early 1970s mostly by psychologists. The most famous study in this arena is by Brickman et al. who compare a group of 22 lottery winners with another 22 non-winners (control group) who were living in the same geographical area. In this study, based on these small sample sizes, they conclude that lottery winners were not significantly happier compared to others and to their own past situation. This study has to be taken with precaution since its small size makes it difficult to assess the statistically insignificant differences and also because of the reservations one may have to extrapolate the results of lottery winners to the overall population. Despite these limitations, the Brickman et al. study has been recurrently used as a leading reference to show individuals' complete adaptation to income increases. Apart from few exceptions, however, there has hardly been any evidence on income adaptation from an economist's perspective. The main reason for this is the lack of data, as one needs a large panel to be able to identify the effect of income changes on large population samples. So far there are only two papers that look at income adaptation with long panel data sets, and these find opposite results. While Ferrer-i-Carbonell and Van Praag find that individuals adapt only partially to income, Di Tella et al. find stronger support for income adaptation—but no support for adaptation to status. It seems clear that given the small amount of evidence, the empirical tests on income adaptation should be considered rather tentative. Besides studying income adaptation, there are some empirical studies that also examine peoples' adaptation to other life events. Up until recently psychologists generally believed that individuals adapted to about every life event and that the happiness level was individual specific and thus rather constant. According to these theories, happiness was predetermined

and after a distressing life event individuals' happiness would only temporarily move from its baseline level. In other words, individuals were assumed to have a tremendous capacity to adapt. Recent evidence stemming from large panel data sets, however, challenges these theories. This new evidence seems to indicate that individuals' adaptation depends on the life event as well as on individuals' characteristics. The evidence, however, is still scarce and tentative and may be challenged in the near future as more data become available.

Unemployment is one of the worst life events, at least in western societies. The existing empirical evidence clearly and consistently shows that unemployment has a strong detrimental effect on happiness. This evidence is corroborated by suicide statistics that show that being unemployed is one of the main causes of emotional distress. Moreover, the “non-pecuniary” negative effect of unemployment on happiness is substantially larger than the detrimental effect brought about by the ensuing income fall. On top of all this, the negative effect of unemployment on happiness seems to persist over time—that is, individuals do not seem to adapt to unemployment. From a policy perspective, it is also important to notice that the effect of unemployment on satisfaction is smaller for individuals living in areas with high unemployment rate, which may help explain unemployment hysteresis. Some of the happiness literature has used domain instead of life satisfactions questions. Domain satisfaction questions reflect individuals' satisfaction with an aspect of life, notably financial situation, job, and health status. Van Praag et al. present a two-lawyer model in which individuals' situation explain each domain and these in its turn determine satisfaction with life as a whole. The empirical results show that domain satisfactions are much interrelated among themselves and that life satisfaction can be view as an aggregate measure of those different satisfactions. A considerable part of the satisfaction literature has focused on the use of self reported job satisfaction to examine the importance of job characteristics and amenities (for example, hourly wage, working hours, time shifts, type of contract, over-education, and commuting time) on individuals' satisfaction. With no market failures, preferences over job amenities/characteristics would be internalized in the labor market through wages (compensating wage differentials) and one would then not find any separate effect of, say, commuting time or type of contract on job or life satisfaction after controlling for income or wages. Nevertheless, many studies do find statistical and quantitatively significant effects of various job amenities on job and life satisfaction after controlling for wages and many other relevant characteristics. Holding a temporary contract is negatively correlated with job satisfaction in most countries, although what matters the most is the individual perception on the possibility to lose the job. Other job characteristics that have been found to affect reported job satisfaction include over education, working hours, and firm size, which correlate

negatively with job satisfaction, while pay, being a civil servant, and self-employment show a positive correlation. There are also a few studies that have focused on health or health related issues, notably but not exclusively by examining the impact of individual health on individual's (health) satisfaction. In the empirical literature, there are various proxy measures for individual health, such as individuals' self-reported disabilities or incapacity to perform daily activities, self-reported chronic illnesses or the number of visits to the doctor or days staying at hospital. Some studies, for example, estimate the importance of different chronic illnesses on self-reported health satisfaction while controlling for individual characteristics such as income, age, and working situation. This type of estimations allows identifying the relative importance of the different chronic illnesses from an individual subjective perspective, which in turn may help to assess the benefits of various medical interventions when having a limited budget. In another study, Oswald and Powdthavee take adaptation into account when analyzing the effect of disability on life satisfaction. Their results show a negative but declining effect of disability on satisfaction as time passes. In other words, individuals seem to partially (30–50%) adapt to being disabled. Besides examining the effect of health on happiness, there are some studies that use subjective measures of satisfaction to look at health related issues. Blanchflower empirically estimates the effect of “having access to health” on life satisfaction by using US data. He finds a negative and statistical significant correlation between individual happiness and reporting to have been unable to see a doctor in the past 12 months because of its cost. Finkelstein et al. use life satisfaction measures to empirically test the impact of health status on the curvature of the utility function—that is, whether utility is health state dependent. In their 2008 article they test the effect of health status on the marginal utility of consumption and find, for example, that relative to a healthy individual a one standard deviation increase in the reported number of chronic diseases leads to an 11% decrease in the marginal utility of consumption. A branch of the literature is concerned about the impact of region or country characteristics on individual life satisfaction instead of focusing on the effect of individual characteristics—and how they relate to others. These studies have combined information on individual satisfaction with macro data to look at, notably, the impact of inflation, unemployment rate, GDP per capita, inequality, and environmental quality on self-reported individual satisfaction. The first papers focused on the impact of GDP per capita (already discussed above) and of inequality; later on, the other macro/country variables were also introduced into the analysis. Already in 1977, Morawetz et al. compared the happiness levels of two villages in Israel and observed that individuals living in the most egalitarian village (Isos) were happier than those living in the less egalitarian village (Anisos). Using a larger set of cross-sectional data, Van Praag et al. found empirical

evidence of the importance of the country's log income variance for individuals' evaluation of hypothetical incomes—that is, a proxy for financial satisfaction. Very recently, and already using larger household panel data sets, there have been a few studies that empirically test the impact of income inequality (typically measured by the regional Gini coefficient for every time period) on happiness. Alesina et al. find a clear negative effect of the Gini coefficient on satisfaction for various European countries and for the USA, the impact being much smaller for the latter. Most recently, similar results were found for Germany. However, Grosfeld and Senik find different results for a transition country (Poland) and relate it to the possible impact of political distrust on individuals' taste for equality. In particular, they find that Polish were rather tolerant towards inequality until 1996, their dislike for inequality increasing afterwards. The authors argue that the year break (1996/1997) corresponds with an increasing mistrust in the political system and elites, which would explain the change in (dis)taste for inequality. The relative importance of unemployment and inflation rate for individuals' utility is an interesting topic from a macro economic perspective, a field in which the objective function of the policy maker is often defined, among others, on inflation and unemployment. Di Tella et al. presented the first empirical study that estimated the relative importance of inflation and unemployment rate of the country for individual' self-reported satisfaction. In this study, they combined micro data on individuals' reported satisfaction and other personal characteristics (for example, their own employment situation and income) with macro data for 12 European countries (Euro- Barometer) from 1975 to 1991 and for the United States (US General Social Survey) from 1972 to 1994. The results show that both unemployment rate and inflation rate correlate negatively and statistically significantly with happiness, although the effect of unemployment is larger (the relation between the two rates ranges between 1 and 1.7, depending on the country and year). Their estimates indicate, for example, that a 4% increase in unemployment (this is the standard deviation in the sample) would lead to a reported happiness decrease of 0.11 on a 1–4 scale. A 1% increase in the inflation rate (also the standard deviation in the sample) would reduce happiness 0.012 points on the same scale. In a similar exercise and using roughly the same data and empirical approach, Di Tella et al. (2003) examine the effect of other macro-economic variables on individual reported satisfaction. The main conclusion is that the macro-economic situation of a country does matter for individual self-reported satisfaction even after controlling for individuals personal characteristics and their situation. Their empirical results show, for example, that economic recessions generate important losses of happiness on top of the negative effect of GDP slow down or increase number of unemployed. Indeed, they do find as well that the effect on happiness is positive for GDP, negative for unemployment, and positive for the

unemployment benefits in the country. Likewise, individuals' self-reported satisfaction with life seems to also depend on the environmental quality (notably air quality) of the region where individuals live. For example, Welsch studies the effect of air pollution (i.e. nitrogen, particles and lead) on average country satisfaction using aggregate data for ten European countries between 1990 and 1997, and finds a negative impact of lead and nitrogen (the latter being larger) but no (statistically significant) effect of particles. Studies employing aggregate country data, both on happiness and environmental quality, suffer from three important limitations. First, they cannot control for individual characteristics (both observed and unobserved personal traits); second, they impose interpersonal comparisons at the cardinal level; and finally, they assume that aggregate country pollution measures properly capture the air quality of every single location (for example, that pollution is fairly evenly distributed across the whole country). Some studies partially overcome some of the above limitations by using individual data on satisfaction—but still rely on aggregate country data for pollution. This is, for instance, the set up of Di Tella and MacCulloch when studying the impact of country average SO_x emissions for various European countries and the USA (1975–1997). After taking due account of individual characteristics, their findings corroborate the negative effect of pollution (measured here as SO_x emissions) on satisfaction found in previous studies using aggregate data on satisfaction. Only recently, Luechinger was able to overcome all three limitations by combining data on individual happiness (from the German SOEP) with information on SO₂ emissions at the very local level from 1985 to 2003, and his results confirm the negative impact of (air) pollution on individual happiness. The studies discussed above include only a selected sample of topics which have captured a great deal of attention amongst economists. The literature on subjective life satisfaction, however, is vast and growing. By now, there is evidence on the impact of another wide array of individual and aggregate covariates, such as age, religion or political system. Next I briefly mention some of the ones I have not discussed previously. Life satisfaction follows a U-shape relationship with age, with a minimum satisfaction level at about 40 years old. It seems as if many individuals start their adult life with high expectations that are difficult to meet and thus get unhappier as time passes up until around their midlife, when they seem to revise their expectations downwards. In most Western countries, high education (for example, the number of years of education) correlates negatively with satisfaction, which is taken as an indication that the positive effect derived from the opportunities that higher education gives (for example, 'social status' and having an 'exciting job') is smaller than the negative effect resulting from the difficulty to meet the higher expectations that highly educated individuals may have. Gender differences are, in general, not that large—if at all. Although women are more frequently

depressed than men, they are not consistently unhappier because they also experience more positive emotions. Having a partner with whom to share daily life contributes positively to life satisfaction. In addition, the only exploratory evidence on causality indicates that having a partner increases individual well-being instead of being happy improving the probability of finding a partner. The number of children is usually found to have a negative although small impact on life satisfaction. Other findings show that, for example: religion correlates positively with satisfaction; commuting time (even after controlling for earnings) is negatively correlated with happiness; direct democracy correlates positively with satisfaction in Switzerland, and obesity (body mass index) is negatively correlated with well-being.

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RINGRAZIAMENTI

... a chi gioisce con me per questo traguardo...