Report to the Global Marshall Plan Initiative



balance the world with an Eco-Social Market Economy

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Wolfgang Eichhorn / Dirk Solte

Swellmoney and Sustainability

Unriddle our Destiny

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by Wolfgang Eichhorn and Dirk Solte. Ed. by Klaus Wiegandt

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Foreword

The aftermath of the financial crisis of 2007-08 changed for many people the understanding of how the economy works. For many years, the Global Marshall Plan Initiative, the Club of Rome, the Eco-Social Forum Europe and other well-respected organisations have advocated for adequate global governance and more regulation of markets, specifically financial markets. On the contrary, market fundamentalists have argued that no policymaker can outsmart markets, with their alleged self-healing powers. The eruption of the financial crisis was no surprise to us, whereas the market fundamentalists were dumbfounded by what had happened and shocked that their models did not hold.

After the fall of the Berlin Wall in 1989, market fundamentalism, driven by huge ambitions of power, became the leading paradigm: free-flow of capital, minimal state control and deregulated business and -trade were positioned as the framework conditions needed to solve all societal problems. This dogma is based on the idea that totally free markets inherently guarantee the best allocation of resources, hence securing the path for growth, in terms of GDP, jobs, income, and even sustainability.

The financial sector and its "spin doctors" were successful in terms of manoeuvring the political debate in their favour, positioning themselves as relatively neutral economic catalysts; similar to a casino, where net gains and net losses compensate each other. Such seemingly harmless economic players, they argued, should not be burdened by taxation and regulations for transpar-

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ency, but instead should be granted unlimited freedom in order to maximize net wealth.

This was indeed a compelling "narrative" and many even believed it to be fact. Hence, it is all the more astonishing that a major player in the global financial market like George Soros claimed since a long time that it was a fairy tale. He generated huge market gains using his superior knowledge of the financial system. Soros's work focuses mainly on the concept of reflexivity: investors' understanding of the dominant- or the supposedly dominant economic paradigm and participation in the capital markets may at times affect economic performance.

Once an insight is out of the box, it changes the situation and might then not be true anymore. This is a complicated form of feedback and adds to the fact that actors in the economy generally lack foresight. Situations in financial markets therefore often may change heavily and unexpectedly. Insiders use and feed this volatility to their advantage. Their "special" know-how enables them to tweak the system in ways that generate profit. Due to the lack of transparency, these dubious activities go largely unnoticed. As long as they can get away with the "casino metaphor", they can even avoid paying taxes.

Before 2007, there were hardly any publications available that provided in-depth insights into the workings of the economy. Only few people knew what was going on and were able to predict the crisis ahead. One of these economic forecasters was **Dirk Solte** from the FAW/n in Ulm, Germany. Using the institute's expertise on globalization and deregulation, as well as his own research results, Solte forecasted the financial crisis; his scientific argumentation was in line with that of the Eco-Social Forum Europe, the Global Marshall Plan Initiative, the Senate of the Economy, the Club of Rome, to name a few.

Another expert on market regulation is **Wolfgang Eichhorn**. For decades, Eichhorn has analysed market controls, macro-eco-

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nomic scenarios and impossibility results to devise adequate market regulations. Some years ago, Eichhorn came up with the idea that the so-called "magical quadruple" of German economic policy (adequate- and constant economic growth - price level stability - high rate of employment - balance in foreign trade) needs to be extended to nine economic parameters, including two that focus on the environment and the nature of the income distributions. Since the last financial crisis, the theories of Solte and Eichhorn have been broadly debated. Nevertheless, it is noteworthy, that the theories described in this book are anything, but mainstream. More importantly, their theories are scientifically reliable. Prior to the fall of Lehman Brothers, Dirk Solte published a book in which he drew up a prognosis for the economic turmoil that lay ahead. Together with Franz Josef Radermacher, he worked on several projects related to the economic crisis, including teaching material for the general public.

The book "Swellmoney and Sustainability" was originally part of a series published by the Foundation "Forum für Verantwortung" under the guidance of **Klaus Wiegandt**. It gives a comprehensive overview of the authors' analysis work as well as those of other esteemed economists. We hope that it finds many readers and that those readers will benefit from the insights on a highly important issue for our common future. Especially the young generation should learn that today money is quite different from what it was a decade ago. Unfortunately it is still taught the old way at many places.

Franz Josef Radermacher Frithjof Finkbeiner

Club of Rome Global Marshall Plan Foundation

Sustainability Project

Sales of the German-language edition of this series have exceeded all expectations. The positive media response has been encouraging, too. Both of these positive responses demonstrate that the series addresses the right topics in a language that is easily understood by the general reader. The combination of thematic breadth and scientifically astute, yet generally accessible writing, is particularly important as I believe it to be a vital prerequisite for smoothing the way to a sustainable society by turning knowledge into action. After all, I am not a scientist myself; my background is in business.

Shortly after the first volumes had been published, we received suggestions from neighboring countries in Europe recommending that an English-language edition would reach a far larger readership. Books dealing with global challenges, they said, require global action brought about by informed debate amongst as large an audience as possible. When delegates from India, China, and Pakistan voiced similar concerns at an international conference my mind was made up. Dedicated individuals such as Lester R. Brown and Jonathan Porritt deserve credit for bringing the concept of sustainability to the attention of the general public, I am convinced that this series can give the discourse about sustainability something new.

Since the time the first books of the series have been published in 2007, unsustainable developments on our planet have come to our attention in ever more dramatic ways. The price of oil has more than tripled; for the value of industrial metals has risen exponentially and, quite unexpectedly, the costs of staple foods such as corn, rice, and wheat have reached all-time highs. Around the globe, people are increasingly concerned that the pressure caused by these drastic price increases will lead to serious destabilization in China, India, Indonesia, Vietnam, and Malaysia, the world's key developing regions.

The frequency and intensity of natural disaster brought on by global warming has continued to increase. Many regions of our Earth are experiencing prolonged droughts, with subsequent shortages of drinking water and the destruction of entire harvests. In other parts of the world, typhoons and hurricanes are causing massive flooding and inflicting immeasurable suffering.

The turbulence on the world's financial markets, triggered by the US sub-prime mortgage crisis, has only added to these woes. It has affected every country and made clear just how unscrupulous and sometimes irresponsible speculation has become in today's financial world. The expectation of exorbitant short-term rates of return on capital investments led to complex and obscure financial engineering. Coupled with a reckless willingness to take risks everyone involved seemingly lost track of the situation. How else can blue chip companies incur double-digit billion dollar losses? If central banks had not come to the rescue with dramatic steps to back up their currencies, the world's economy would have collapsed. It was only in these circumstances that the use of public monies could be justified.

It is therefore imperative to prevent a repeat of speculation with short-term capital on such a gigantic scale.

Taken together, these developments have at least significantly improved the readiness for a debate on sustainability. Many more are now aware that our wasteful use of natural resources and energy have serious consequences, and not only for future generations.

Few years ago, who would have dared to hope that WalMart, the world's largest retailer, would initiate a dialogue about sustainability with its customers and promise to put the results into practice? Who would have considered it possible that CNN would start a series 'Going Green'? Every day, more and more businesses worldwide announce that they are putting the topic of sustainability at the core of their strategic considerations. Let us use this momentum to try and make sure that these positive developments are not a flash in the pan, but a solid part of our necessary discourse within civic society.

However, we cannot achieve sustainable development via a multitude of individual adjustments. We are facing the challenge of critical fundamental questioning of our lifestyle and consumption and patterns of production. We must grapple with the complexity of the entire earth system in a forward-looking and precautionary manner, and not focus solely on topics such as energy and climate change.

The authors of the thirteen books examine the consequences of our destructive interference in the Earth ecosystem from different perspectives. They point out that we still have plenty of opportunities to shape a sustainable future. If we want to achieve, however, it is imperative that we use the information we have as a basis for systematic action, guided by the principles of sustainable development. If the step from knowledge to action is not only to be taken, but also to succeed, we need to offer comprehensive education to all, with the foundation in early childhood. The central issues of the future must be anchored firmly in school curricula, and no university student should be permitted to graduate without having completed a general course on sustainable development. Everyday opportunities for action must be made clear to us all - young and old. Only then can we begin to think critically about our lifestyles and make positive changes in the direction of sustainability. We need to show the business community

the way to sustainable development via a responsible attitude to consumption, and become active within our sphere of influence as opinion leaders.

For this reason, my foundation Forum für Verantwortung, the ASKO EUROPA-FOUNDATION, and the European Academy Otzenhausen have joined forces to produce educational materials on the future of the Earth to accompany the thirteen books. We have set up an extensive program of seminars, and the results are very promising. The success of our initiative "Encouraging Sustainability", which has been awarded the status of an official project of the UN Decade "Education for Sustainable Development", confirms the public's great interest in, and demand for, well-founded information.

Taking Action - Out of Insight and Responsibility

»We were on our way to becoming gods, supreme beings who could create a second world, using the natural world only as building blocks for our new creation.«

This warning by the psychoanalyst and social philosopher Erich Fromm is to be found in »To Have or to Be?« (1976). It aptly expresses the dilemma in which we find ourselves as a result of our scientific-technical orientation. The original intention of submitting to nature in order to make use of it ("knowledge is power") evolved into subjugating nature in order to exploit it. We have left the earlier successful path with its many advances and are now on the wrong track, a path of danger with incalculable risks. The greatest danger stems from the unshakable faith of the overwhelming majority of politicians and business leaders in unlimited economic growth which, together with limitless technological innovations, is supposed to provide solutions to all the challenges of the present and the future.

For decades now, scientists have been warning of this collision course with nature. As early as 1983, the United Nations founded the World Commission on Environment and Development which published the Brundtland Report in 1987. Under the title "Our Common Future", it presented a concept that could save mankind from catastrophe and help to find the way back to a responsible way of life, the concept of long-therm environmentally sustainable use of resources. "Sustainability", as used in the Brundtland-Report, means "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Despite many efforts, this guiding for ecologically, economically and socially sustainable action has unfortunately not yet become the reality it can, indeed must, become. I believe the reason for this is that civil societies have not yet been sufficiently informed and mobilized.

Forum für Verantwortung

Against the background, and in the light of ever more warnings and scientific results, I decided to take on a societal responsibility with my foundation. I would like to contribute to the expansion of public discourse about sustainable development which is absolutely essential. It is my desire to provide a large number of people with facts and contextual knowledge on the subject of sustainability, and to show alternative options for future action.

After all, the principle of "sustainable development" alone is insufficient to change current patterns of living and economic practices. It does provide some orientation, but it has to be negotiated in concrete terms within society and then implemented in patterns and behaviour. A democratic society seriously seeking to reorient itself towards future viability must rely on critical, crea-

tive individuals capable of both discussion and action. For this reason, life-long learning, from childhood to old age, is a necessary precondition for realizing sustainable development. The practical implementation of the ecological, economic, and social goals of a sustainability strategy in economic policy requires people able to reflect, innovate and recognize potentials for structural change and learn to use them in the best interests of society.

It is not enough for individuals to be merely "concerned". On the contrary, it is necessary to understand the scientific background and interconnections in order to have access to them and be able to develop them in discussions that lead in the right direction. Only in this way can the ability to make appropriate judgements emerge, and this is a prerequisite for responsible action.

The essential condition for this is presentation of both the facts and the theories within whose framework possible courses of action are visible in a manner that is both appropriate to the subject matter and comprehensible. Then, people will be able to use them to guide their personal behaviour.

In order to move towards this goal, I asked renowned scientists to present in a generally understandable way the state of research and the possible options on twelve important topics in the area of sustainable development in the series "Forum für Verantwortung". All those involved in this project are in agreement that there is no alternative to a united path of all societies towards sustainability:

- »Our Planet: How Much More Can Earth Take?« (Jill Jäger)
- »Energy: The Worlds Race for Resources in the 21st Century« (Hermann-Joseph Wagner)
- »Our Threatened Oceans« (Stefan Rahmstorf and Katherine Richardson)
- »Water Resources: Efficient, Sustainable and Equitable Use« (Wolfram Mauser)

- »The Earth: Natural Resources and Human Intervention« (Friedrich Schmidt-Bleek)
- »Overcrowded World? Global Population and International Migration« (Rainer M\u00fcnz and Albert F. Reiterer)
- »Feeding the Planet: Environmental Protection through Sustainable Agriculture« (Klaus Hahlbrock)
- »Costing the Earth? Perspectives on Sustainable Development« (Bernd Meyer)
- »The New Plagues: Pandemics and Poverty in a Globalized World« (Stefan Kaufmann)
- »Climate Change: The Point of No Return« (Mojib Latif)
- »The Demise of Diversity: Loss and Extinction« (Josef H. Reichholf)
- »Building a New World Order: Sustainable Policies for the Future« (Harald Müller)

Those twelve books habe been published in spring 2009. As a thirteens book the topic "Swell money and sustainability" has been addressed by Wolfgang Eichhorn and Dirk Solte.

The public debate

What gives the courage to carry out this project and the optimism that I will reach civil societies in this way, and possibly provide an impetus for change?

For one thing, I have observed that, because of the number and severity of natural disasters in recent years, people have become more sensitive concerning questions of how we treat the Earth. For another, there are scarcely any books on the market that cover in language comprehensible to civil society the broad spectrum of comprehensive sustainable development in an integrated manner.

When I began to structure my ideas and the prerequisites for a public discourse on sustainability in 2004, I could not foresee that by the time the first books of the series were published, the general public would have come to perceive at least climate change and energy as topics of great concern. I believe this occurred especially as a result of the following events:

First, the United States witnessed the devastation of New Orleans in August 2005 by Hurricane Katrina, and the anarchy following in the wake of this disaster.

Second, in 2006, Al Gore began his information campaign on climate change and wastage of energy, culminating in his film "An Inconvenient Truth", which has made an impression on a wide audience of all age groups around the world.

Third, the 700-page Stern Report, commissioned by the British government, published in 2007 by the former Chief Economist of the World Bank Nicholas Stern in collaboration with other economists, was a wake-up call for politicians and business leaders alike. This report makes clear how extensive the damage to the global economy will be if we continue with "business as usual" and do not take vigorous steps to halt climate change. At the same time, the report demonstrates that we could finance countermeasures for just one-tenth of the cost of the probable damage, and could limit average global warning to 2°C – if we only took action.

Fourth, the most recent IPCC report, published in early 2007, was met by especially intense media interest, and therefore also received considerable public attention. It laid bare as never before how serious the situation is, and called for drastic action against climate change.

Last, but not least, the exceptional commitment of a number of billionaires such as Bill Gates, Warren Buffett, George Soros, and Richard Branson as well as Bill Clintons work to "save the world" is impressing people around the globe and deserves mention here.

An important task for the authors of our series was to provide appropriate steps towards sustainable development in their particular subject area. In this context, we must always be aware that successful transition to this type of economic, ecological, and social development on our planet cannot succeed immediately, but will require many decades. Today, there are still no sure formulae for the most successful long-term path. A large number of scientists and even more innovative entrepreneurs and managers will have to use their creativity and dynamism to solve the great challenges. Nonetheless, even today we can discern the first clear goals we must reach in order to avert a looming catastrophe. And billions of consumers around the world can use their daily purchasing decisions to help both ease and significantly accelerate the economy's transition to sustainable development - provided the political framework is there. In addition, from a global perspective, billions of citizens have the opportunity to mark out the political "guide rails" in a democratic way via their parlia-

The most important insight currently shared by the scientific, political, and economic communities is that our resource-intensive Western model of prosperity (enjoy today by one billion people) cannot be extended to another five billion or, by 2050, at least eight billion people. That would go far beyond the biophysical capacity of the planet. This realization is not in dispute. At issue, however, are the consequences we need to draw from it.

If we want to avoid serious conflicts between nations, the industrialized countries must reduce their consumption of resources by more than the developing and threshold countries increase theirs. In the future, all countries must achieve the same level of consumption. Only then will we be able to create the necessary ecological room for maneuver in order to ensure an appropriate level of prosperity for developing and threshold countries.

To avoid a dramatic loss of prosperity in the West during this long-term process of adaption, the transition from high to low resource use, that is, to an ecological market economy, must be set in motion quickly.

On the other hand, the threshold and developing countries must commit themselves to getting their population growth under control within the foreseeable future. The twenty-year Programme of Action adopted by the United Nations International Conference on Population and Development in Cairo in 1994 must be implemented with stronger support from the industrialized nations.

If humankind does not succeed in drastically improving resource and energy efficiency and reducing population growth in a sustainable manner – we should remind ourselves of the United Nation forecast that population growth will come to a halt only at the end of this century with a world population of eleven to twelve billion – then we run the real risk of developing eco-dictatorships. In the words of Ernst Ulrich von Weizsäcker: »States will be sorely tempted to ration limited resources, to micromanage economic activity, and in the interest of the environment to specify from above what citizens may or may not do. "Quality-of-life" experts might define in an authoritarian way what kind of needs people are permitted to satisfy« (Earth Politics, 1989, in English translation: 1994).

It is time

It is time for us to make stock in a fundamental and critical way. We, the public, must decide what kind of future we want. Progress and quality of life is not dependent on year-by-year growth in per capita income alone, nor do we need inexorably growing amounts of goods to satisfy our needs. The short-term goals of our economy, such as maximizing profits and accumulating capital, are major obstacles to sustainable development. We should go back to a more decentralized economy and reduce world trade and the waste of energy associated with it in a targeted fashion. If resources and energy were to cost their "true" prices, the global process of rationalizations and labor displacement will be reversed, because cost pressure will be shifted to the areas of materials and energy.

The path to sustainability requires enormous technological innovations. But not everything that is technologically possible hast to be put into practice. We should not strive to place all areas of our lives under the dictates of the economic system. Making justice and fairness a reality for everyone is not only a moral and ethical imperative, but is also the most important means of securing world peace in the long term. For this reason, it is essential to place the political relationship between states and peoples on a new basis, a basis with which everyone can identify, not only the most powerful. Without common principles of global governance, sustainability cannot become a reality in any of the fields discussed in this series.

And finally, we must ask whether we humans have the right to reproduce to such an extent that we may reach a population of eleven or twelve billion by the end of this century, laying claim to every square centimetre of our Earth and restricting and destroying the habitats and way of life of all other species to an ever greater degree.

Our future is not predetermined. We ourselves shape it by our actions.

We can continue as before, but if we do so, we will put ourselves in the biophysical straitjacket of nature, with possibly disastrous political implications, by the middle of this century. But we also have the opportunity to create a fairer and more viable

future for ourselves and for future generations. This requires the commitment of everyone on our planet.

Klaus Wiegandt

Preface

The Chinese ideogram for crisis - wēijī - does convey the notion of danger and of a cruicial point of change. That reflects deep insight to the systemic character of life. A crisis denoter a system in a "near-chaotic" situation; it is highly unstable and even abrupt changes are possible; changes that would be considered unrealistic in "normal", calmer times. We find ourselves in such a "near-chaotic" situation with the window of opportunity wide open to solve the most important global problems together. If we look through this window in the right direction it would provide us with the greatest prospect of a sustainable future. It is like a "stargate", a "wormhole", appearing to us: Will we dare to step through to grasp at the chance to us: Will we dare to step through to graps at the chance to achieve a world in balance?

Global problems call for global answers. In medical terms, vorrect diagnosis is the essential prerequisite for an effective remedy. Otherwise in the chosen treatment will at best alleviate the symptoms without actually curing the illness. Likewise, in considering the "disease" afflicting us, it's vital that we first grasp how the global financial system works and how its operations impact on our society and the real economy.

We want to stimulate a wide-ranging public devate on the mechanics behind the crisis, to highlight some possible ways forward, and to motivate people from all walks of life to ponder on the problems facing us an get involved in working out solutions. 24 Preface

That is why we wrote this book.

Anyone who travels the world - hopes for it,
Anyone who experiences other cultures - senses it,
Anyone who looks into other peoples's hearts - knows it:
A common future is what we all want and need.
It won't be easy - but we can achieve it.

Wolfgang Eichhorn & Dirk Solte

It is a riddle wrapped in a mystery inside an enigma: but perhaps there is a key.

Winston Churchill, 1939

This famous remark by Churchill is also an appropriate opening quotation for this book. Admittedly, the British statesman was not speaking about the global financial system, when he uttered these words. However, it's tempting to speculate that, if he were alive today, this might well be how he would characterize the current economic crisis and its possible outcomes. In the spirit of Churchill's insight, in the pages that follow we try our best to unravel the mysteries of money creation. We explain how to gain high profits even in times of crisis by using magic tricks, and finally suggest a way out of this disaster.

The current world financial system came into being after the Great Depression of 1929 – 1932/33, which began with a "Great Crash" (the title of J.K. Galbraith's seminal work of 1954). At least in part, this system is a very real entity made up of imposing (rarely even aesthetically pleasing) buildings, computer centres, infrastructures, telecommunication networks and so on. On the human level, it comprises owners, bosses, employees and customers. Beyond all this there are other, less tangible but even more important constituent elements of this system: ideas and legislation.

How has this become a collapsing house of cards? In this book

we answer this question. Before going into details, one can summarize: the world financial system has developed into a house of cards because of a shift in the focus of its operation. Since about 1970 it resorts to figments of imagination from worthwhile and necessary services and intermediate inputs to the real economy. These designed figments of imagination are in part fancy and highly inventive - arcane financial instruments. In using them, small bets could result in immensely high gains. Like in a gambling house these games are by no means economically justified. On the opposite side high bets could lead to a total loss. One example is financial derivatives. In most cases derivatives are unsecured debt obligations whose values depend on the values of their so-called underlying instruments they refer to (these could be precious metals, commodities, shares, bonds, stock indices or currency exchange rates). Small changes of the market value of these underlying instruments could result in exorbitant changes of the amount of debt which is "securitized" by the derivative. Maybe one could ignore this gambling, if only a few gamblers would have these high gains or losses and only from time to time, but this is not the case. M. Gburek (2007, p. 243) figures out that »the worldwide volume of credit derivatives only has reached more than the eighteen-fold of the market value of all shares traded at the New York Stock Exchange in the second half-year 2005«. Although this high volume of estimated \$ 600 Trillion (\$ 600'000'000 Million) sums up the value of all referenced underlying instruments, it figures out how voluminous the figments of illusion have become. What a gambling house! Who benefits? Those betting right are the profiteers. They gain from all those who bet wrong. However, even those lucky profiteers could become unlucky, if the debt obligation they own could not be paid back by the debtor.

By the end of this book, readers will hopefully have come to realize one basic fact, namely that the global financial system –

the vital cardiovascular system of the world's economy – is anything but stable. To continue the analogy, at the heart of the economy its task should be to keep the blood in circulation around the body, thus ensuring that it neither overheats nor cools down unduly. It should, like the heart, be the most important factor in maintaining the health of the entire body, the world economic system. We aim to show, however, that this is sadly far from the truth. In actual fact, global finance is a complex system of pumps that only really operate efficiently in "calmer times" – in other words, on those rare occasions when the economic body is not under stress. The fundamental problem is that this particular heart is not geared to the most important factor of all, namely the well-being of its body. Despite being an integral part of the whole economic body, it has started to behave like a self-serving entity. In this respect, it can be likened to a disruptive adolescent child in a family: a growing body in and of itself, following its own aims. Yet even this behaviour could be endured if the economic heart, like a real heart, proved elastic and resilient. Unfortunately this is not the case. The heart that is global finance has long since begun to pursue its own agenda, growing out of all proportion to the wider economy that it should actually be serving. Instead of being a stable basement of the economic system it has become a growing house of cards. Indeed, it is now a multitude of the economic house it should serve. It will continue to be a house of cards as long something extraordinary doesn't happen.

We have been inspired by all the good intentions and resolutions from politicians and some academic commentators that promoted the idea of an economic rethink as a cure-all. This bullish approach was encapsulated in the slogan of Barack Obama's 2008 presidential campaign: »Change – yes we can!« Yet it remains to be seen whether these good intentions will result in concrete action, and whether the restructured global finan-

cial system that emerges from the shake-up will really be a rocksolid edifice. Many suspect that the changes will be little more than cosmetic. There seems scant ground for optimism. Political action and public discourse make us ruminate and we are afflicted by doubts. It causes despair. The world financial system of the world economic body still remains a vulnerable and fragile heart. There is a concrete danger of witnessing the economic body collapsing at the next infarction of the financial system. To run with the metaphor of a house once more, we haven't even yet settled on what the best foundations or underpinnings for the building might be. It is still a house of cards, but should be the stable basement of our economy. There is a very real danger that the whole structure of our economic house could come tumbling down when the next earth tremor hits the financial system. Plus, by then, countermeasures to ensure the stability of the financial system will have become even more difficult and costly. In such an eventuality, should national governments - and more importantly, taxpayers - find themselves unable or unwilling to intervene a second time in order to prop up financial institutions of systemic importance and save them from collapse? Then the main building – the wider economy – will also come crashing down.

Yet don't precisely the lessons that we have learned from the near-collapse of the global financial system in late 2008 make such a scenario highly unlikely? Unfortunately not! Writing in the German newspaper Die Zeit (4 June 2009), economic commentator Uwe Jean Heuser summed up the problem: »Soon the window of opportunity for rewriting the rulebook governing the financial markets will close. Privately owned banks have already set the tone, with the Deutsche Bank boasting about their immense quarterly profits. Meanwhile, brokers and dealers from other banks are already raking in bonuses from currency speculation once more; and where states have banned bonus payments,

banks have simply hiked up their employees' fixed salaries. Hedge funds are expanding their business and many banks are wooing their customers with promises of high rates of return. The gamblers are rolling the dice in the casino again, and most are still playing by the old rules. What really should be happening instead is for banks to be forced to retain higher equity, especially during the boom times. If they gamble, this should not be based on credit and if they provide others with credit for speculation they should not be able to simply abrogate responsibility by pointing to a credit rating from some dubious agency. We need a centrally appointed board to act as an early-warning system for when financial markets threaten to overheat. In other words, we need to put in place measures to guard against this increasingly frequent cycle of boom and bust, which bankers are evidently far more comfortable with than the rest of us.« To echo Heuser's assessment: there should be an immediate ban on credit-based speculation on property or shares in value added. On the other hand, so long as ecological limits are not reached, credit should be readily available if it is used to generate added value.

Let's draw one more analogy here – the obvious one of an ill person. In order to prescribe the most appropriate remedy, a doctor must first correctly diagnose what's wrong with the patient. For instance, if a husband or wife goes to the doctor complaining of severe headaches, it would be negligent to simply prescribe aspirin and send them away. There may be underlying reasons for these symptoms – say, a severe marital crisis, for which the most appropriate and effective therapy would be relationship counselling. Likewise with the global financial system. The deep-seated causes of the crisis must be identified and their impact on the economy and society clearly understood. In particular, it's essential to really get to grips with the concept of money. What is money? What different kinds of money are there? How exactly is money created and how can money disappear? Only a

comprehensive grasp of the monetary and financial system equips a person to sort the wheat from the chaff in statements like: »Governments spend Billions to combat recession«, or »The bank has secured itself a new injection of funds as equity«. What do such statements actually mean? Do governments really spend money or is there something else going on here? Of what kind are those "new funds", which the bank has secured as equity? One of our chief endeavours in this book has been to demystify the business of money and money creation. In doing so, we have consciously set our face against gridlock, clichéd patterns of thought, which much of the press coverage and political discourse on the subject only serves to reinforce. One upshot of this is that we deliberately revisit certain key aspects of the operation of the global financial system (and the "diseases" affecting it) throughout the text, by way of stressing just how important they are. It is only through a proper understanding of these aspects of finance and a fundamental grasp of the concept of money that we will be in a position to draw the right conclusions and lessons from the situation facing us.

The book is in three parts: Retrospect, Analysis and Outlook. A glossary explains some technical expressions and terms from finance an economics that may be used in the book.

The first part consists of a lightning tour through the history of booms and busts, bubbles and depressions experienced by the global economy and its monetary and financial systems. This historical overview begins in Biblical times and runs up the present day. Along the way, we take time to explain such terms as money, money supply, deposit money, interest rates, currency, Central Bank, commercial bank, inflation, deflation, debt obligations, securities, markets, the market economy and invent the term swell-money / leverage-money. The main conclusion of part 1 is the insight that monetary and economic crises – whether in individual nations, groups of nations or on a global scale – have

throughout history been the rule rather than the exception.

Part 2 is given over to an analysis of these phenomena. Answers are given, or at least attempted, to a wide range of questions. For example: what causes the underlying instability in the global financial system and the circulation of money? How did the Great Depression of 1929 – 1932/33 come about, and what were its consequences? Does money actually disappear as the result of a crash in a financial market, or is it just redistributed? How is it possible to use "sleight of hand" to exploit anticipated future values in the here and now? Who are the winners and losers in a financial crisis?

Part 3 looks to the future. We emphatically do not predict what the world economy and the global financial system will look like in years to come - for the simple reason that nobody can possibly know. However, what we can say with certainty is this: if the near-collapse of the global financial system that we witnessed in late 2008 – and whose aftershocks are still rippling through the real economy and society - does not result in a rootand-branch overhaul of the system, then humanity is sleepwalking to its own destruction. Instead of looking to the future with fear and trepidation, it is down to us to use all our creative efforts to shape our own destiny. In this spirit, this book puts forward a seven-point programme for a possible way out of the crisis and makes some practical suggestions on how to manage the current state of affairs. Behind all these guidelines and action plans is one overriding aim - a sustainable recovery of all societies on the planet and of the planet itself! The essential prerequisite for this is a shift of the collective mindset, a move away from a counsel of despair that claims nothing can be done. What will happen in the future, if we do not even attempt to take the first step and investigate wishful scenarios for our future and debate on them?

Following the delightful deliberation of the Swiss theologian

and poet Kurt Marti we should ask ourselves:

»Where would we be if everyone simply said: »Where would we be?« And if no-one ever dared to go and discover where the first step might actually lead us? If no-one would dare to become aware of what could be next century?«