



Prepared for the  
Club of Rome's  
50th Anniversary  
in 2018



Ernst Ulrich von Weizsäcker  
Anders Wijkman

# Come On!

Capitalism, Short-termism,  
Population and the Destruction  
of the Planet — A Report  
to the Club of Rome



Springer

**Come On!**

Ernst Ulrich von Weizsäcker • Anders Wijkman

# Come On!

## Capitalism, Short-termism, Population and the Destruction of the Planet

### A Report to the Club of Rome

by Ernst von Weizsäcker and Anders Wijkman, co-authors in cooperation  
with 34 more Members of the Club of Rome  
prepared for the Club of Rome's 50<sup>th</sup> Anniversary in 2018



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Springer

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ISBN 978-1-4939-7418-4      ISBN 978-1-4939-7419-1 (eBook)  
DOI 10.1007/978-1-4939-7419-1

Library of Congress Control Number: 2017952604

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Printed on acid-free paper

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The registered company address is: 233 Spring Street, New York, NY 10013, U.S.A.

# Preface

In the years since its founding in 1968, there have been more than 40 reports to the Club of Rome. The first report, *The Limits to Growth*, catapulted the Club of Rome, and the authors of *Limits*, into the global limelight. The book served as a shock to a world as yet largely unaware of the long-term effects of continued growth in what we now call the human ecological footprint. Aurelio Peccei, founder and then president of the Club of Rome, saw the responsibility of addressing the suite of problems facing the world, what he called the predicament of mankind, but was astonished to learn from the *Limits* report that these problems could all be tied to the consequences of humankind's desire for endless growth on a finite planet. The message from the bold young team at the Massachusetts Institute of Technology was that if growth continued unabated at the present pace, shrinking resources and heavy pollution would lead to an ultimate collapse of world systems.

Certainly, today's computer models are much more advanced than the World3 model used by the 1972 team. Some aspects of economic growth during the almost five decades that have passed – like innovation – were not fully taken into account. But the central message of *Limits* is as valid today as it was in 1972. The world of today is facing many of the challenges that were anticipated in the 1970s: climate change, scarcity of fertile soils, and massive species extinction. Furthermore, the planetary social situation remains extremely unsatisfactory, with some four billion people living in very tenuous economic conditions or being threatened by natural disasters or wars. New estimates warn that more than 50 million people will be forced every year to leave their home and emigrate. Where can they go? In 2017, there are already 60 million refugees in the world!

Simultaneously, however, modern societies have acquired an amount of economic wealth, scientific knowledge, and technological capacities that should enable to fund and implement most of the transformations that *The Limits to Growth* saw as paramount in terms of creating a sustainable world.

We, the Executive Committee of the Club of Rome, gratefully acknowledge the merits and message of *The Limits to Growth*, as well as that of the other very valuable reports that have been written to the Club of Rome. Moreover, we remember the bold step taken in 1991 by Alexander King, Aurelio Peccei's successor as



president of the Club of Rome, who published *The First Global Revolution*, a book, coauthored by Bertrand Schneider, then the club's secretary general. In contrast to other reports, *The First Global Revolution* was presented as a report by the Council of the Club of Rome (the equivalent to today's Executive Committee of the Club of Rome). King and Schneider realized that the end of the Cold War opened huge new opportunities that could lead to a peaceful and prospering world. This optimistic book brought the Club of Rome back into the limelight, albeit less so than had *The Limits to Growth*.

The world is again in a critical situation. We see the need for a bold new beginning. This time, however, we believe it is particularly important to look at the philosophical roots of the current state of the world. We must question the legitimacy of the ethos of materialistic selfishness that is currently the most powerful driving force in the world, and we welcome Pope Francis's initiative in addressing a deeper-lying crisis of values, a central issue which the Club of Rome identified many years ago. The time has come, we believe, for a new Enlightenment or for otherwise overturning current habits of thought and action that only consider the short term. We acknowledge the strong approach taken by the United Nations in their 2015 formulation of the 2030 Agenda, comprising 17 Sustainable Development Goals to be implemented over the next 15 years. However, unless the destructive driving forces of purely materialistic economic growth are tamed, we cannot escape the fear that 15 years from now the world will be in an even harsher ecological situation than it is today.

From this perspective, the committee wholeheartedly supports the initiative taken by our current copresidents in composing and coordinating a new and ambitious report that addresses the predicament of humankind from the perspective of today's realities.

And now, a word of explanation for the surprising title. "Come on" has several different meanings in the English language. In casual language, it is often spelled "C'mon" and means "don't try to fool me." We consider this the meaning for Chaps. 1 and 2 of the book. We don't want to be fooled by the usual descriptions of the state of the world and the usual, corresponding answers, which can make things worse, not better. And we don't want to be fooled by outdated philosophies. Another meaning of the title is thoroughly optimistic: "Come on, join us!" This is the meaning for Chap. 3 of the book, which we consider an exciting journey of real solutions. Clearly, the architecture of the book comprises both meanings but in the indicated order. (To be sure, also some more meanings, including somewhat dirty ones, of "Come on" exist, but they have no relevance for us!)

June 2017. The Executive Committee of the Club of Rome.

Susana Chacón, Enrico Giovannini, Alexander Likhotal, Hunter L. Lovins, Graeme Maxton, Sheila Murray, Roberto Peccei, Jørgen Randers, Reto Ringger, Joan Rosàs Xicota, Ernst von Weizsäcker, Anders Wijkman, and Ricardo Díez Hochleitner (Honorary Member).

# Executive Summary

The human-dominated world can still have a prosperous future for all. This requires making sure that we do not continue to degrade our planet. We firmly believe this is possible, but it becomes increasingly difficult to achieve, the longer we wait to act appropriately. Current trends are in no way sustainable. Continued conventional growth leads to massive collisions with natural planetary boundaries. The economy under the dictates of the financial system with its seduction to speculation tends to lead to widening gaps in terms of wealth and income.

World population must be stabilized soon, not just for environmental but also for compelling social and economic reasons. Many people see the world in a state of disarray, confusion, and uncertainty. Deep social inequalities, failed states, wars and civil wars, unemployment, and mass migrations have left hundreds of millions of people in a state of fear and despair.

The United Nations has unanimously adopted the *2030 Agenda*, which is meant to address these challenges. However, a successful implementation of the agenda's 11 socioeconomic goals could more than likely destroy its three ecological goals, which are to stabilize the climate, restore the oceans, and halt biodiversity loss. The only way to avoid this to happen would be by adopting an integrated approach to policymaking, leaving behind today's silo-based structures.

Chapter 1 of this book offers a diagnosis of the non-sustainable trends of our time, of what has been termed the “Anthropocene” – the age of human domination of all aspects of this planet, including its biogeochemical composition. A “prosperous future for all” requires that economic well-being be largely decoupled from the destruction of natural resources, especially in agriculture, and the pollution of the atmosphere. The book suggests that the legitimacy of full national sovereignty must be questioned concerning all matters that affect the entire globe.

Chapter 2 offers a deeper analysis, describing society's fundamental philosophical crisis at this juncture, starting with the encyclical letter *Laudato Sí* by Pope Francis. The foundations of today's religions and common beliefs, as well as our system of economics, stem from a time of the “empty world” (Herman Daly) and are inappropriate for our current “full world.” Capitalism as we know it, with its

focus on short-term profit maximization, is moving us in the wrong direction – towards an increasingly destabilized climate and degraded ecosystems. In spite of all the knowledge we have today, we seem unable to change course, literally driving planet Earth to destruction. Ultimately, Chap. 2 suggests the need of a new Enlightenment, one that is fitting for the “full world” and for *sustainable* development. That enlightenment should embrace the virtues of *balance* instead of doctrine. We explicitly mention the balance between humans and nature, between short term and long term, and between public and private interests. Chapter 2 can be seen as the most revolutionary part of the book.

Can the planet’s beleaguered natural systems wait until all of human civilization has gone through the long process of a new Enlightenment? No, explains Chap. 3; we must act now. This is absolutely doable. We list an optimistic if slightly haphazard collection of opportunities that already exist: decentralized clean energy, sustainable jobs in every type of country, and a massive decoupling of human well-being from the use of fossil fuels, basic materials, and scarce minerals. Pragmatic policies including on the financial system are featured. Frame conditions must make sustainable technologies truly profitable and encourage investors to support long-term solutions.

The book closes with an invitation to readers and discussants to engage themselves in the many possible ways of creating a sustainable world society.



# Acknowledgments

This report is a multi-contributor book. We as lead authors very gratefully acknowledge the excellent contributions received, in draft form, from Nora Bateson (parts of Sect. 2.7), Mariana Bozesan (Sect. 3.13), Yi Heng Cheng (Sect. 3.17), Herman Daly (Sects. 1.12 and 2.6.2), Lars Engelhard (parts of Sect. 3.13), Herbie Girardet (Sects. 1.7.2 and 3.6), Maja Göpel (Sect. 1.1 and linking sections between the three chapters), Garry Jacobs and Heitor Gurgulino de Souza (Sects. 2.8 and 3.18), Volker Jäger and Christian Felber (Sect. 3.12.4) Karlson “Charlie” Hargroves (Sect. 3.9), Yoshitsugu Hayashi (Sect. 3.6.3), Hans Herren (Sects. 1.8 and 3.5), Kerryn Higgs (Sects. 1.9 and 3.11 and several other pieces), Ashok Khosla (Sect. 3.2), Gerhard Knies (Sect. 3.16.3), David Korten (Sect. 2.2), David Krieger (Sect. 1.6.2), Ida Kubiszewski and Robert Costanza (Sect. 3.14 and part of Sect. 1.12), Petra Künkel (Sect. 3.15), Ulrich Loening (essential comments on Sects. 2.6 and 2.7), Hunter Lovins (Sect. 3.1 and parts of Sects. 1.6 and 3.4), Graeme Maxton (Sects. 2.5 and 3.12.2), Gunter Pauli (Sect. 3.3), Roberto Peccei (Preface, Chap. 1, and structure), Jørgen Randers (Sects. 2.5 and 3.12.2), Kate Raworth (Sect. 3.12.1), Alfred Ritter (part of Sect. 3.5), Joan Rosàs Xicota (essential comments on Sects. 1.1.2 and 3.11), Agni Vlavianos Arvanitis (part of Sect. 3.6), and Mathis Wackernagel (part of Sect. 1.10). In all cases, we as authors applied modifications with a view of making the book coherent in substance and style. But without the valuable contributions, we would have been at a loss.

Kerryn Higgs, Mamphela Ramphele, Jørgen Randers, Alexander Likhotal, Ulrich Loening, David Korten, Irene Schöne, Mathis Wackernagel, and Jakob von Weizsäcker went through the trouble of looking at the entire manuscript or at least major parts of it and greatly helped us discovering weaknesses and omissions. Susana Chacón and Peter Victor made very important oral comments during a preparatory meeting on the book in May 2016. Verena Hermelingmeier accompanied the authors throughout the process of writing and helped in formulating major passages. Hans Kretschmer oversaw the quality of illustrations and where necessary secured printing permissions for them.

Toward the end, we engaged Holly Dressel as the main language editor for the entire book. It turned out she did a lot more than language editors do. She became a true contributor making the text a lot more readable and attractive, offering new phrases, and finding good references.

As authors, we are truly grateful to the members of the Executive Committee of the Club of Rome for accompanying and encouraging us in writing this book.

We are also very grateful to our club member Alfred Ritter for supporting the initiative of writing this ambitious work and for financing it to a large extent. We gratefully acknowledge additional financial support by the Robert Bosch Foundation.

Emmendingen, Germany, and Stockholm, Sweden, June 2017

Ernst von Weizsäcker and Anders Wijkman, Copresidents of the Club of Rome

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# Chapter 1

## C'mon! Don't Tell Me the Current Trends Are Sustainable!

### 1.1 Introduction: The World in Disarray

We all know that the world is in crisis. Science tells us that almost half of the top soils on earth have been depleted in the last 150 years<sup>1</sup>; nearly 90% of fish stocks are either overfished or fully fished.<sup>2</sup> Climate stability is in real danger (Sects. 1.5 and 3.7); and the earth is now in the sixth mass extinction period in history.<sup>3</sup>

Perhaps the most accurate account of the ecological situation is the 2012 'Imperative to act',<sup>4</sup> launched by all the 18 recipients (till 2012) of the Blue Planet Prize, including Gro Harlem Brundtland, James Hansen, Amory Lovins, James Lovelock and Susan Solomon. Its key message reads, 'The human ability to do has vastly outstripped the ability to understand. As a result, civilization is faced with a perfect storm of problems, driven by overpopulation, overconsumption by the rich, the use of environmentally malign technologies and gross inequalities'. And further, 'The rapidly deteriorating biophysical situation is barely recognized by a global society infected by the irrational belief that physical economies can grow forever'.

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<sup>1</sup> Arsenault (2014).

<sup>2</sup> FAO (2016).

<sup>3</sup> Kolbert (2014).

<sup>4</sup> Blue Planet Prize Laureates (2012).

### ***1.1.1 Different Types of Crisis and a Feeling of Helplessness***

The crisis is not cyclical but growing. And it is not limited to the nature around us. There are also a social crisis, a political and a cultural crisis, a moral crisis, as well as a crisis of democracy, of ideologies and of the capitalist system. The crisis also consists of deepened poverty in many countries and the loss of jobs for a considerable part of the population worldwide. Billions of people have reached a state of mind where they don't trust their government anymore.<sup>5</sup>

Seen from a geographic point of view, symptoms of crisis are found nearly everywhere. The 'Arab Spring' was followed by a series of wars and civil wars, serious human rights violations and many millions of refugees. The internal situation is not better in Eritrea, South Sudan, Somalia, Yemen or Honduras. Venezuela and Argentina, once among the richer states of the world, face huge economic challenges, and neighbouring Brazil has gone through many years of recession and political turmoil. Russia and several East European countries are struggling with major economic and political problems in their post-communist phase. Japan finds it difficult to overcome decade-long stagnation, and to deal with the 2011 tsunami and ensuing nuclear disaster. And the temporary economic upswing several African countries have enjoyed lost its dynamism as soon as the prices of mineral resources collapsed, and partly due to very unusual droughts. Land grabbing is plaguing much of Africa, but also other parts of the world, leading to involuntary dislocations of millions of people and the related problems with refugees both within countries and abroad.<sup>6</sup>

The response of governments has been concentrated, at worst, on managing their own political image, and at best to treat the symptoms of the crisis, not the cause. The problem is that the political class in the whole world is strongly influenced by investors and by powerful private companies.

This indicates that the current crisis is also a crisis of global capitalism. Since the 1980s, capitalism has moved from furthering the economic development of countries, regions and the world towards maximizing profits, and then to a large extent profits from speculation. In addition, the capitalism unleashed since 1980 in the Anglo-Saxon world, and since 1990 worldwide, is mainly financial. This trend was supported by excessive deregulation and liberalization of the economy (see Sect. 2.4). The term 'shareholder value' popped up in the business pages of the media worldwide, as if that was now the new epiphany and guardrail for all economic action. In reality, it served to narrow business down to short-term gains, often at the expense of social and ecological values. The myth of shareholder value has been effectively debunked in a recent book by Lynn Stout.<sup>7</sup>

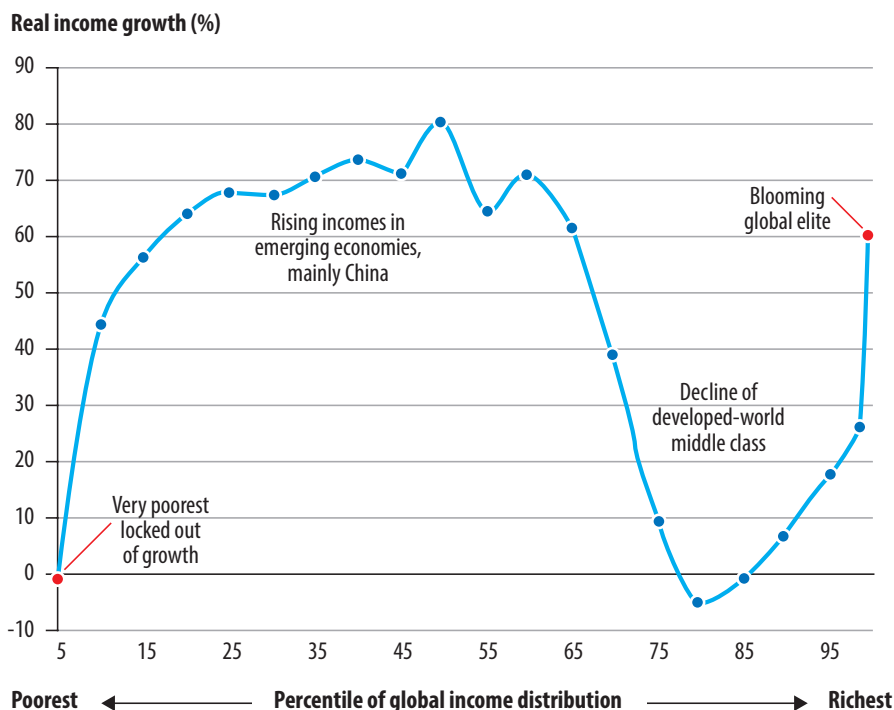
A different, if related, feature of 'disarray' is the rise of aggressive, mostly right-wing movements against globalization in OECD countries, often referred to as populism. These have become overt through Brexit and the Trump victory in the United States. As Fareed Zakaria observes, 'Trump is part of a broad populist

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<sup>5</sup>The Edelman Trust Barometer (2017) says that 53% of the population in 28 countries believe the systems governing them are failing; only 15% deem that the systems are working.

<sup>6</sup>Liberti (2013).

<sup>7</sup>Stout (2012).



Source: *The American Prospect*, using data provided by Branko Milanovic

**Fig. 1.1** Global income growth from 1988 to 2008 for 21 income groups from poorest to richest. The curve resembles the silhouette of an elephant and is referred to as ‘elephant curve’ (Source: <http://prospect.org/article/worlds-inequality>)

upsurge running through the Western world. ... In most (countries), populism remains an opposition movement, although one that is growing in strength; in others, such as Hungary, it is now the reigning ideology’.<sup>8</sup>

This phenomenon of right-wing populism can be explained to an extent by the ‘trunk valley of the elephant curve’ (Fig. 1.1)<sup>9</sup> showing the decline of *developed-world* middle classes, during a 20-year period. While more than half of the world’s population was enjoying over 60% income rises, OECD’s middle classes suffered losses caused mainly by the deindustrialization and job losses in major parts of the United States, Britain and other countries. In the United States, the median income increased by a meagre 1.2% since 1979.

The stunning income growth on the left-hand side of the curve, the ‘back of the elephant’, lifting some two billion people out of poverty, was caused mainly by China’s and some other countries’ economic success. What remains invisible on the picture is the far end of ‘the trunk of the elephant’: The richest 1% of the world and, more revolting, the richest eight persons of the world now own as much wealth as

<sup>8</sup> Zacharia (2016).

<sup>9</sup> Branko Milanovic. 2016. <https://milesorak.com/2016/05/18/the-winners-and-losers-of-globalization-branko-milanovics-new-book-on-inequality-answers-two-important-questions/>

the poorest half of the world population combined, a figure publicized by Oxfam during the 2017 World Economic Forum.<sup>10</sup>

The 'elephant curve' gives an incomplete picture for a second reason. The Oxford Poverty and Human Development Initiative (OPHI) has proposed a Multidimensional Poverty Index (MPI) going beyond just income and including ten indicators around health, education and living standards. Using that MPI, OPHI counts 1.6 billion people living in 'multidimensional poverty' in 2016 – nearly *twice* as many as the number of people living in extreme poverty measured by income alone.<sup>11</sup>

Thirdly, the interpretation of the curve requires an analysis of the people in each percentile group. In fact, they tend to move. And the curve does not distinguish those in Russia and East European countries who lost much of their income after 1990 from those in Detroit or middle England who, for very different reasons, also were among the losers.<sup>12</sup> Another fact cannot be seen in the picture: the massive shift of money and income from the manufacturing and trade sectors to the financial sector.<sup>13</sup> Bruce Bartlett, a senior policy advisor to both the Reagan and Bush administrations, argues that this 'financialization' of the economy is the cause of income inequality, falling wages and the poor performance. David Stockman, Reagan's director of the Office of Management and Budget, agrees, describing our current situation as 'corrosive financialization that has turned the economy into a giant casino since the 1970s'.<sup>14</sup>

Populist politicians in the OECD countries see themselves as speaking for the forgotten 'ordinary' people and for genuine patriotism, but they tend to fight and antagonize the people representing *democratic* institutions – what an irony!

For the European Union (EU), the strongest trigger for populism has been the millions of refugees who came or would like to come to Europe from the Near East, from Afghanistan and from Africa. Even the most generous European countries have reached their own assumed limits for receiving these masses of refugees. The EU institutions were too weak (not too powerful, as they are depicted by the new nationalists) to deal with the 'refugee crisis', resulting eventually in an identity crisis in the EU. Once a success story of an entity ensuring peace and economic development, the EU has lost some of its unifying narrative. The populist right-wing movements or parties see and criticize the EU as the culprit for all kinds of undesired events. The irony is that continuing the success story would require more, not less, powers for the Union. The Union should be entrusted with border protection, a well-funded common asylum and refugee policy to deal with the refugee crisis and maintain the advantages of the Schengen agreement. And for the re-stabilization of the Euro, the EU or at least the Euro zone needs a common fiscal policy, as the new French President Emmanuel

<sup>10</sup> <https://www.oxfam.org>. 2017-01-16. Just eight men own same wealth as half the world. The title of the study is "An economy for the 99 percent." Data are based on the *Credit Suisse Global Wealth Data* book, 2016. See also Jamaldeen (2016).

<sup>11</sup> OPHI (2017). See also Dugarova and Gülasan (2017).

<sup>12</sup> For more details see Corlett (2016).

<sup>13</sup> Greenwood and Scharfstein (2013). Authors say that in 1980, people working in the financial sector made about the same as people in other industries; By 2006 they made 70% more.

<sup>14</sup> Bartlett (2013). Stockman (2013).

Macron is proposing. But it is these very measures of which nationalist populists are most afraid.

The EU in its present form is not without shortcomings. Free market principles have come to dominate EU policymaking, leading to a subordination of other policies, like environment. Notably the UK wanted that priority, as it preferred to see the EU chiefly as a union for mutual trade. And the austerity policies pursued have blocked many benign investments and led to unnecessary suffering among tens of millions of Europeans. Such shortcomings, however, should never be used to put in question the overall objectives of the EU – a union of peace, the rule of law, human rights, cultural understanding and sustainability.

Addressing the global crisis of democracy, the German Bertelsmann Foundation has published a 3000-page empirical report on progress (or lack thereof) on democracy and a social market economy, as measured by the Bertelsmann Transformation Index (BTI).<sup>15</sup> Over the last few years, the report sees a consistent decay of such parameters as civil rights, free and fair elections, freedom of opinion and of press, freedom of assembly and separation of powers. Within the same time frame, the number of countries in which authoritarian, mostly religious, dogmas influence political decision making rose from 22% to 33%. That report was published before the assaults on democracy and civil rights that occurred in summer 2016 in Turkey or the Philippines. Symptoms of tyranny are spreading, including in some of the countries with a solid tradition of freedom and democracy.<sup>16</sup>

Let us briefly turn to a different kind of crisis. Well, not exactly a crisis but an unpleasant feature in an otherwise fruitful communication tool, the ‘social media’. Aside from being practical and useful for everyday arrangements and exchange of news and reasonable opinions, social media also have become vehicles for enhancing conflicts and vilification of mostly innocent individuals, and for spreading ‘post truth’ nonsense. Much of the contents of social media political conversation is self-enhancing political rubbish, as those media serve as ‘echo chambers’ for networks of like-minded frustrated citizens.<sup>17</sup> An empirical study from China found that anger and indignation are the emotions that are most likely to get viral in the social media, meaning they are multiplied faster and stronger than other emotions.<sup>18</sup>

The Internet and the social media are also vehicles for ‘bots’ (short for robots) that can disrupt or destroy messages, multiply nonsense and create all kinds of mischief. There are dozens of types of malicious bots (and botnets) to harvest email addresses, to grab content of websites and reuse it without permission, to spread viruses and worms, to buy up good seats for entertainment events, to increase views for YouTube videos or to increase traffic counts in order to extract money from advertisers.

A more frightening cause of disarray relates to terrorism. In earlier times, humanity’s violent conflicts occurred mostly between different countries. In recent times,

<sup>15</sup> Bertelsmann Stiftung. 2016. (Lead author: Sabine Donner) Politische und soziale Spannungen nehmen weltweit zu. Executive Summary. Transformationsindex der Bertelsmann Stiftung. Gütersloh.

<sup>16</sup> Snyder (2017).

<sup>17</sup> Quattrociocchi et al. (2016).

<sup>18</sup> Fan et al. (2014).

systemic and at least partly religious conflicts prevail, using terror attacks with the explicit intention of making people feel insecure. During much of the twentieth century, religions remained quiet, non-aggressive and geographically confined to rather stable territories. This no longer is true. Partly because of globalized populations moving or being forced to leave their home territories, some factions of Islam have expanded geographically and are claiming strong influence over national states, for example, attacking countries like France with its tradition of laicism that does not permit religion to dominate politics.

What tends to be underrepresented in the media is the *positive* role of religions. In Christian-dominated Europe, liberal and tolerant religion became part of the European identity a century after the Enlightenment successfully discredited the earlier doctrinaire, authoritarian and colonialist-missionary manifestations of the faith. During the Cold War, Christian goals of social cohesion helped build the system of 'Western values', often described as the social welfare state, or the 'social market economy' (for its partial demise, see Sect. 2.4).

With a view towards leading Islam into an equally benign and co-operative social role, some Islamic scholars, such as Syrian born Bassam Tibi, call on Muslims in Europe to integrate into democratic society.<sup>19</sup> Tibi, however, is not popular among radical Muslims, to put it mildly. But to understand the radicalization of Islam, one must not underestimate the role played by the West, in particular the United States, in interfering with Near Eastern states.

Some would say that the troublesome situations mentioned so far, the recurring topics of media headlines, are only the surface of our world's 'disarray'. Deeper and more systemic problems include the breath-taking speed of technological development that may very easily run out of control. One trend is digitization that potentially threatens millions of jobs (see Sect. 1.11.4). Another trend or development can be observed in the biological sciences and technologies. The enormous acceleration of genetic engineering through the CRISPR-Cas9 technology<sup>20</sup> is causing fears of monster creation or the extinction of species or varieties not seen as valuable under human utilitarian criteria. Generally, a non-specific feeling is spreading that 'progress' has scary sides and that the genie may already have left the bottle (see Sect. 1.11.3).

No doubt there is a need to analyse and understand the symptoms and roots of the variety of crises, political, economic, social, technological and environmental. It is also important to recognize the extent to which people perceive the various phenomena of disarray and feel disoriented, and to recognize that the reality and the feelings of disarray have a moral and even religious dimension.

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<sup>19</sup>Tibi (2012). He sees "Islamism" as incompatible with democracy, while Islam has deep roots into democratic consultation methods and has been open for a very early Enlightenment in the twelfth Century, chiefly through Ibn Rushd – Latinised as Averroes.

<sup>20</sup>E.g. Hsu et al. (2014).



### 1.1.2 *Financialization: A Phenomenon of Disarray*

An important part of the disorientation relates to financial markets. Historians will look back at the last 30 years with concern, when looking at the explosion in bank balance sheets, backed up by declining levels of equity and massive borrowing. One of the results was a temporary private-sector-led boom. The other was a massive increase in the world's financial sector (finance, insurance, real estate – FIRE), often called *financialization*, and subsequently the financial crisis of 2008–2009.

Excessive risk-taking developed into a crisis that was close to bringing the whole financial system to a halt. When the bubble burst, many governments were forced to step in with broad support programmes.

Governments caught by the new mind-set (see Sect. 2.4) were intimately involved in all of this. True, there are many examples of serious malpractices within the private financial sector. But had it not been for the systematic deregulation of the banks by governments, with the purpose of stimulating economic growth by issuing more debt, the situation would have been radically different. The causes behind the crisis were many and varied:

- Excessive lending by the banking industry
- Lack of action on the part of regulators and central banks to stop (i) excessive lending, (ii) the spread of exotic financial instruments (synthetic assets and bonds, collateralized mortgage obligations/CMOs, structured debt issues, etc.) and (iii) pure speculative transactions
- Opaque tax havens, and the absence of a binding legal framework that is accepted and implemented by the international community, in general, and the major jurisdictions and financial centres
- Securitization and distribution by investment banks and other financial actors of mortgage-related assets and investment vehicles transferring the credit risk from the original lender to the ultimate bondholders
- Failure by some rating agencies and auditing firms to properly assess and report the inherent risks posed by many of the financial products

A deeper analysis is presented by economists Anat Admati and Martin Hellwig<sup>21</sup> about the main causes behind the financial crisis. Western banks borrowed far too much with far too little equity in their balance sheets to act as a buffer if things went wrong in their business – from trading in the multitrillion-dollar derivatives markets to often reckless lending on real estate. In the decades following the Second World War, banks operated with between 20% and 30% of their liabilities as equity. By 2008, that had shrunk to just 3%. Banks obviously believed that they had invented instruments that removed the risk, allowing them to run their banks with a tenth of the buffer they had before. It proved to be very unrealistic. But they counted with the state to underwrite their risks.

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<sup>21</sup> Admati and Hellwig (2013).

Bankers have enriched themselves spectacularly in the process. They made themselves 'too big to fail' – and too big to jail. The 2008 financial crisis was mostly caused by that irresponsible greed.<sup>22</sup> Yet, in 2009, not only did bankers avoid criminal prosecutions and receive hundreds of billions in government bailouts, but some still paid themselves record bonuses. At the same time, almost nine million households in the United States had to abandon their homes when the value of their houses plummeted and they could no longer service the adjustable-rate mortgages – the so-called foreclosure crisis.<sup>23</sup>

Financialization refers to the dominance of the financial sector in the global economy and the tendency for accumulated profits (and leverage) to flow into real estate and other speculative investment. Debt is an intrinsic element in this process. In the United States, for example, both household debt and private sector debt more than doubled relative to GDP between 1980 and 2007.<sup>24</sup> The same is true for most OECD countries. At the same time, 'the value of financial assets grew from four times GDP in 1980 to ten times GDP in 2007 and the finance sector's share of corporate profits grew from about 10% in the early 1980s to almost 40% by 2006'.<sup>25</sup> Adair Turner, chair of the UK's Financial Services Authority in the years following the 2007–2008 crisis, regards unchecked private credit creation as the key system fault that led to that crisis with its devastating consequences.<sup>26</sup> From this follows that the financial sector constitutes a significant and increasing risk factor in the economy.

The degree of financialization varies from country to country but the increase in the power of finance is general. The current finance sector evolved in the context of the deregulation that gathered pace from the late 1970s and expanded dramatically after the 1999 removal of the separation between commercial and investment banking in the United States.<sup>27</sup> This barrier had been put in place in 1933 by the Roosevelt administration in response to the Wall Street Crash of 1929, when a period of rampant credit creation and financial speculation collapsed. Similar speculation preceded the crisis of 2007–2008: The face value of financial products reached US\$640 trillion in September 2008, 14 times the GDP of all the countries on earth.<sup>28</sup>

Lietaer et al.<sup>29</sup> compare speculation with ordinary money transfers paying for goods and services: 'In 2010, the volume of foreign exchange transactions reached \$4 trillion per day', which does not even include derivatives. In comparison, 'one day's exports or imports of all goods and services in the world amount to about 2% of those \$4 trillion'. Transactions *not* paying for goods and services, almost by definition are

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<sup>22</sup> E.g. McLean and Nocera (2010).

<sup>23</sup> NCPA (2015).

<sup>24</sup> "In 1981 household debt was 48% of GDP, while in 2007 it was 100%. Private sector debt was 123% of GDP in 1981 and 290% by late 2008" (Crotty 2009, p. 576).

<sup>25</sup> Crotty (2009), *ibid*.

<sup>26</sup> Turner (2016). "Across advanced economies private-sector debt increased from 50% of national income in 1950 to 170% in 2006" (p. 1).

<sup>27</sup> The removal of the separation occurred in 1986 in the UK.

<sup>28</sup> Sassen (2009).

<sup>29</sup> Lietaer et al. (2012). Quotes from pages 11–12.

*speculative*. Such financial products and transactions, the authors continue, lead regularly to monetary crashes, sovereign debt crises and systemic crashes with an average of more than ten countries in crisis every year.

One of the consequences of this development is that a significant part of economic growth has been distributed to the wealthy, as mentioned with the new Oxfam figures in the previous subchapter.

Practices within the financial sector demonstrate a disregard for the impact they have on both people and the planet. That includes a distinct short-termism, the ratio of banks' reserves to their loans, the ratio of banks' lending that support the real economy versus speculation in property and derivatives, unchecked credit creation – in fact money creation – and the failure to account for long-term climate and environmental risks. In the words of Otto Scharmer at MIT,<sup>30</sup> 'We have a system that accumulates oversupply of money in areas that produce high financial and low environmental and social returns, while at the same an undersupply of money in areas that serve important societal investment needs'.

The failure to account for environmental risks means that the pressure on already-scarce natural resources accelerates – trees are felled, waterways polluted, wetlands drained and the exploitation of oil, gas and coal accelerating, as long as there is demand. It also means that huge savings, among them pension funds, are locked into investments in fossil-based assets. Such assets are increasingly looked upon as high-risk assets (see Sect. 3.4).

### 1.1.3 *Empty World Versus Full World*

The Club of Rome was always conscious of the philosophical roots of human history. Among the valuable scripts are Kenneth Boulding's *The Meaning of the Twentieth Century* saying (in short) that the meaning is the stewardship of Spaceship Earth. His book was labelled one of the five 'prescient classics that first made sustainability a public issue'.<sup>31</sup>

But then many thinkers saw that the stewardship was difficult under the conditions of the *full world*.<sup>32</sup> That became the chief message of the Club of Rome during its early years, written down in *The Limits to Growth*.<sup>33</sup> Humans cannot become successful stewards of Spaceship Earth with development ideals, scientific models and value sets that were shaped at a time of the *empty world*, when the population was small and the bounty of natural resources on this earth seemed endless, that is, during the time when the European Enlightenment unfolded and the Americas looked like places where settlers and entrepreneurs could endlessly find new space.

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<sup>30</sup> Scharmer (2009).

<sup>31</sup> Rome (2015).

<sup>32</sup> Daly (2005); see also Sect. 1.12.

<sup>33</sup> Meadows et al. (1972).