

# **The History of the 21st Century:**

**the best that civilization  
has ever seen**



**Humberto Contreras Ph. D.**

# The History of the 21<sup>st</sup> Century:

## the best that civilization has ever seen

The must read history of the 21<sup>st</sup> Century. You will be surprised to hear that optimism is an innate quality of civilization and that better times must be ahead of us. This will happen because the human race is a product of evolution, and evolution is characterized by its ability to forge ahead. This book will show you why the 21<sup>st</sup> Century will be the best that civilization has ever seen.

Technology will continue to unleash progress in a way never seen before and computers leading the bio and nano technologies could very well create a world of abundance for all.

To create this world of abundance for all the inhabitants of the earth there will be a need to recognize that people are not only citizens, but they are also and foremost consumers. If the world ever thinks like this, the poor will be rich and the rich even richer.

*“A wealthy landowner cannot cultivate and improve his farm without spreading comfort and well-being around him. Rich and abundant crops, a numerous population and a prosperous countryside are the rewards for his efforts.”* Antoine-Laurent de Lavoisier.

## ABOUT THE AUTHOR

Humberto Contreras is a Civil Engineer with a Masters in Structural Engineering and a Doctorate in Earthquake Engineering. As an expert in probabilistic and stochastic systems he implemented solutions involving risk analysis and safety of Nuclear Power Plants and Nuclear Waste. He has also been a computer software consultant for major corporations. He is currently retired and lives in New England and the Riviera Maya.

*“We must welcome the future, remembering that soon it will be the past; and we must respect the past, remembering that it was once all that was humanly possible.”* George Santayana, Spanish philosopher.

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**With all my love to my wife Gloria for her love, support and encouragement, this book is the product of her persistence in motivating me to write it.**

**To my dearly loved daughter Cleopatra-Alexandra, whose editing has made this book comprehensible.**

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# Where Are We Now

*“During the rest of the 21<sup>st</sup> Century, philosophical, scientific and engineering advancements will continue to drive big changes in our way of life and the economy.”*

This statement is quite believable due to the known fact that since the Renaissance, and most probably even before, knowledge has been increasing exponentially. And, even more now because by the end of the 20th century we saw a coming together of:

- Genetic understanding, brought in part by sequencing the human genome.
- Continued improvement of computing performance.
- The rise of nanotechnology.

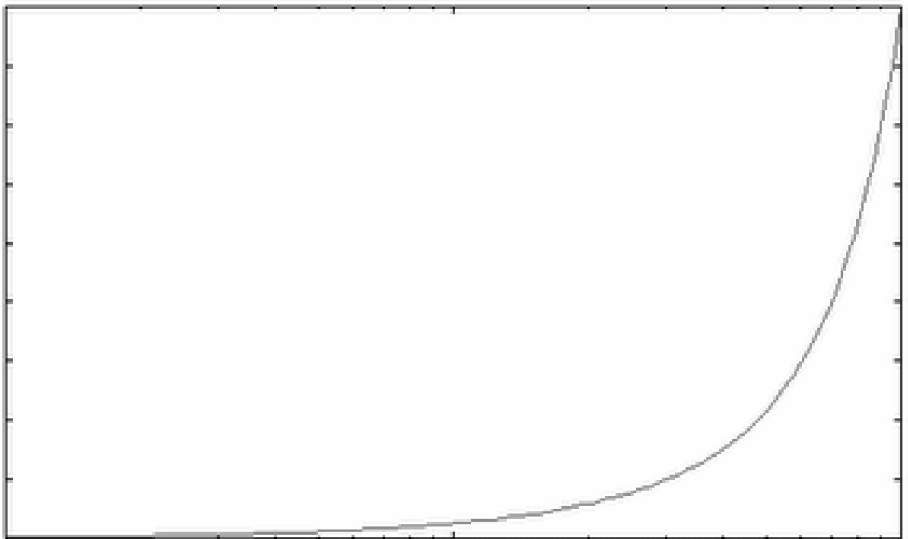
The combination of new technologies has created a synergy that is likely to produce spectacular results.

Knowledge growth in human societies is akin to all other evolutionary systems; like the evolution of life forms where it took billions of years to build primitive cells. Then evolution accelerated during the Cambrian era where complex multi cellular life was achieved in tens of millions of years

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and more recently primates evolved into humans in only a few hundreds of thousands of years. Human technology presents a similar pattern: it took hundreds of thousands of years to tame fire, thousands more to discover agriculture, hundreds to go from metal implements to cars and airplanes, and 30 years to develop the Internet after the discovery of the computer.

Exponential curves have the appearance of a flat line until they start picking up momentum and then they start going up very fast; they look like this:



Of the changes that can be expected in the years ahead, some can be predicted from present trends, others can be expected and still others will be unquestionably surprising. In addition, as history goes back it also goes forward thanks to traditions, customs, laws, trends, religion and human nature that have a damping effect on future change and provide a limited scope of predictability.

Let us review where we stand now.

## **The Economy**

Right now, the world economy is characterized in great part by the financial crisis of 2008 caused in large part by a combination of the following:

- Banks and investment firms made outrageous choices; among them: wishful thinking based on speculation, wildly optimistic and inaccurate models of risk-management, and outright lies.
- Wall Street was inept, greedy and panicky.
- Regulators did not implement control mechanisms.
- U.S. Federal Government that acted irresponsibly and inefficiently.
- The Iraq war.
- A general disregard in the business world for ethics and honesty.

The war against Iraq was supposed to provide cheap oil and only produced a huge debt and oil prices close to \$150 a barrel. The refinancing game that gave many Americans a lot of extra money exploited the false premise that the value of real estate was always going to go up and very fast. These and other actions of banks and government weakened the dollar and established the landscape for the crisis exacerbated by the U.S. exporting securities that were backed by mortgages, many of them sub-prime, to cover this debt.

In the past, the U.S. had enough industrial and agricultural production that it could export goods to pay its debts. However, because of the globalization and outsourcing there were not enough goods to pay for the war and all the imports were bought with the money coming from refinancing. So the U.S. paid for it with some good and some bad mortgages. But then came the recession of 2008 with its predictable job losses that made many of the good loans bad and the already bad loans even worse because the price of real estate went down to its true value.

However, if that was all then we would be all right, the crisis could last a few months and then it would be over; and we would just wait for the next. However, this crisis did not start in the 2000s and it is not a simple

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financial crisis. Problems started around 1975 when real wages, that had been going up since 1820, leveled off and let the air out of our perception that in America our children were going to live better lives than ours. All this based on the premise that the accepted measure of achieving a better life in the American Dream is linked to consumerism; the more you buy, there better off you are.

### **Wages and Profits**

There were several reasons why wages flattened. The arrival of the computer allowed business to replace many workers with only one or two doing the same job. Europe and Japan, which were destroyed during the Second World War, rebuilt efficient factories and became fierce competitors of American business. After the Civil Rights movement blacks found that they could now hold much better jobs; waves of new immigrants also competed for the same jobs.

Moreover, business did everything they could to keep their profits and money within the realm of the rich. To cope with the need for more money, women started looking for jobs and men started working longer hours. Americans work 20% more hours than the rest of the developed world. Another way to cope was to borrow money; first, there were credit cards, then refinancing.

Now the working class of the U.S. is exhausted because they work too much, they owe too much, and they have a lousy personal life because everybody in the family works long hours. They are not going to get a raise, what they get are salary cuts, they are lucky if they just keep their jobs, and there is no way to borrow more, expectations have to be reduced.

Nevertheless, wow, business could not have it better, since the 1980s, they started having fewer employees earning the same wages as before, and these few can produce much more than before. Profits grew so much that business owners and upper management did not know what to do with this humongous amount of money; so they increased their salaries and bonuses by a hundred fold, bought other businesses in an orgy of mergers and acquisitions, and deposited huge amounts in banks.



Then banks found themselves laden with enormous deposits and they started lending it to workers; and workers needed more money to keep the American Dream alive. The unholy alliance of banks and business had a party; they lent their employees the money that they hoarded by not paying them a fair salary, and then got it back with interest. Instead of higher wages, the working class acquired rising debt.

During these scandalous speculations, business, banks and investment firms made lots of money in profits and commissions and thus the upper management of these firms rewarded themselves handsomely with huge salaries, big bonuses and incredible golden parachutes. In addition, George W. Bush even lowered their taxes. They were in heaven!

## **Free Markets and Boom-Bust**

What this and other crisis have shown is that the structural basis of Free Markets is in some way unsound. Its persistent “boom-bust” behavior is unsettling and does not allow the stability and rate of growth that the population of the world deserves and that the entrepreneurs invest and work for.

How does the economy avoid these cycles? Several answers have been given in the past:

- Absolute Kings; the economy is their own.
- Dictatorial regimes; only the loyal politicians can do business.
- Communism; property and business are a state affair.
- Anarchy; free-for-all markets of opportunity and brute force.

None of the above has worked better in recent years than what we consider capitalism in the United States or socialism in Europe, Canada and other nations. The first three solutions more or less amount to a state controlled economy. Interestingly, Free Markets are also state controlled economies; maybe they are less controlled, but still must work within the laws and regulations of the country. It could be that the controlling laws are not able to prevent the “boom-bust” cycles, and other problems of the economy, and we have to find another way of controlling it.

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There is a big economic vulnerability that everyone, rich and poor alike, faces; luckily, we personally do not fully understand the extent of our economical risks. Moreover, when something bad happens to other people it is common to judge them with the saying: “each individual’s fate is truly deserved.” Still when bad times hit the ones that are hit hardest are the same masses that had nothing to do with the crisis; they could even be halfway around the world from the crisis’ focal point.

Anyway, if a billionaire loses half a billion he or she still has enough money to travel in that beautiful private jet, but if a middle class worker loses his or her job then that family most likely becomes one more of the poor class.

It is sad to see the effects of recessions; so many homes and apartments unoccupied and decaying while millions of families are homeless or forced to live with relatives. Home construction sites abandoned and looking like ghost towns. People wasting years of their lives in poverty, fear and frustration. There has to be a better way.

### **Who Controls the Economy?**

We cannot forget that those that control power, money and the markets set the ideas and rules that govern capitalistic Free Markets, and almost any other financial system. It is not surprising, that in this effort to make the rich richer, these rules are less than optimal for the rest, and maybe not even a close approximation of what *Free Market* theories call for.

Banks, finance companies, the stock markets and other entities that guide the economy are in the hands of the few that are very rich. Almost none in the public really trade investments directly and if they do the amounts they trade are not very influential. In the U.S., there are means of saving through instruments like the 401k and other retirement funds that some think puts them in the saddle, but really, these investments are completely controlled by huge investment funds that are managed by companies owned by the same very few rich people. These very rich individuals create wealth and then lose it without the public having anything to do with it.

The economy is studied and sometimes managed by economists, which since around the 1900s is considered a profession; its students go to Universities to master certain theories and mathematical concepts applied to their profession. As a profession, economists in the western world study capitalism, which is the system under which they will operate. Moreover, in an ironic twist, the classic definition of economics is “the science of choice under scarcity”.

As economists exert a great deal of political influence in the enactment of new laws and regulations, it is not surprising that they help perpetuate the status quo. It is like asking a general how to solve a problem; his answer is going to be a military solution. In the same way, a majority of economists will recommend solving the problems of capitalism with more capitalism. They have a hammer and the only thing they think about is how to strike the nail.

The economy needs to be handled differently and better understood than it is today. There has to be a revision of what Free Markets really are and how they work. The state of the economy affects everybody; yet even in democratic societies real participation in it is limited to a very few. Moreover, those very few play with the economy, not only theirs, but of the whole world. It is not right that the fate of so many families should depend on the financial games of a few. In the same way that the poor and the lower middle class are excluded from the economy, there should be a way of isolating them from the dreadful consequences when the game goes wrong for the powerful. Should finance and by extension the economy be democratized?

## **Money**

The global financial crisis of 2008, along with many others in the past, has educated us in many ways. For sure, we know now that we cannot trust the banks or investment companies implicitly and that our money is not as safe as we thought. Governments seem to be the only safety net standing between the banks and us; but what will happen if next time the governments fail to act or act incorrectly. Then we all lose our money and

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investments? If all the money can be lost, then what is money? Where does it go and who has it after such a colossal loss?

Money used to be supported by a gold reserve, but after World War I, it became asset based. So the value of money is established by the value of factories, homes, goods and whatever the economy can produce. Banks lend you money; if you have assets then they can give you a business loan, a mortgage or a personal loan; all based on your assets.

However, banks do not produce money, the interest that they get from the loans is sometimes paid to their account holders on a reduced basis and the rest is used for operations, expenses and profits. It is assumed that banks invest your money in supposedly safe places like real estate, government bonds, secured loans and other securities. To increase their profits banks can also invest in the stock markets, foreign currencies and other risky markets; when they do that your money is not very secure, but the banks make a lot more money doing it.

### **Fractional Banking**

In most of the world, the banking industry operates under a Fractional-Reserve system that implies they can keep only a fraction of the deposits in reserve and that they can lend out the rest. In the U.S., banks are required to hold only 10% on checking deposits and 0% on certificates of deposit. This is why governments have to guarantee bank accounts, like FDIC in the U.S., at least up to a certain limit.

Even when they are in good health, banks operate like Ponzi schemes because most of the money in deposit accounts serves to make loans, to pay for operating expenses, or in investments. Funds from new deposits are used to pay checks for other accounts from which the money has already been spent. It is a very fragile system, as we have seen in this crisis of 2008. If payments fail to be made, then banks are in trouble; the Central Bank intervenes and either gives them money or finds a buyer. As these crises happen in so-called free markets, the points of view, fears and greed of those that play in these markets make the situation even worse.

After the crisis of 2008, many people and governments are calling for a new money world order. Do we need a redefinition of money and banking or just a few new regulations?

## **Entrepreneurship vs. Bureaucracy**

Most businesses in the world started under the umbrella of entrepreneurship ideals; inventors and/or investors got together and launched a business based on a new idea or a better expectation. Throughout their lifecycles, almost all corporations go from being owned and controlled by the original owner to public ownership. Then when the original owners are bought out or retire, they fall under the control of a bureaucratic managerial structure.

Thus, many corporations do not reflect free market values and are not setting out to meet the original goals of the founders. These corporations have been forced to apply the short-term goals that the ephemeral and detached CEOs and upper level managers have to meet to keep their jobs and to make their stock options grow in value. It is useless to the careers of these managers to continue in the entrepreneurial course of the founders and to have long-term goals and pride in their companies.

To make things worse, only a minority of these corporations' stock is in the hands of independent owners; most of the stock is owned and traded by huge investment funds administered by bureaucratically appointed managers that could not care less about the corporations' well being, its employees, its products or its sense of accomplishment. They trade the stock using software programs with buy and sell limits and almost no interest in how the corporation itself is doing internally except where it reflects on the price of its stock. They do not consider the stock to be the company; there is a profound disconnect between them. The following examples could prove useful to understanding the sequence of such events.

In the 1980s, Lotus Development Corporation was a strong innovative software company. In 1982, Mitch Kapor and Jonathan Sacks launched 1-2-3 a spreadsheet that quickly became the best seller for PC type

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computers. In 1986 Jim Manzi, a financial consultant, succeeded Kapor as CEO; Kapor cashed his stock and left the company. After this Lotus became a company with more interest in financial deals that benefited top management directly, than in its mainstay of software development and sales. Lotus new management failed to see the rise of the Windows operating system for PC computers but still Lotus made bundles of money from the inertial sales of 1-2-3 and other Lotus products. However, that was not as important to top management as the real estate deals and the 3.5 billion sale of Lotus to IBM in 1995, which in less than 5 years caused the demise of Lotus as a top software company. Manzi walked out of that sale with almost 80 million dollars. This is a short story of a very strong software company that forgot software engineering, and instead took the path of financial greed, thus bringing itself up and down in 13 years.

Apple Inc. was established in 1976 by Steve Jobs and Steve Wozniak who designed and hand-built the Apple I Personal Computer Kit. In 1980, Apple did a public offering of its stock and generated more capital than any other company did ever before, making a lot of money for the venture capital investors who became the de-facto owners of Apple and eventually named their own CEO. In 1985, Steve Jobs was fired. Apple continued its growth due to the inertia of the products developed during the time of Steve Jobs. Starting in 1992 the company went into a decline and in 1996 Steve Jobs was called back as a consultant and a year later he became CEO again and he returned Apple to profitability by introducing the iMac, iBook, iPod and iPhone and other innovative products. Apple went through a cycle of up- down and then up reflecting the management involvement in design and engineering when it was going up and financial management, sometimes called bean counters, when pointing down.

William C. Durant a natural promoter and owner of Buick, a very well designed car that was then the largest selling car in America, founded General Motors, known also as GM, in 1908. GM bought Oldsmobile, Cadillac, Pontiac and other since discontinued brands. In 1910, Durant lost control of GM to the bankers because he owed too much due to all these acquisitions. Durant then started Chevrolet and retook control of GM in a

famous proxy war. A few years later, he once again lost control of GM and then Alfred P. Sloan an engineer from MIT was selected to head the corporation. Sloan had a dictatorial style of leadership and led GM to great success; he invented the concept of planned obsolescence and one of his favorite quotes was “the business of business is business.” GM was very successful even after Mr. Sloan’s retirement in 1956 and up to the 1980s. After that, GM’s management kind of lost its touch and started producing mediocre cars and became more interested in cost cutting and assembling cars from common and cheap parts without any mechanical and engineering strategy; that became obvious when their products were compared with the very well engineered Japanese and German cars of that time. To muddle up the issues even more, GM became mostly a bank called GM Acceptance Corporation, lending to car buyers and mortgages. Banking was such a good business that they forgot all about the manufacturing side. Recently GM went into Chapter 11 bankruptcy.

In these cases, we see the same pattern of success vs. failure very closely associated with entrepreneurship vs. managerial philosophy. This is a pattern that is plaguing businesses all over the world as the old guard that started the business retired and “professional managers” took over. Many of these “professional managers” seem to have a lot less interest in the long term well being of the company than on stock prices and other short term performance measurements that lets them keep, at least for another quarter, their extremely well paid jobs and lead to big bonuses.

So where are, or should, businesses be going, more of the same or is there another way that improves the way they are managed? Is it inevitable that enterprises grow old and become corrupt from within? Should all decisions, even those that affect the working force most, be made by a few upper management employees without a genuine bond with the enterprise? Why, is it that workers are not part of the decision process at all times? Should corporations be subject to constraints based on ethics and common sense? Upper management pays no attention to the hopes and well-being of workers; should governments just leave corporations alone or nevertheless strive to protect workers?

## **Jobs**

Since antiquity most of population lived in and from the land by hunting, taking care of animals and cultivating fields in small plots of land; it was essentially a family enterprise and caring for large parcels of land was not easy. A minority of the population lived in cities and towns; they made a living from commerce, handcrafts or government, some were also servants or in the military. The idea of factories or dedicated workplaces, where many people worked simultaneously, was not known except in construction projects or where slaves were concerned. This was true for example in the “latifundia” (big plantations) of the Roman Empire that were owned by the aristocracy and where slaves were used. The concept of a “job” was not the same as it is now.

These conditions stayed more or less the same during the middle ages and the renaissance until the start of the industrial revolution in the 19<sup>th</sup> Century. With the invention of the steam engine and its use to power big textile factories and mills many people were needed to operate and support these machines; they came from the countryside, with their families, into the towns where these factories were located, looking for a “job.” This trend started in England, Europe and the U.S. and became a successful model that was copied in many other countries with varied success.

The 20<sup>th</sup> century was a remarkable period for workers, wages rose, fringe benefits grew, and working conditions improved. Even though many statistics were sketchy at the beginning of the century, the picture is clear: The world’s workforce was much better off at the end of the century than it was at the beginning. However, in the interim, there were two World Wars and other wars; these events touched many people of the world and impeded progress in Europe, Japan, Russia and other parts of the world due to the great deal of destruction and loss of life that these wars entailed.

Over the course of the 20<sup>th</sup> century, the composition of the American labor force shifted from industries with primary production occupations, such as factory workers, farmers and foresters, to those of professional,



technical, and service workers with a large increase in wages and benefits. At the beginning of the 20<sup>th</sup> century, about 38% of the labor force worked on farms; by 2000, it was less than 3%. Likewise, those working in goods-producing industries, such as mining, manufacturing, and construction, decreased from 31% to 19% of the workforce. Service industries were the growth sector during the 20<sup>th</sup> century, jumping from 31% of all workers in 1900 to 78% in 2000.

Economic growth in this past century has been uneven. When it ended, we had on one-hand billionaires and millionaires by the millions and a robust middle class. On the other hand, there is a very large working and not working poor that live in conditions of anxiety, crime, social problems, and endemic poverty. For example, in the U.S. in the year 2000 25% of workers 35 to 60 years old earned less than \$15,000 a year, 50% less than \$30,000. At the same time half a century ago, the median pay of top executives in U.S. companies was 30 times an average worker's salary; by 2005, that ratio was 262. In fact, many chief executives make more money in one workday than the average worker makes the entire year.

America in the 20<sup>th</sup> century experienced periods of very low unemployment and periods of extremely high unemployment. Between 1900 and 1908, the unemployment rate fell below 3%. Later in the century, rates above 8 percent were recorded during recessions, such as those in 1915, 1921, 1975, and 1982. The highest rates of unemployment came during the Great Depression, when there were rates above 20% for several years. In 1933, there were more than 12 million workers unemployed; and the unemployment rate averaged 25%. More recently, there were double-digit unemployment rates during parts of 1982 and 1983, but there was a steady decline from 7.8% in mid-1992 to 4.1% at the end of 1999. Then in 2009, we have seen a rate of more than 10% and a very bad recession.

The 20<sup>th</sup> century has been very good for many people but there are still enormous economic risks faced by individuals or families; the phrase: “if you don't work, you don't eat” is a very good description of their lot in

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life. Therefore, for most people this means that they must avoid a riskier but better opportunity, and work cynically to keep a lousy job. That is if they can still get a job because for the first time since the Depression, the American economy has added virtually no jobs in the private sector from 1998 to the year 2008. The total number of jobs has grown a bit (0.01%), but that is only because of government hiring.

In America, and around the world, large companies are increasingly owned by institutional investors who crave swift profits; a feat often achieved by cutting payroll. The declining influence of unions has made it easier for employers to shift work to part-time and temporary employees. Moreover, factory work and even white-collar jobs have moved to low-cost countries in Asia and Latin America.

Capitalistic business is about maximizing shareholder value; they do not want workers. They hire less, and try to find equipment to replace them. Automation has helped manufacturing cut 5.6 million jobs since the year 2000.

The rest of the world shows the same trends, in almost the same proportions in developed countries, and on a lesser degree in the underdeveloped nations.

Can we continue using the same “job” version, which is the one invented during the industrial revolution? Alternatively, we could change it during this 21<sup>st</sup> century to other and maybe better ways to use our human resources.

### **Corporate Social Responsibility**

Corporate Social Responsibility or CSR is a self-imposed program to integrate responsibility for the impact of a corporation’s activities on the environment, consumers, employees, suppliers, communities and stakeholders into its business model. The 21st century will most probably see the increase of demand for more ethical business processes and actions.

The benefits of CSR depend on the nature of the enterprise, and are difficult to quantify in financial terms. However, developing a CSR strategy for businesses cannot be focused on short-run, or even long-term, financial results; this contradicts the capitalistic framework of business which stresses profits above all else. Milton Friedman and other neoliberal economists affirm that the only objective of corporations is to maximize returns to its shareholders and that they are not responsible to society except by following the laws of the countries within which they work. These people perceive CSR as not pertinent to business and incongruent with capitalism.

Those that favor CSR find its purposes favorable to the interests of society and human freedom. They claim that the type of capitalism practiced in many countries leads to an economic exploitation of labor.

A wide variety of individuals and organizations operate in between these poles. Although arguably some corporations' CSR programs are carried out to distract the public from ethical questions posed by the way they operate and for their commercial benefit by increasing their exposure with the public.

Ethics training of employees within corporations, which is sometimes required by the government, is another way to change the corporate behavior. This training is intended to teach employees to make ethically correct decisions. This also benefits the company by reducing the likelihood of breaching laws.

## **Ethical Consumerism**

Ethical consumerism is the deliberate purchase of goods and services that are considered to be ethically produced. This means they were made with no mistreatment of humans, animals or the environment. It is put into practice through buying ethical products or boycotting unethically produced goods or services.

Some corporations have used this movement as a marketing tool, which does not reflect improvements in their practices. Moreover, as

information is limited regarding the outcomes of this practice, consumers are not capable of making informed choices. In addition, the uneven distribution of wealth prevents consumerism, ethical or otherwise, from fulfilling its potential

### **Laws and Regulation**

Another way of making sure that corporations do not harm people and the environment is for governments to set the plan to assure social responsibility using laws and regulations to compel businesses to conduct themselves responsibly.

Government regulation poses many problems. Regulation in itself is unable to cover every aspect in detail of a corporation's operations. Thus, it is difficult to fine-tune the laws so that they really accomplish their objective. And, as a result, there could be endless litigation and lobbying to go around these laws. Regulations often exist but enforcement is lax.

### **Stakeholder Priorities**

Another motivation for corporations to become more socially responsible is that their stakeholders expect them to tackle the social issues that are significant to them. On many occasions, employees are instructed to deal with these matters due to the business benefits that can be derived from increased employee commitment in a cause that they consider important.

### **What is to be Expected**

Some view ethical issues as simply an obstruction. Many companies apply CSR programs as a means to gain public support and to gain an advantage over their competition using their social contributions to provide a subliminal level of advertising.

There are three ways for businesses to become aligned with the interests of the population, including labor. The first one is to really become ethical and self-regulate their greed and arrogance. The second is that governments become more interested and resolve the issue through laws, regulations and enforcement. And the third is that they create such

indignation in the population that they become the target of social discontent and eventually are forced to change their ways.

## **System Abuses**

We hear too many times that a poor worker on unemployment compensation or a welfare recipient is “abusing the system” because they do not “contribute to the system” even though they could very well be in their sixties and have worked for more than thirty years. What we never hear is that a trust fund baby is “abusing the system”; even though this person may never ever work in his or her life. It seems that the connection between the inheritances, that made these trust funds possible, and the fact that they were possible thanks to the system, is never made.

The idea that your property, including money, is sacred and as such, you can do whatever you want with it is widespread. And even though banks, governments and invaders have proven that nothing is sacred and that they can do almost what they want with your property; for banks and governments it must be within the laws and regulations that they also write; just try to resist paying your home’s mortgage or property tax and you will quickly lose it. For invaders it is just first-come-first-served or might makes it right.

Everybody’s properties, especially those that are inherited, are an outcome of the way the system is set-up. Moreover, the system is set-up by the very rich, so it is no wonder that they can abuse the system in a big way without any misgivings. In essence, the system values property, and with it money, way beyond the value of human beings; and by doing so provides a framework of extreme dislike of poor people and reluctant acceptance of the middle classes. This is a major part of the reasoning behind the condemnation of people that “abuse the system”, who happen always to be poor or middle class.

Ethical treatment of human beings must include the realization that they cannot be valued by the property they possess or the money they have. Of course, all persons are different, and this argument does not in any way push for a flat plane. What is important is the recognition of the

many valuable human qualities in each and every person and a fair behavior that does not make wealth the foremost purpose in life. Will the world during the 21<sup>st</sup> Century become more ethical regarding the value of human beings?

## **Equality**

Equality or egalitarianism is a political or economic term that expresses the idea that all people should be treated as equals and should have the same political, economic, social, and civil rights. In the American “Declaration of Independence” Thomas Jefferson used the phrase “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain inalienable Rights, that among these are Life, Liberty, and the Pursuit of Happiness.” These concepts were at the time known as natural rights and were advocated by the English philosopher John Locke.

This magnificent concept did not prevent the continued practice of slavery in the U.S., thereby negating its universality. In addition, in words and actions, equality of women was also ignored.

## **History**

Before the invention of agriculture, human societies were hunter-gatherer groups. Later societies incorporated the idea of classes; upper and lower, slaves, peasants, nobility, there are too many to count. By definition, stratification in classes is the opposite of equality. However, classes are part of all societies, arguably even of the primordial societies. The most important class distinction is between the powerful and the powerless.

In modern societies, class is primarily income inequality. In subsistence societies, it is malnutrition. Class is not always directly related to income, however higher classes usually benefit from better income than lower classes. Customs and obstacles to personal development perpetuate people to a given class for generations.

Classes are extremely difficult to eradicate, they seem to be hard wired into human nature. In a surprising twist, it is not only the upper classes

that want to keep their status; also, many of the lower classes accept their position in life. Even when they manage to earn a higher income, some families that are of the lower class choose to stay in the same class, keeping their friends, neighborhood and way of life.

In practice, because of the variety that exists within humanity, and the traditions and wealth distribution, it is almost impossible to achieve egalitarianism. First, we would have to define it, and then we would have to convince everybody that it is good for the individual. Equality in a limited way is still possible; well, maybe not really equality, but some kind of flat plane that allows everybody to live a comfortable and financially secure life that will promote individual and collective well being.

## **Basic Income**

Unconditionally providing each citizen with a sum of money that allows participation in society with human dignity, without any means-test, is known as Basic Income (BI). This sum of money would be delivered to all citizens, rich and poor. The U.S. Basic Income Guarantee Network defines this as an “unconditional, government-insured guarantee that all citizens will have enough income to meet their basic needs.” The Basic Income Earth Network (BIEN), a worldwide organization, argues that the benefits of a Basic Income include a lower overall cost than the current welfare means-tested system.

Several winners of the Nobel Prize in Economics fully support a Basic Income including Herbert Simon, Friedrich Hayek, James Meade, Robert Solow, and Milton Friedman.

Critics argue that there is a potential for lack of encouragement to work if this type of program is implemented. Advocates point out that the cost of labor is falling due to technical advancements and that unless a Basic Income is distributed, the continuously worsening wages paid to unskilled workers will not allow them to survive. Another argument in favor of this program is that it allows businesses to pay very little for labor, they would

pay only the difference between what they pay now and the amount provided by Basic Income; thus reducing direct production costs.

### **Implementation of Basic Income**

The best way to set up the implementation of Basic Income is through the enactment of extended human rights that would guarantee a dignified standard of living for all citizens. It would be even better to have the UN enact such a document, thereby assuring that eventually there will be a worldwide application of this idea.

If governments ever implement the idea of Basic Income (BI), there will be some disruption and consequences caused by it. Let us go through some of them:

- Some goods and services would be considered as basic necessities, up to a given price. Such items could be those already covered by the extended human rights that guarantee a comfortable living standard.
- Employers will have to pay their employees only the amount that exceeds the BI. However, employees will not have income tax, social security or health deductions in their checks.
- Health care would be provided by the government, either as a direct service or through a fixed discount in the BI. Private or supplemental insurance would have to be paid with whatever extra money the person makes.
- Basic Income could not be subject to liens or other financial obligations. The only payments allowed using BI would be for car and housing, but even they will be flexible enough to allow for changes of residence and other difficulties.
- As a large number of houses or condominiums will be paid using the BI, there will have to be proper regulations, among them some limits to the percentage of the BI that could be used for housing or car. Possibly most mortgages paid with BI will be in the form of long term leases, with full property rights at



the end of the lease. The same could be said of car acquisitions.

- Citizens that earn considerably more money than what is provided by BI would still be able to buy upscale homes or other high ticket items using mortgages or loans, but their BI would not be considered a collateral for any of these types of loans or obligations.
- In general BI should be used exclusively for its primary purpose, which is to provide each citizen with a comfortable and dignified living standard.
- Even though they are not yet citizens, children will also get their BI, most probably adjusted by age.
- Citizens will be provided with the full amount at their 18<sup>th</sup> birthday. If they opt to go to college, they will be able to support themselves.
- Social insurance for retirement will not be necessary, as retirees will continue cashing-in their Basic Income. This will eliminate the need to set up a given retirement age, which will help if lifespans are extended.
- Under some conditions, citizens from other countries will be allowed to enroll in the local BI.
- BI should be indexed against inflation so that its objective is not lost.
- BI will assure businesses that customers will continue to buy, even in hard times, and so they can plan accordingly.

Basic Income payments to all will eventually eliminate the need to work. However, as in the near future the trend towards increased productivity with fewer employees will accelerate, BI will be needed to shelter the poor and the middle classes from the expected shortage of jobs. Moreover, in many cases it would help those that seek employment by allowing business to hire them at a very low direct cost. As an added benefit, it could reduce, and eventually eliminate, the stigma of not having a job.

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It would be expected that all citizens would want to earn more than the BI, and that most people would consider living using only the BI as a measure of last resort. Nevertheless, they will always have a BI as a parachute.

Many ways are suggested to pay for this Basic Income; the most relevant among them are Value Added Taxes (VAT), wealth, excessive income and luxury taxes. Value Added Taxes are extremely fair, if you buy something, then you pay, otherwise you do not. As this kind of tax is regressive, then those items needed to achieve the minimum standards that BI guarantees could be exempt from taxes. Primary residence homes could also be exempt. All others would be subject to a high VAT, and in the case of luxury items, including prime real estate, there would be a luxury tax added. Wealth and extremely high income should also be taxed, maybe in the form of excise, property and assets taxes. Inheritance would also be subject to taxation when exceeding a given high amount.

The idea would be to moderate the excesses in unfair wealth distribution and not to get rid of the rich. Nonetheless, a sizable number of people, especially in America, will consider these measures as a distribution of wealth, which it is, and they will fight against it. In a bizarre way of behaving, those that will oppose these steps with most ferocity could very well be the lower middle class of America; as they have been indoctrinated, by the rich and powerful, to think that they are the rich and powerful and as such these measures affect them directly. On the other hand, once these measures are enacted, the rich will go with the flow and will try to find new ways of taking advantage of the new rules.

### **Human Capital**

The root of the cause of most of the planet's problems seems to be overpopulation, diseases, poverty, insecurity and environmental. These problems subsequently generate an extreme reduction in human capital. Too many people in the world can barely, if at all, produce enough resources to survive. If there were a way to enhance their productivity, it would help all of us.

Throughout history, the majority has not been the best that they could have been. Imagine children growing up during the war in Ethiopia in the 1980s in a poverty-stricken village, how could they develop into productive persons? They could not get the education needed to flourish and most will spend their lives in poverty. Alternatively, a youth born in a poor neighborhood in America, forced to work in a badly paid job and never being able to get the education necessary to obtain a well-paid job? A large number of people have the potential to achieve much more in life.

The growth in per capita incomes of many countries during the 19<sup>th</sup> and 20<sup>th</sup> centuries was mostly due to scientific and technical progress that raised productivity. In addition, the increasing reliance of businesses on sophisticated knowledge enhanced the value of formal education, technical schooling, on-the-job training, and other human capital.

It is a common consideration that human capital is the “most valuable asset” of a company. And even though employees are considered the most important asset of companies, the structure of capitalism relegates them to the same low echelon as other commodities. This is quite obvious when businesses react to any problem, be it a reduction of the price of their stock, negative ratings of their top administrators or a dip in sales, the first, and almost always only, reaction is to layoff part of their workforce. Seems that their “most valuable asset” is so valuable because it is easily disposable; in a society where “if you don’t work you don’t eat” these conditions are not conducive to fair treatment of human capital.

An approach that reduces poverty by allowing education, and other income opportunities, to fall within the grasp of most people in the world will necessarily reduce poverty even more and in so doing will alleviate those conditions that create many problems in this planet.

## **Education**

Only 5% of American youth graduated high school in the year 1900 with only 1% going on to college. In 2000, 86% graduated from high school and 25% went on to college.

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However, considering the amount of change in other areas of society, schools seem frozen in time. Kids do the same things as their great-grandparents once did: sitting in uncomfortable chairs, listening to the teacher, taking notes by hand, and reading from textbooks that are out of date by the time they are printed.

Many governments still believe that the primary purpose of universal schooling is to raise honest, hardworking, useful citizens, devoted to family and country, but who are not to rise above their station in life. Some communist and other totalitarian or fundamentalist regimes have gone even further by educating children to become patriots, and martyrs, preparing them for the wars to come. Even today, the “kibbutz” in Israel follows similar ideas of those of Stalin’s regime; they raise children to be the guardians of Zionist land.

In the 19<sup>th</sup> Century, schools like the ones we have now were designed to educate workers and professionals for the industrial revolution. Education must now produce globally oriented team workers who are effective in an international and continuously changing work environment; during the rest of the 21<sup>st</sup> Century these goals will shift to new ones and it will be necessary to educate people accordingly. Will we still find schools late in the 21<sup>st</sup> Century? Maybe there will be something different from school and more similar to interactive games that kids, and adults, play in order to learn?

## **Science and Technology**

Technology entered the workplace in a massive way in the 20<sup>th</sup> century. The list of technological improvements in the workplace in the last century is almost endless: computers, communication devices, measuring devices, computer controlled equipment, the x-ray, wind tunnel, arc welder, circuit breaker, transistor, Geiger counter, laser, neon lamp, teletype, fiber optics, stainless steel, carbon-fiber and the Internet. The list goes on and on.

At the turn of the century, only 5% of the Nation’s factories used electricity to power their machines. However, by the end of the century,

electrical powered machines were omnipresent; and heating, air conditioning, and air filtration are common in the workplace. Technological improvements often resulted in improved safety in the workplace, as machines replaced the worker in many of the more dangerous and repetitive tasks.

Additionally, technological improvements that entered the home in the 20<sup>th</sup> century led to major changes in the workplace, as more homemakers were able to shift some of their time from home care to paid jobs. At the same time, new industries were created to serve the home; and existing industries expanded. Electricity was in less than 10% of the Nation's homes at the turn of the century; but it was universal by the end of the century in all but the most backward areas of the world. New machines introduced in the home in the 20<sup>th</sup> century included the radio, television, refrigerator, dishwasher, clothes washer, dryer, iron, vacuum cleaner, microwave oven, automatic toaster, electric razor, and electric hairdryer. In addition, there was prepackaged food, frozen food, and a host of other convenience items. And do not forget cars and airplanes.

The same story was repeated all over the world. Even third world countries benefited from many of these improvements in their quality of life and of course, many women became paid workers.

Considering the notion of exponential growth in inventions and technology most probably by the end of the 21<sup>st</sup> Century there will be a variety of improvements that will look overwhelming to us. Just as the 20<sup>th</sup> Century brought a change in the way we live; how will this change us and the way we live during this century?

## **Health**

The ancient Greeks had an average longevity of 19 years and this number increased slowly until very recently. Last Century started with an average lifespan of 47 years in the U.S. and went up to 77 years in 2000. Longevity increased over 50% worldwide in the past century and the quality of life has clearly increased.

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Health in the 20<sup>th</sup> Century improved due to many advances in medicine, among the most significant are:

- Sanitation was finally understood as a most important way of preventing infections.
- Vaccines were developed and applied comprehensively.
- Infant and maternal mortality dropped because most births took place in hospitals under sanitary conditions.
- Infections were controlled with antibiotics.
- Surgery became a lot less painful and less dangerous.
- Laboratory tests and body scanning devices allowed doctors to make better diagnostics.

The 21<sup>st</sup> Century has the potential of an even larger increase in longevity. As with knowledge and manufacturing, the fields of health and medicine have been growing with an exponential dimension. If longevity grew by 50% in the 20<sup>th</sup> Century, can we expect a growth of 100% or more in the 21<sup>st</sup>?

Then there is drug addiction. This is a double edged problem. First, there are the consequences of using drugs, second is the criminalization of the process of making, distributing, selling and consuming these drugs. Arguably, the worst is the second.

In light of what we have seen in the recent past, there have been more and more types of drugs invented and used. There is no reason to believe that this trend will stop anytime soon. Every day we read about new drugs that are being developed to promote well being, those that help avoid jet lag, improve memory and many more.

Given the advances in medicine it is natural that many new drugs will hit the market; some will be over the counter, others will require prescription and many will be illegal. With a penal system already bursting, are we going to create another set of offenses? Alternatively, will drugs be legalized and controlled in some way similar to tobacco and alcohol?

As science learns more about how the brain handles awareness, drugs will become ever more potent and precise. A spectrum of drugs to adjust neural connections or to have an effect on specific spots of the brain could be fine-tuned for a particular purpose without secondary effects or addiction. This new crop of substances will help enhance whatever you want to enhance at a given time. To make it more complicated, if you do not use them you get the short stick; you lose the game. Moreover, if they have no bad effects or addictions then there will be no reason to outlaw them; except, of course, for the moral issues made up by the moralists that seem to be always on hand.

## **Political and Economic Systems**

When the 20<sup>th</sup> Century started, there were many kingdoms and a few democracies. At the end of the Century, there were very few kingdoms, many democracies and some countries under communist regimes. Of course, there are some countries still under rogue dictators or warlords.

First, let us clarify that capitalism, socialism and communism are mostly economic systems whereas democracy, kingdom, and dictatorship are political systems. In recent years, most of the world's nations have been under one the following types of government-economic systems:

- Kingdom and capitalism.
- Kingdom and socialism.
- Kingdom and communism.
- Dictatorship and capitalism.
- Dictatorship and socialism.
- Dictatorship and communism.
- Democracy and capitalism.
- Democracy and socialism.
- Democracy and communism.

Parliamentary kingdoms, such as practiced in England, Spain and Japan, are really democracies with a traditional figure of a Queen or King as a political damper.

## **Capitalism**

Capitalism is an economic system in which capital, which includes all the means of production except labor, is privately controlled. Labor, stocks, goods and capital are traded, and thereby priced, in free markets. Profits are paid to the owners or they are invested mostly in stocks, real estate, technologies and industries. Wages are paid to labor and workers play no role in the ownership or control of the business or industries in which they are employed.

## **Communism**

Pure communism in the Marxian sense is a classless, stateless and oppression-free society where decisions are made democratically, every member of society participating in decision-making of political and economic issues. As an economic ideology, communism is usually considered a branch of socialism; owing to this fact, we are considering communism only as a label for an economic system. And the fact that most communist states have taken the form of dictatorships, whereas in its original form it is supposed to be a pure democracy, further strengthens this limitation of communism to just an economic system.

## **Socialism**

Socialism encompasses various theories of economic systems allowing for worker ownership and administration of means of production and resources in a society that stands for equal access to resources for all individuals with a method of compensation based on the amount of labor expended.

Socialism argues that capitalism unfairly concentrates wealth among the small segment of society that controls the capital and that its wealth is gained by exploitation creating inequalities that do not provide a fair field for everybody and does not use technology and resources in the best interest of the community. As all economic theories, its practice differs from the definition.



Most modern socialist states, especially the European states, follow a path that is a combination of capitalism and free markets merged with socialism. This is viewed as the means of providing economic justice, as defined in 1989 at Stockholm in the 18th Congress of the Socialist International, as their Declaration of Principles:

“Democratic socialism is an international movement for freedom, social justice, and solidarity. Its goal is to achieve a peaceful world where these basic values can be enhanced and where each individual can live a meaningful life with the full development of his or her personality and talents, and with the guarantee of human and civil rights in a democratic framework of society.”

This blend of controlled capitalism merged with socialist economic justice is the model that that we will follow in this book whenever we mention socialism.

## **Government Types**

Democracy is a political system in which government is either: carried out by the people, in which case it is called a direct democracy; or where the power to govern is granted to elected representatives in the form of a presidential or parliamentary system.

A dictatorship is an autocratic form of government in which the government is ruled by a dictator, without having inherited the position, even though North Korea, Syria, Cuba and maybe Egypt have broken this rule. It could be very easily confused with an absolute monarchy.

Monarchy or kingdom is a form of government which is ruled by one person, the King or Queen that usually is crowned under the name of God, and who is wholly set apart from all other members of the state that are his or her subjects. Monarchy takes many forms: absolute, hereditary, elective, constitutional, and semi constitutional.

## **20<sup>th</sup> Century Political Events**

In this past century, several political events were significant:

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- After World War I, the kingdoms of the defeated alliance of the German, Austro-Hungarian and Ottoman Empires became broken; their colonies were divided among the winners and the remaining parts became democracies of some sort, or dictatorships. Russia embraced communism.
- After World War II Russia began exporting its revolution, Eastern Europe, China, Vietnam, Cuba, North Korea, and many other countries became communist. The Cold War started.
- Western Europe ended thousands of years of wars by becoming the European Union.
- Russia's communism fizzled away; Eastern Europe, Russia and parts of the old Soviet Union became fledgling democracies. The Cold War ended.
- China became a capitalistic nation under a communist government. Moreover, they are very successful!

The political structure of the world has improved with more countries being governed by democratically elected politicians; some are more democratic than others, but it is still a good sign of progress.

Of all the political events in this past century, by far the most progressive is the creation of the European Union; the economical, political union of 27 states guarantying the freedom of movement of people, goods, services, and capital. This Union was seen as an escape from the extreme nationalism that had devastated Europe for centuries, and it has transformed Europe. With half a billion people, it is the world's largest economy. The euro, the common currency created in 1998 and shared by 15 of the European Union's members, has moved toward becoming the world's strongest currency, rising steadily as the dollar has slipped.

Another progressive event of the 20<sup>th</sup> Century was the creation of the United Nations (UN) in 1945 to replace the failed League of Nations. The UN was established to maintain international peace and promote cooperation in solving international economic, social and humanitarian

problems. Even though it has been the subject of many criticisms, its value as a means of promoting diplomacy and dialog, even between enemies, is widely recognized; and its humanitarian and peace keeping tasks have been fairly successful. Just the fact that 196 nations are members of the UN is laudable.

In contrast to this good news, the Middle-East problem that started after World War II by the creation of Israel and the occupation of Palestine territories had grown, by the end of the Century, to be the major source of conflict in the world. This was due in great part to the ruthless policies carried out by Israel to maintain occupation of the West Bank and Gaza Strip at all costs by bloodily suppressing Palestinian uprisings and a lack of desire to achieve a peace deal involving a separate and independent Palestinian State.

Will this trend towards more representative governments continue during the 21<sup>st</sup> Century? Will the model of the European Union be copied in other parts of the World? Will the horrors of war persist?

## **The First Ten Years**

The major incident during the first ten years of the 21<sup>st</sup> Century was the destruction of the Twin Towers in New York City. This terrorist act brought worldwide condemnation of the act and support for the U.S.

This support was squandered by George W. Bush who used this support to further the ambitions of his group of Neo-Conservatives taking the U.S., and a few ultra-right or “kiss ass” governments, into a preemptive war against Iraq, using the scheme of eliminating the danger of alleged weapons of mass destruction but in reality to plunder Iraq’s oil reserves. This war and the Afghanistan war were handled in the most inept way. This, along with the overall clumsy mismanagement overseen by Bush’s administration have resulted in the longest wars in recent history and the worst economic breakdown after the Great Depression.

The Middle-East crisis became worse than before under the George W. Bush regime with the rise to power of Hamas in Gaza Strip and Hezbollah

in Lebanon; these political parties/terrorist organizations (depending who you ask) were funded and aided by Iran and other Middle-East states who became more aggressive after the Iraq fiasco. Israel tried to destroy both and after destroying cities and towns and killing thousands of civilians in Lebanon and Gaza Strip both Hezbollah and Hamas are still in power and more popular than ever.

Simultaneously, the Human Genome Project completed its mapping of the human genome in 2003, two years before its deadline. This project ended up costing about \$3 billion dollars. In 2005, the genome of James Watson was sequenced for \$1 million. In 2008, the cost was down to \$60,000 dollars and by 2015, it is expected to be \$100.

Other scientific and technology projects have also made fantastic progress; Moore's Law is still doubling computer capacities every two years even though there seem to be a 600-year limit. Nanotubes are now produced commercially. The Internet is still growing fast. Hosts of promising applications are being explored. It is work in progress.

This is the promise of technology but there is the reality of human nature; an inexcusable lack of moral values on the part of President George W. Bush and his followers have marred these ten years. As this behavior was sanctioned at one point or another by a sizable part of the U.S. population, and many from other countries, it is an indication that human nature has not developed following the same exponential rate as science and technology. Regretfully, as the history of human civilization makes plain, a regressive factor is very much entrenched in human beings.

Nevertheless, there seems to be light at the end of the tunnel. The last four wars waged by superpowers against underdeveloped countries have resulted in failure: U.S. vs. Vietnam, Russia vs. Afghanistan, U.S. vs. Afghanistan and U.S. vs. Iraq. Could it be that wars are not effective anymore? Well, let us remember that wars started as a way to plunder, soldiers were paid with a share of the plunder; now that everybody is watching it is not as easy, or popular, to plunder. Then again, not everything is lost. American and most probably many global corporations,

abetted by politicians, plundered the U.S. coffers during these last U.S. wars.

Corporations found the lack of moral values an incentive to further reduce their ethical principles and plunder their lower class employees, their consumers and whoever was doing business with them; especially since most corporations are now considered part of the “manager’s capitalism” system, where top management is looking only for its own short-term gain.

Therefore, we have a worldwide depression, two major wars going on, and several upheaval areas of Africa and an unstable region in the neighborhood of Israel. This is not the way we want to describe the 21<sup>st</sup> Century; we have to be better. Thankfully, President Barack H. Obama, who was elected in 2008, has started to correct many of the national, international and global deleterious effects of the Bush/Cheney years. Let us hope he succeeds and brings the U.S. and the world back to the right track. Maybe even one that is more progressive than the one we were headed towards before.

*“The whole of the global economy is based on supplying the cravings of two per cent of the world’s population.”* Bill Bryson.





# New Directions

*"The human race is governed by its imagination."*

Napoleon Bonaparte.

**F**or the world to carry on with its progress in a wide-ranging manner it has to take social, technological, economical and medical steps forward. There is no advancement in a world where most of the population lives in abject poverty even if the few rich are incredibly rich. This will only create lack of progress due to a reduction in human capital because poor people normally are deficient in education.

There will also be fewer customers, thereby forcing a decline in gross output, efficiency of factories and service providers; and yes, also the profits.

The idea is not to turn everybody equal, either in wealth or personality; but to get rid of the poor by turning them into customers and active members of society; for example by establishing a minimum income as an element in human rights. Especially if the increase in mechanization and productivity turns out to be so all-inclusive that there is an abundance of goods and at the same time jobs are in short supply.



## **A New Economy**

What can be done? Either we go back to a real market economy that is only good in theory, or we invent another way of dealing with the economy. As has been pointed out at the beginning of this book, the world can expect a number of dramatic changes and it could be that some of these changes will allow us to find this new economy.

Now, let us make something very clear. Most of the population of the world does not participate in the economy except that they have a job and a salary or maybe their own business. Most people in the world do not invest, even a 401k type of account, such as those that exists in the U.S., does not count as an investment because it is managed through an investment fund; therefore, it is a savings account. Furthermore, most people do not have the kind of money or knowledge to qualify as serious investors. So many small investors could be better off going to gamble in Las Vegas than playing in the stock or other markets. Of course, they can make money sometimes. Nevertheless, in a whim, a billionaire can wipe them out in the blink of an eye. The markets are by nature heavily biased towards huge capital. It is not a fair game.

In the future, the economy has to orient itself towards an era of plenty. Considering the productivity gains of these past years we can expect more to come. Productivity gains coming from technical advances could very well mean two things for the economy:

- An abundance of goods and services.
- A lack of jobs.

How will the economy adapt to these seemingly contradictory conditions? If it remains in the same track of “you don’t eat if you don’t have a job”, there will be an enormous surplus of goods and services and few people who can pay for them, then workplaces will close and that means even less jobs. If the economy keeps on following capitalism and its principles then a very few will own everything; which will not be too much but enough to satisfy their more lavish needs and they will have to

close their eyes and ignore the rest. Note that this has already been tried by the last King of France and also by the last Tsar of Russia.

## **A New Social Order**

The social order of the world has been improving alongside science and technology; as natural resources, food and other basic necessities are available to more of the populace, conditions improve. That has been the case in the history of cultures ever since the invention of agriculture, disregarding Europe in the Middle Ages, Egypt after the Pharaohs and so many other cultures that have relapsed; however that is only when taken in isolation, worldwide the trend is that as one culture backs up, another takes the lead.

During the time of the Greeks and the Romans, a simplistic classification of their class structure would include the ruling aristocratic masters, the citizens and the slaves. Being a slave was very bad and more than 30% of the population were slaves.

In Europe's Middle Ages and all the way to the Renaissance there were Kings with their courtly aristocracy and their servants and then there were peasants. Peasants were very poor, had no rights and lived at the will of their Count or Baron or whoever ruled the land. Slavery in Europe more or less disappeared during the last half of the Middle Ages.

Then in the Industrial Revolution and up to the end of the 20<sup>th</sup> Century raises in productivity and new inventions allowed a new social order to be instituted. Governments and owners are the new masters, followed by workers that now include a new middle class of managers and professionals and then the poor. Being poor is bad; you have to work hard, if you can find a job, but then even the middle classes find it difficult sometimes and also face what has been called "wage slavery": "if you don't work you don't eat". However, it is far worse to be a slave.

Slavery has been an upsetting part of the rise of civilization; from Africa to the American Continent came more than 11 million slaves. Nevertheless, slavery was universal until the last decades of the 1800s.

There are still pockets of slavery. These days slavery takes the form of human trafficking or sex trafficking.

However, since the 19<sup>th</sup> Century slavery was abolished in most countries even though severe problems of racism remain. Slavery is more common when the labor to be done is relatively simple and thus easy to supervise. It is much more difficult and costly to check that slaves are doing their best and with good quality when they are performing complex tasks. Therefore, slavery is unprofitable for factory jobs.

Throughout this social evolution, the fate of women has not been too good either. Women in antiquity were obliged to submit to their parents or husband. In Athens, Rome and the Far East a wife was considered property of her father; or her husband when she married.

Then, in the year 610 AD, the Islamic prophet Muhammad gave women rights in their marriage, divorce and in the administration of their wealth and inheritance. The Constitution of Medina in 622 included greater rights for women in Arabia than in Europe at the time and for centuries to come. This constitution recognized women as persons and changed the concept of marriage from “property” to a “contract” that women according to the law were able to accept or reject at will.

In Europe, the same old story continued; women were not allowed too much in terms of property rights and none in politics. Even the French Revolution failed to deliver in its equalitarian slogan by making men equal but not even mentioning women.

It was during the 18<sup>th</sup> Century that women started to challenge laws that denied them the right to their property once they married and to demand their right to vote; these movements happened primarily in the U.S. and Europe. By the year 1900, New Zealand and Australia gave women the right to vote. After the First World War, the U.S. and some European countries granted this right. However, it was in 1948 that the United Nations adopted the “Universal Declaration of Human Rights” with 30 Articles, among them Article 21 states:

1. Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.
2. Everyone has the right of equal access to public service in his country.
3. The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

We have witnessed that social change took place during the 20<sup>th</sup> Century, and that these changes accelerated during the last half. In general, they have taken the path of “modernization” or to outside viewers “westernization.”

Considering the changes over the centuries and more recently in the last 50 years of the 20<sup>th</sup> Century, and with the acceleration of science and technology there will be impressive changes in the social structures of the 21<sup>st</sup> Century. Especially after the first 50 years. Of course what remains to be seen is the direction and essence of these changes. Will it be more of the same? Will changes make life easier and enable people to be in charge? Will money be as important?

In the 21<sup>st</sup> Century, considering ever-increasing affluence and improved means of communication, is there any hope that we will find regimes full of politicians that love public life and serve to help their people, not for power and riches? Will entrepreneurs start their business for the love of the challenge, and not for the money? And will ordinary people have no other goal in life but to live it in a generous and responsible way, without envy, sin or bad thoughts? Of course not! Still following the very much-established trends, and due to the affluence that is expected, life still could, should, and will be better for most people in the world.

Among the most significant changes that will personally affect people living in the latter part of the 21<sup>st</sup> Century will deal with their work. Some scenarios of what “a job” at that time could be like come to mind:

- A shift from jobs to challenges. Imagine going to work to help build up a project just because you like the idea and the team. You do not care about wages because you are already getting more than enough anyway. Maybe you will get a bonus if the project accomplishes more than expected.
- Or prepare a business plan, or a research task, and if it performs well enough in the assessment scenarios you will get a chance to do it. You will get the funds, the opportunity to build a team; you will also get management services and encouragement. If it is a business plan you would expect dividends, if research a patent or copyright. You can make money out of it.
- Or write a book and publish it. You will get initial free access to marketing and advertisement. If many people read it, you could become famous and get rewards like getting expanded access to the market. You would also get royalties paid by your readers.
- Or do nothing and read, play, go to a park. You are already set for life.

However, what if a person is not self-motivated but still wants to have a “job”? One that is steady and secure and that he will gladly do for the rest of his life, even if he does not make a lot of money. In this case, employers would have the option of providing a permanent job to this type of individual by paying an insurance provided by a private company or by the government, out of the salary paid to the employee. The insurer would keep a pool of jobs ready for insured permanent employees so that they get an equivalent job in case their employer is unable to keep them on their payroll.

These ideas of a “job” absolutely require a new financial order where all people can live comfortably without having to work and not all the rewards are monetary. This is not as outrageous as it sounds. Many people do it now; all you need is wealthy parents or being disabled or to live in a Scandinavian welfare state.

It is a matter-of-fact that many people who have no need to go to work to survive do things where money is not the object. Those that are lucky enough to be born into wealth, are likely to work wherever they like and in what they like and almost always the idea of doing it for money is very much out of the question. Moreover, if you qualify as one of the above it is not degrading or shameful not to work. In a world of plenty, work could very well be an option.

A “job” could be a means to achieve certain goals, which could be to become famous, or to get to know more people that share your goals, or maybe just doing it will be a satisfaction to you. There will also be monetary rewards, but most likely, they will not have the importance that we express now to them because this extra money will be extra. In addition, if you prove yourself good in a given field it will be easier to  
continue                                      doing                                      even                                      more.

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