part 3

The near future of the World economy:
the most likely scenarios

What will our economic future look like? Depending on the circumstances several different scenarios are possible. When considering the future we need to take a range of factors into account. How current political and economic globalization will develop is uncertain. Emotions play a major role in the economy. Much depends on the way citizens and governments react to insecurity and the threat of an economic downturn. Will they leave economic development to the market? Will they expect to find solace in ever more control mechanisms and (sometimes conflicting) laws and regulations? Or will they seek shelter in protectionism?

IMF Projections

Let's start with projections by the International Monetary Fund. The IMF March 2009 projections show a contraction in world growth in 2009 followed by a small recovery in 2010.

	2008	**Projection 2009**	**Projection 2010**
World output	3.2%	-1% to -0.5%	1.5% to 2.5%
Advanced economies	0.8%	-3.5% to -3.0%	0.0% to 0.5%
US	1.1%	-2.6%	0.2%
Euro area	0.9%	-3.2%	0.1%
Japan	-0.7%	-5.8%	-0.2%
Emerging economies	6.1%	1.5% to 2.5%	3.5% to 4.5%

Source: World Economic Outlook, March 2009

The modest growth predicted for the emerging economies in 2009 hides big differences. The economic growth in China is projected to be around 6%, while the Russian economy is going to contract 4.5% in 2009, according to World Bank estimates. These official projections have also been readjusted downward quite often in recent months and new readjustments are likely.

The future of globalization

Energy company Shell is well known as the company that develops the best future scenarios. In past decades, The Shell Scenario method has found many followers worldwide – and it has a proven track record. Shell suggests that companies need to avoid making their future dependent on any one scenario. In this so-called TINA (There Is No Alternative) approach, a company develops its future strategy in such a way that it can deal with all possible scenarios. According to Shell there are three possible scenarios for the future of globalization. These will influence the future of the world's economy.

Scenario 1: Low Trust Globalization

In this scenario we see the absence of market solutions to the crisis of security and trust, rapid regulatory change, overlapping jurisdictions, and conflicting laws, leading to intrusive checks and controls, encouraging short-term portfolio optimization and vertical integration. Institutional discontinuities limit cross-border economic integration. Complying with fast-evolving rules and managing complex risks are key challenges. Low Trust Globalization is characterized by a combination of a very strong role for institutional investors, and a legalistic approach to rules and compliance. Mandatory standards and systematic rating and disclosure reflect – and further reinforce – an overall climate of distrust. Legal risk is very high, and insurance costs for directors and officers reach staggering heights.

Scenario 2: Open Doors

In this scenario we see clarity about security and compliance, regulatory harmonization, mutual recognition, independent media, the setting up and implementation of voluntary best-practice codes, and close links between investors and civil society: this encourages cross-border integration and virtual value chains. Networking skills and superior reputation management are essential.

In the Open Doors scenario, stakeholders have a major voice as well, often working in cooperation with investors and regulators. The capacity to understand and evaluate different market cultures is high, and trust is reflected in comply-or-explain codes. Board evaluation is emphasized. Legal risk is moderate – and reputation is of crucial importance.

Scenario 3: Flags

In this scenario dogmatic approaches, regulatory fragmentation, national preferences, and conflicts over values and religion give insiders an advantage – thus putting the brakes on globalization. Gated communities, patronage, and national standards exacerbate fragmentation and call for a great deal of attention for country-risk management.

The Flags scenario sees political considerations interfering with a patchwork of stringent national rules, further encouraging a "home bias" in investment portfolios. The risk of loss of control is very high, as groups with good connections and national champions can weaken the rule of law.

The consequences of the Shell scenarios for economic growth

Over the period 2005-2025 economic growth rates range from 2.6 % per annum in the Flags scenario, 3 % per annum in the Low Trust scenario, and 3.8 % per annum in the Open Doors scenario. This means that by 2025 the level of global economic prosperity is 40 % higher in the Open Doors scenario than in the Flags scenario.

In the Open Doors scenario technological progress is rapid, thanks to substantial research and development efforts conducted in an international environment within a uniform set of global intellectual property rules. With trade barriers gradually dismantled and the hurdle of institutional discontinuities diminishing, foreign trade expands rapidly. Financial markets are more integrated, fostering the efficient allocation of capital on a global scale.

In the Low Trust Scenario, trade integration also increases, albeit along a flatter path due to security concerns and continuing institutional differences across borders. Intellectual Property regimes differ, and the spreading of knowledge is hampered by legal and security considerations.

In the Flags scenario, national barriers undermine collaborative research efforts and impede the wider distribution of technological innovations. Markets remain fragmented and high domestic savings are required in order to finance investments.

Conclusion: the wisest is the Open Doors Scenario, yet politicians at the moment tend to choose the Flags Scenario

If political leaders around the world choose the Flags scenario, they are opting for protectionism and less globalization. Deloitte-economist Ian Stewart calls this "slowbalization". Choosing this scenario definitely means a lasting economic slowdown, while a short, deep slowdown would be preferable. Yet politicians all over the world fear the anger of their electorates and social unrest, and give in easily to the requests of national businesses for bailouts. As a result, we may be sure that this crisis is going to last much longer than it needs to.

Important variables for scenarios

The renowned economist professor Lans Bovenberg says: "When you develop future scenarios, you especially take into account uncertainties. You divide them in two dimensions in four quadrants. For the financial branch, an important uncertainty is the extent of internationalization. How will globalization continue, and how will local entities like nation states and regions relate to globalization? Will nation states erode? Will city-states come back? Will there be a backlash because of nation states trying to regain the power they lost during globalization? The second important uncertainty is the development of community spirit and individualism. Collectivities are important for this sector, especially because individual products are normally more expensive than collective ones. Collective retirement is cheaper than the retirement of an individual freelancer."

Allianz scenarios

Paul Achleitner, Boardmember of financial multinational Allianz, has also designed scenarios for the future of the World economy. In the short term he foresees two possibilities:

Flash in the Pan (Upside) In this scenario we see the positive impact of fiscal measures and the various stimulus plans. Therefore a successful quantitative easing, and no deflationary tendency. Risk appetite returns. Government yields rise, stock markets recover.

Black Hole (Downside) In this scenario the crisis intensifies, GDP's shrink continuously, unemployment rises, risk appetite decreases, equities, and government bond yields decline and political risks increase.

In the medium term he foresees four possible scenarios:

1930 A severe economic depression, very high unemployment and severe price deflation.

Japan Economic stagnation, rising deflation and increasing state role.

Yes we Keynes Lasting economic recovery, massive Keynesian programs, and successful policy coordination.

Argentina Reflationary recovery, unstable governments, and uncontrolled hyperinflation.

The Kondratiev waves and seasonal differences as states of mind

As explained in the previous chapter, in many areas we can recognize fixed patterns of change, like high and low tides. Many cycles have a time span of 60 years between a peak and a dip. Joseph Schumpeter described them in terms of innovation – technological and financial. Nikolai Kondratiev described the wave patterns in a more general economic sense.

Kondratiev's theory suggests that the economy has cycles, much like a year has seasons. It starts with a period of profitable inflation, which is spring. A subsequent period of "stagflation" (economic slowdown or stagnation, combined with inflation) represents summer. The profitable deflation represents fall, and the final deflation is winter, after which, the cycles start all over again. The last Kondratiev cycle ended in 1949. We saw profitable inflation in the period from 1949 to 1966, stagflation from 1966 to 1982, profitable deflation from 1982 to 2000 – and since 2000 we have been in a winter deflation, leading to a depression.

There are great differences in people's mental states during the various seasons of the Kondratiev cycle. Spring is a period of great zest for work, an urge to consume, and a strong tendency for economic expansion. In summer, people want to enjoy their acquired wealth and consume more and more. In this period differences of opinion start to rise to the surface. Apparently, summer in the Kondratiev cycle is also a favourite season to start a war. Fall characterizes itself by an "everyone for himself/herself" mentality. The expenditure policy becomes irresponsible, and there is a lack of commodities. Nevertheless everyone wants to continue living at the same prosperity level. Many live on credit. However, in winter debts made in fall can no longer be supported, and the economic system collapses. Extremism and fundamentalism surge, and war is a common phenomenon. In a conventional winter, there would be three real depression years and fifteen recovery years, during which the economy stays flat to catch its breath, so a new spring can begin.

A New Great Depression?

A lot of economists compare the present crisis with the Great Depression, but only some of them expect the 2008 crisis to last as long as the 1929 crisis did. Then it lasted until 1938 – a similar time frame now would

mean a depression until 2017. But there are big differences between the government measures taken back then and the measures now. In the 1930's banks went bankrupt, while now most banks are saved. Back then the government trusted the market to correct the economic imbalance, which worked out disastrously. Now the stimulus programs of governments all over the world are enormous and will help the economy back onto its feet again. As for statistics, Professor Robert Barro from Harvard University calculated that "the odds are roughly one-in-five that the current recession will snowball into a macroeconomic decline of 10% or more that is the hallmark of a depression." Furthermore, Mr. Barro, who distinguishes between war-related and non-war related depressions, found that the 59 non-war depressions that have occurred worldwide since 1870 had an average duration of nearly 4 years. This would mean that, if this recession turns into a depression, we could not expect substantial recovery until 2012.

Deflation or Inflation?

Some experts worry about the risk of deflation, an extended period of falling prices. That's something that usually occurs in times of sharp economic downturn, such as the Great Depression. But other experts are just as concerned about the opposite scenario: rapidly rising prices, or inflation, caused by the huge stimulus efforts of central banks and governments around the world. And to make it even more complicated, investment strategist Jason Trennert has said in the *Wall Street Journal*: "We believe it's quite possible to have commodity-price inflation at the same time you have broad-based deflation." At the moment the inflation rate is still very low, but the present stimulus measures taken by governments all over the world could lead to a rise in inflation. When governments print money and spend extra billions, more cash chases the same number of products, leading to higher prices eventu-

ally. Much of what is going to happen depends on the actions taken by major investors like China and the Arabic Emirates. If they are willing to finance the stimulus measures taken by Western governments, then the risk of inflation is not that big. But if they refuse to finance Western debts, a country like America could be confronted with superinflation, lose its financial hegemony and the dollar standard. If economic activity remains weak, deflation is a possibility, as companies compete to lower prices to attract customers. In the *Wall Street Journal* A. Gary Shilling, a bearish economist, forecasts annual deflation of about 2% over the next few years, as consumers save more and the "overall supply of goods and services exceeds demand."

Financial astrology

Most market trends, including the ups and downs of the business cycle, the stock market, and house prices are caused by fluctuations in investor psychology, be it fear, excitement, greed or over-optimism. In fact, recessions begin and end in the "minds of men." Economics and psychology go hand in hand. But is investor psychology measurable and predictable? Astrologers say the answer to that question is "yes," and they call their trick of the trade financial astrology or business astrology. At first sight, the combination of financial business and astrology seems a strange one for a lot of people. However, in times of great uncertainty there are decision makers in the financial industry that consult astrologers, and what they told me seemed very striking, so I'll give you some astrological scenarios here, so you can make up your own mind.

First I needed an example of an astrologer's prediction that was short term, so that I could "verify" it. On March 2, 2009 an astrological prediction warned: "The possibility of a sharp decline in stock indices is very high this week. Like the terrorist alert system, let's say stock markets are now on 'red alert'." They explained that this was all due to "the 19-month cycle of Venus retrograde taking effect on Friday, March 6, 2009." And in fact, many indices declined sharply that week, 50-90% off their all-time highs, representing the largest percentage decline since the Great Depression of the 1930's.

Cardinal Climax and Grand Cross

Not only was the sharp decline of indices during that week in March 2009 predicted by astrologers. The present crisis as a whole was predicted as well: "Because for the first time since 1929-1934, Saturn, Uranus, and Pluto are entering into a T-square formation. This rare celestial pattern will take place in the Cardinal Signs (Aries, Libra, and Capricorn), and hence it is referred to as the 'Cardinal Climax'. This pattern officially began in 2008, when Pluto entered Capricorn, and Saturn-Uranus entered into their opposition to one another." In the coming years this Cardinal Climax is going to develop into: "…a Grand Cross that will occur in summer 2010, when Pluto, Uranus and Jupiter, and Saturn and Mars will be at 0-3º Capricorn, Aries and Libra, respectively, while inner planets transit at 0-3º Cancer. This is assumed by astrologers to be a time with many great challenges and dramatic changes. This aspect resembles another Grand Cross that occurred during the 1930's. Astrologers trace these cycles to decades and even centuries earlier, when Uranus transited Aries last time in the 1930's and 1840's, and Pluto transited Capricorn last time in the 1760's and 1770's, which were decades of many revolutions and changes. The cardinal alignment of 2010 is also a continuing square between Pluto and Uranus, which occurred last time in the 1960's and the 1930's and will occur between 2010 and 2014. Therefore, mundane astrologers predict dramatic changes (economic, social, military, scientific) to occur again in the years ahead."

Pluto in the sign of Capricorn

The above prediction talks about revolutionary changes, but doesn't tell us when we can expect the present economic recession to be over. So let's return to astrology and look at a prediction about the end of the crisis. In fact, there are some astrological influences that predict an end to the recession pretty soon. Following is an example from astrologer Stefan Stenudd, who describes elements from the world financial-astrological chart on his website www.horoscoper.net, and especially the passing of Pluto through the sign of Capricorn, from 2008 to 2023.

Pluto and Capricorn

"In the beginning of 2008, Pluto made its first entry into Capricorn. Pluto causes metamorphosis – drastic and unforeseen changes with a long-lasting effect. In Capricorn, these changes deal with established orders, organization and structure, and on a concrete level buildings of any kind.

Pluto is in the second House, which rules economy and finance, so that is where its dynamics will show the most. The present credit crisis is a clear example of this. The international banking system threatens to collapse, and a new order for it is crucial.

But both Venus and Jupiter are in the same House, right next to Pluto. They show that the transit to a new financial order will be smooth and very successful. The outcome will be one of vastly increased riches and resources. It will turn positive quite quickly, too. Already early next year, neat solutions to the biggest problems will start to work and change things for the better.

By February 2012, there will be a major burst of the world economy, expanding and enriching it tremendously. But already before that, the financial world will be increasingly blooming. This is related to some serious and firm reform of government and leadership, which is a process initiated by the economic crisis we have right now. The crisis is closely linked to real estate, which is also a trait of Capricorn. Although presently any investment in real estate seems out of the question, soon it will be the other way around: The fall of house values will lead to even higher values on houses and other even bigger constructions. Investments and projecting of big new buildings are sure to pay off, faster than we may today believe possible. The ones who dare rebuild what has been torn down will be the most successful, whether they are nations or businesses. The bigger the better." □

The world economy according to Citibank and Mike Adams

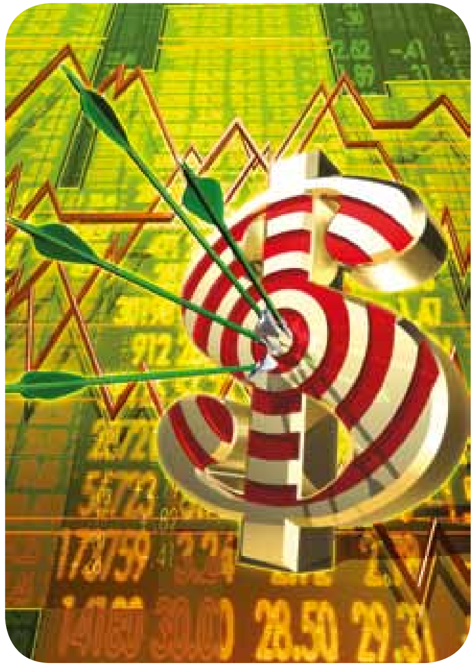
An internal memo from a top Citibank analyst reveals what the banks really think about the global financial situation, and the outlook is grim: "The world is not going back to normal after the magnitude of what happened" wrote Tom Fitzpatrick, Citibank's chief technical strategist. He goes on to explain that the massive money creation efforts by the Federal Reserve and other central banks will end with one of two things: a resurgence of inflation, or a fall into "depression, civil disorder and possibly wars." Either outcome, he says, will cause the price of gold to skyrocket. Gold will push to well over $2,000 per ounce, he explains.

The timing on all this? Sometime in either 2009 or 2010, said the analyst.

This coincides with predictions that journalist Mike Adams made on NaturalNews.com, where he predicted price inflation of 20% - 40% in 2009, and the financial collapse of the United States government (sometime before 2025) due to an irreversible debt burden. Adams also predicts that when the people wake up and realize their dollars have been looted by the Treasury and turned into worthless pieces of paper, there will be riots in the streets of the US. He says: "These events have already been set into motion. It is now only a matter of time until they bubble to the surface. On the day the mainstream taxpayers actually figure all this out, don't be caught out in public. Stay home."

The world's economy according to Paul Kennedy

Paul Kennedy is a professor of history and director of International Security Studies at Yale University. In a column for Bloomberg News he writes: "Every so often in the history of international affairs, a great trans-national turbulence shakes the foundations of the world and brings many of its older structures tumbling to the ground, as we witnessed in 1919, 1945 and 1989. In the confusion and babble that follow, it's difficult to see through the dust and recognize the shape of the altered strategic landscape. Peering through the wreckage of the past year's financial crisis, it seems clear that every nation was a loser in 2008.…In the midst of general turmoil, there are always relative winners and losers. Those



who are likely to lose most in the coming year will include Russia, Venezuela and Iran (too dependent on oil), most of Africa and Latin America (too tied to commodities), and Japan, Taiwan and South Korea (too wedded to exports, shipping, electronics). By contrast, and unless it falls into the trap of a Pakistan war, India will advance; none of its banks (so far) are on the Bear Stearns Cos. track. China will take hits, but that probably means an increase in economic growth of 5% or 6%, deriving more from domestic development, and less from cheap exports.…Norway will ride the storm on its still-massive currency reserve and the rest of Scandinavia has strength in depth – unlike the less competitive economies of East and Central Europe. Germany's combination of ultra-high-quality production, superb infrastructure and financial caution (few Germans use credit cards: Americans, take note!) give it strengths that are lacking in the UK, France, Italy, Spain, Greece and other European countries that fell for easy credit and large government deficits. Prussian fiscal rectitude will keep the euro high, and compound the dollar's weaknesses. The biggest question concerns the United States. My instinct tells me it will lose ground in 2009. I simply don't see how the Treasury can print $1 trillion to cover deficit spending, offer those bills at very low interest rates, and expect foreigners (not Americans, because we don't have the savings) to buy them, persuading the world to keep afloat its greatest debtor since Philip II of Spain. Why should sensible Chinese investors do that when they can buy Swiss bonds, gold, or Scottish real estate? Yet if Asians decline to buy tens of billions of Treasuries each month in 2009, US interest rates will have to go up again. So: India up, China up, Germany up (all relatively). The developing world down, Russia down, most of Europe and Japan down, and President Barack Obama's America down and down. I'd like to believe I am very wrong. I worry that I'm not."

Aging and sustainable pensions in a responsible society

Just like people, pensions come in all shapes and sizes. As an international pensions company with over 60 years of experience in pensions, investment management and insurance, we have become familiar with dozens of different pension systems in all sorts of countries. The most advanced and "mature" pension system is to be found in the Netherlands. The system in Holland consists of three pillars for old-age provision. People receive not just a solid government pension but also save for a top-up pension through their employer. The latter is compulsory and is arranged collectively within a company, industry or occupational group. The supplementary pension system is based on the principles of collectiveness and solidarity, and the costs of the system are shared proportionally. In addition, people in the Netherlands make supplementary private pension provision (third pillar). In this way a situation has arisen in the Netherlands in which a huge level of pension assets has been built up (reaching Euro 600 billion).

There are also many countries in the world in which people make their own, individual old-age pension arrangements, in some cases on top of a limited state pension. This is generally done through insurance companies, which offer the consumer annuity insurance. The old-age pension is generally a personal, expensive affair which, on account of the high costs, is arranged individually, or even not at all. Everyone is free to set aside money for pension purposes. The weakness of the system lies in the high costs and the fact that it is optional. For if the moped, TV or fridge breaks down, that money will, in many cases, no longer find its way to old-age provision…

Pension also means hoping for support and care by the children

Finally there are countries in which the "pension" just consists of the hope or the knowledge that you will be able to fall back in old age on the support and care of your own children and other loved ones. A state pension, solidarity and collective saving or insurance for retirement do not really feature in the scheme of things.

Future

The proportion of elderly people in Europe, Asia and the United States is rising substantially.. This means that young people need to bear the future burden of the elderly. In countries with relatively low population growth, such as China, the younger generations will be required to bear a substantial financial burden. This will be associated with social tensions. In the Dutch system, the retirement age will be increased. A broad social debate about solidarity and the sustainability and affordability of the system is taking place. This will also take place in other countries with pension systems in which there is a collective element. From whatever angle one looks at things, the risk and the initiative for pension build-up will in future become increasingly a matter for the individual.

On top of this, we find in our business that people in many countries are highly enamoured of supervision. Such regulation will certainly not diminish in the future. Based on the pension legislation, frameworks and norms, all these bodies are concerned with exercising supervision over organizations and individuals. Precaution and prevention take pride of place in this superabundance of supervision, but the regulators are unable to provide any guarantees – least of all in times of financial crisis. Despite that, a sharp increase in government regulation all over the world is in prospect.

Towards a sustainable society

As a leading investment manager with investments all over the world, we believe that the future will flourish best in a sustainable society. In addition we are convinced that companies that act in accordance with this principle have the best chance of survival and best earnings potential in the longer term. Consumers too will in future increasingly expect their pension fund, insurer and asset manager to deal responsibly with the environment, people and the world. This will ultimately mean that a clear distinction is drawn between organizations that are prepared to work responsibly and sustainably and those who take these considerations less seriously. It will be the former group of organizations that is preferred by consumers all over the world.

Complex and consequently non-transparent investment products will have no part in a future portfolio. That also applies to high-yielding arrangements. Ethics in the broad sense of the word will become the guiding principle in terms of both method of production and financial reward. We will be exerting our influence as shareholders to this end as actively as possible. In this role we will be entering into a dialogue to persuade companies to adopt more responsible and sustainable policies. Entering into discussion with companies and even excluding a company from the investment portfolio will become ever more important in the future. Key considerations in this regard will be matters

such as good corporate governance, transparency, conditions of employment and the use of child labor, and how human rights and environmental issues are dealt with.

Later retirement

Pensions will increasingly become an individual matter. The choice of whether or not to save for one's pension will in the future be determined personally, and the way in which that is done will also differ from person to person. In addition, the age at which people take retirement will steadily rise. It may even be asked whether that is such a bad thing. When the pensions systems we have today were on the drawing board decades ago, people grew old more rapidly than now and did not remain in good health for as long. If we bear in mind that, with the aid of medical technology, more and more people will be able to grow old in good health, continuing to work on for some time is not such a bad thing for most people. In this vision of the future the individual who determines his or her own future is key. Pension Services Providers will evolve in service centers to assist individuals in their personal financial management. Aggregation of the essential financial data, analysis and planning will be key elements of a continuous supportive role. It will be a balance of managing the essentials around "income, healthcare and pension" in order to secure "a good life" for the individual. Of course new collective elements will arise. The financial services industry and pensions service providers will be challenged more and more to service the new generations to come. □

Rudolf Hagendijk
Chairman of the Executive Board of Mn Services

Rudolf Hagendijk has been chairman of the Executive Board and managing director of Mn Services since February 2005. Rudolf graduated in public administration at VU University Amsterdam. He majored in policy and governance and devoted extra time in his studies to business culture, organisation and management.

Mn Services manages assets of EUR 56 billion and administers the pensions of over 1.2 million employees on behalf of more than 35,000 employers, making it one of the leading independent investment managers and pension administrators in the Netherlands.

The economic future according to Wim de Ridder

Futurologist and economist Wim de Ridder is quietly optimistic about the present crisis: "Because of the banking crisis there has been a powerful negative impulse running through the whole economic system, resulting in the present recession, but the economic fundamentals of this day and age are excellent." De Ridder emphasises that technological innovation develops irrespective of the economy: "Technological innovations that involve knowledge always grow in an exponential rate. That's a law that already existed in the times the radio was invented. It is a bit like Moore's Law: every 18 months the capacity of computers doubles at the same price. The same goes for technological developments in robotics, genetics, and solar energy. I'm convinced that in 2020 solar energy will be the main source of energy. Now people still complain that it is too expensive, but it is getting cheaper at a rate of 40% every year."

The vested interests of the establishment, for example the oil companies and car makers, are outrun by new technology, which is getting better and cheaper all the time, but in a lot of cases they don't realize it yet. The economic crisis puts extra pressure on the old industries, forcing them to change very quickly. But innovation doesn't depend on their actions. On the sideline new companies and new countries are catching up with the old industries. The knowledge about new technology is there, and will be used and developed further. In fact, all of the economic growth we have seen in the past half-century is due to the growth of information technology. The present crisis may temporarily slow the deployment of new products and services but in the global world technological innovations in the fields of sustainable energy, robotics, and genetics will continue. According to De Ridder a quick recovery of the economy is probable, because the innovative potential is there. In fact, we are currently living in the last part of the fifth technology revolution since the Industrial revolution at the end of the eighteenth century. The end of a long wave in history has always been a golden age of growth.

Making use of these ideas

Studying this dazzling array of ideas, scenarios and possibilities, it's not too easy to come up with the perfect answer for weathering this "perfect economic storm." Many people refer to the 1930's, yet one thing I have concluded is that while history may repeat itself, it is always in different ways. True, there are many similarities with the 1930's. We are entering a new technological period, as happened at that time. A major crash within the financial industry is occurring, as happened then. Nationalism is turning globalization into slowbalization, again. There is social unrest, again. There is no united global policy to tackle the crisis, as in the 1930's. Yet then we needed a major war to fight ourselves out of the Depression, and today, despite many speculations about a market for World War III, I can't see any signs of this. There are other differences as well. In the 1930's we did not have as much social welfare as now, so there was more social unrest then. Then the role of governments in the economy was not as big as it is now.

Making use of both economic and astrological information offers interesting possibilities for developing scenarios. One thing to factor in when dealing with scenarios is the need to reckon with "wild cards", those jokers that can throw off our plans just as they disturb a game of cards.

My future scenarios for the World's Economy

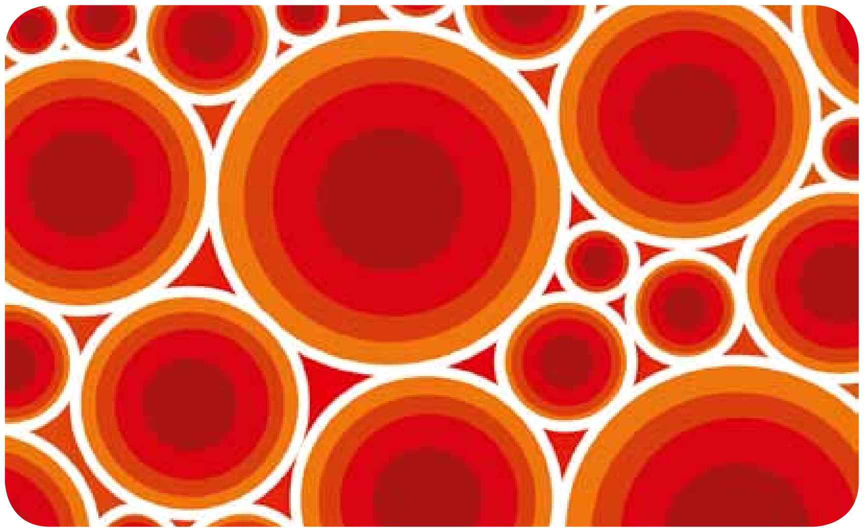
When all these ideas and scenarios are connected, I can envision four possible scenarios for the future of the world's economy.

Scenario 1: United World

Internationalization continues and citizens increasingly organize themselves into new collectives, physically and virtually. The technological revolution helps to stimulate innovation. The generation of youngsters, the Millennials, forces the world to change its ways drastically. Many forces are currently hurting humanity economically, such as ridiculous subsidy systems, the lack of sustainability, and our unwise energy policies. This comes to an end. The financial industry recovers and renews itself after a painful episode and money makes the world go around again. Half of the current financial industry does not survive. New entrants emerge, old borders between financial companies as pension funds and health insurance companies come to an end. Many new stakeholders emerge and take over large chunks of the business of current financial companies. Because of continuous globalization, as described in Shell's Open Doors scenario, the world's economy grows. Risks can be spread worldwide and economies become harmonized. China takes over the role of policeman of the world gradually and harmoniously from the US, and the two powers work closely together. No major inflation or deflation. Keynes is popular. The crisis is painful, however it succeeds in pushing old industries, such as car manufacturing, to successfully transform themselves. Temporary nationalistic waves don't last long and xenophobia passes. The world gradually evolves into a post-material economy. Unlimited population growth comes to an end. The dollar weakens, yet survives, the euro survives too. Africa gets one single currency, the afro, as do the Middle East and Asia.

Scenario 2: A World of "Atoms"

Internationalization continues, as does individualization. Citizens manage their affairs more individually, outside of any collectives. Regions and



nations design their own economic policies. The Flags-scenario of Shell becomes reality. The world economy slows down, globalization turns into slowbalization, protectionism, and nationalism take over. Modern groups of (sometimes only virtually connected) people, which I call *tribes*, will all invest in the technological revolution in their own way, and we will see major differences between tribes. There will be inflation for some products and in some countries or regions, and deflation for others. In this scenario we will see a fragmented world, similar to a random collection of atoms. Internationalization collapses and collectivity increases. In this case, industry stabilizes and gradually starts to shrink. The vision of Paul Krugman becomes a reality. In 1914, after a long period of globalization, that process ended because of rising nationalism and regionalism. This is when the predecessor of the EU, the Donau Monarchy, collapsed; and this is how the predecessor of the euro, the taler, came to an end. Crisis after crisis diminished the faith of citizens in public reign. And finally, after a series of accidents, World War I broke out. A repetition of 1914 is possible. Deflation will be the buzzword. World War III a serious possibility.

Scenario 3: Japan

In this scenario several leaders and stakeholders try to manage the crisis, yet fail, because they are not courageous enough to do what is necessary. Actually this is what happened in Japan during its "lost decade" when its own bank crisis and economic slowdown caused the country a great deal of damage. This happened in Japan because the country was too consensus driven, leaders feared public outrage and did not want to cause anyone pain. So, slowly, the tremendous economic miracle of the past faded away. Now many economists warn, Japan faces the possibility of loosing 10 years again. If the leaders of the world and the financial industry cope with the current crisis the way Japanese stakeholders did with their crisis, we face a long period of economic slowdown. Internationalization collapses and individualization continues. Mass inflation. In this case the financial industry will shrink considerably, as products become (too) expensive and international risk sharing diminishes. The collapse of internationalization has a considerable negative effect on the vitality of the financial sector and will induce a downward spiral. Yet

this process is gradual, as in Allianz's Japan scenario. This scenario is not very bloody, deflation is due, but its not very energetic either.

Scenario 4: Finland

Scandinavia experienced it's own financial and economic crisis in the last part of the twentieth century. The most successful response was the one taken by Finland. Companies or industries that were not good enough, or entrepreneurial enough, were forced to close shop. No bail-outs. New approaches were tried – the method was that of trial-and-error. A lot went wrong, yet most went well. Within a remarkably short time the economy was thriving again, and the financial industry was healthy again. Yet no major changes in the transition towards the post-material economy were made. No major decisions about really reforming the nation and the people were made. The basics of the economic system were not questioned, nor was the welfare state or the dependence on fossil fuels. This may happen to the whole world now. The financial industry may recover, thanks to bail-outs, (self)regulation and pressure to do so by self conscious consumers. The American economy may recover in 2 to 3 years from now, but the major transitions which are needed won't happen: like living on credit and remaining dependent on fossil fuels. Inflation is high in this scenario.

Making the best of the future

United World seems the most attractive scenario for humanity. Although I passionately hope that we will be wise enough to choose this scenario, the odds are mixed. The economic developments and the historical parallels, even the astrological signs and "wild cards" (such as sunspots, see later in this book) look quite gloomy for the short and mid-term.

In the long term however, we know that after Doom comes Boom. As the Russian economist Nikolai Kondratiev discovered – capitalism always renews and reinvents itself. And human beings are creative, inventive and ambitious, we despair often enough, that's true, but we always rebuild our societies on the ruins of the past. And we are always able to reincarnate the good things of the past…even if it takes a while.

Economists and predictions for the future

Making predictions is incredibly difficult. We are gradually mastering the art of predicting the past. In the words of the economist Laurence Peter: "An economist is an expert who will know tomorrow why the things he predicted yesterday didn't happen today." A rather complicated sentence, wouldn't you say?

Predicting what will happen tomorrow, for example, is a whole lot more difficult than predicting what will happen next year. What is going to happen to share prices? How serious is the economic downturn? How long is it going to last? It is much easier to make predictions for the longer term, which is what futurologists do. I am not merely thinking of the words of the great economist, John Maynard Keynes, who said that in the long run we are all going to die anyway. This is a prediction that has a degree of probability bordering on the certain, I think. What I really mean is that long-term predictions are often fantasies, that they are often dreams, just like Jules Verne's fantasy that we might be able to dive deep under the sea in a submarine. The odd thing about people is that they are often able to realize their fantasies. As soon as a fantasy is imagined, people try to make it happen.

A lot of Bakas' fantasies will in fact come true. He even said once on television that 70% will come about. I would find it interesting to know which kinds of predictions are actually going to happen: the very daring, or the moderately interesting. And if the very daring do not manifest, then that is of course rather less interesting. Thus it seems more likely to me – even if it isn't exactly obvious – and this is not something that I made up myself – that an elephant will give birth to a mouse, rather than that a mouse will give birth to an elephant. You need to think about this.

But let us return to the wise words of the economist Laurence Peter. I would like to hark back or rather hark forward to a story from the future, a tale from the year 2046, The Tale of the Golden Egg. In the early years of the 1990's there was a banker, who was called Jacob. He had strongrooms full of banknotes and incredibly complicated financial instruments, and the regulator – the Central Bank that is – was terribly pleased with this banker. But then something went wrong. In the course of 2008 a fire broke out at his neighbor's, a large bank, and a lot of Jacob's innovatively structured financial instruments were reduced to ashes.

For days he sat in his semi-carbonized office, at his wits end, because his bonus had also gone up in smoke. And then a wise man appeared from the East. "Jacob," he said, "You need to change tack: you need to chuck out all those financial cluster bombs; all those dubious, even if advanced investments, must go out of the window." So Jacob devoted himself heart and soul to Masai cattle farming and aromatherapy. Then a new problem reared its head: Russian hackers had thought up a new way to plunder internet accounts. Jacob lost billions as a consequence.

Then there appeared a wise woman from the South, who preached cosiness as the core of the banking business. So Jacob invented the most entertaining banks, with fitness rooms and exciting financial games. These banks were hugely popular. Only there was yet another disaster. In 2020 "everything crashed." There was no more confidence. Insurance policies were cancelled, pension contributions were no longer paid, and of course pensions were no longer paid either. Money was withdrawn from accounts, and even the most bereft lost souls no longer looked for shelter in Jacob's banks.

And then… then out of this nothingness, there appeared a simple underpaid regulator, who came along with the Golden Egg. This was "let's play at old-fashioned banking." Old Jacob laughed and said: "That's how my great-grandfather started about 200 years ago." So Jacob took an airplane to the Amazon region and started up a little bank. He had few customers and that suited him very well: in the morning he walked around the fields and when he felt tired he sat under a tree and had a rest. So the days passed, and he lived long and happily. From time to time he called the old futurologist Bakas to talk about this and that.

And so we return to the here-and-now. I expect that the predictions of Bakas, just like this tale, will not be entirely correct as regards our financial future (I always qualify my statements) but they won't be entirely incorrect (I still qualify my statements). What I am saying is just a guess, because as the Belgian Peter Darbo once said: "Economists are people who earn their daily bread by predicting that its going to be hot in August and cold in January. This is of course purely guesswork." □

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