



Koen De Leus
Philippe Gijssels

The NEW
WORLD
ECONOMY
in 5 trends

Investing in times of
SUPERINFLATION,
HYPERINNOVATION
and CLIMATE TRANSITION

Lannoo

To Miriam & Kathleen

*'Without whom life would be
like a broken pencil:
pointless.'*

CONTENTS

Why we are at a tipping point 7

Introduction 15

ONE TREND TO RULE THEM ALL 49

1

INNOVATION & PRODUCTIVITY

The productivity boost 68

Characteristics of the digital revolution 80

New technologies & productivity acceleration 102

The impact of Covid-19 114

The energy transition 122

2

CLIMATE

War and energy 138

Climate risks undermine growth 152

Economic disaster or opportunity? 157

Winners and losers 168

Inflation, interest rates and debt 176

3

MULTIGLOBALISATION

- Why globalisation matters 196
- From globalisation to deglobalisation 203
- Globalisation in traded goods at its peak 208
 - Globalisation is fragile 213
 - The decoupling 239
 - Multiglobalisation 256
 - The price of deglobalisation 263

4

DEBT

- Developed countries' mountain of debt 280
- Emerging countries' mountain of debt 292
 - Lessons learned from the past 304
 - Finding a solution for our debts 314

5

AGEING

- Demographic transition 338
- Impact on growth and productivity 356
- Impact on interest rates and inflation 375
- Impact on the stock market and real estate market 381

Epilogue 405

Abbreviations and explanations 411

Endnotes 413

WHY WE ARE *at a* TIPPING POINT

We are on the cusp of a different world. Five defining waves will engulf the global economy. The first is the climate transition, a new trend. Then there are multiglobalisation and an innovation-driven productivity boom, both of which are shifting trends. The last two waves, ageing and rising debt, are existing trends that will go into overdrive in the coming decades.

To help you surf these waves, and not go under, we combine two different areas of expertise in this book: an in-depth economic analysis of the new world and a translation of it for the investor. Who are we? Koen De Leus, chief economist at BNP Paribas Fortis, provides the macro analysis, which starts with innovation and production from Chapter 3. What you can do with that macro knowledge as an investor is light-heartedly served up by Philippe Gijssels, chief strategist at the same bank. And we occasionally venture into some science fiction by making predictions about what 2050 will look like. That said, the ideas in this book should in no way be seen as investment advice. We are merely providing you with a few foundational concepts. So, be sure to do your own homework or ask a professional for advice before heading to the markets.

Spoiler alert! We will point out this book's most important insight in advance: we are leaving behind 40 years of ever-declining interest rates and inflation. The table on pages 402–403 shows the impact of these five waves – as we see them evolving – on economic growth, inflation and interest rates. Pluses and minuses largely cancel each other out in terms of growth, but with regard to inflation and nominal interest rates, the balance tilts towards higher levels. A world of higher inflation and interest rates awaits us.

Such a fundamentally new regime will have an enormous impact on any investment strategy. Interest rates are like gravity in our world. When they are low or even negative, all asset classes – including those of the heavy type like gold – take flight. When interest rates rise sharply, just about everything gets sucked down. Therefore, the megatrends we cover in this book cannot be separated from interest rate movements. At any given moment, we need to ask ourselves whether the money tap has been opened or closed.

You might also be thinking: what about China, or rising inequality and the associated populism? These are legitimate questions. First, we wanted to avoid the book going beyond its intended scope. Moreover, you will find that both China's role and rising inequality are covered extensively in the various chapters, as interrelated themes. Readers looking for insights on these topics will certainly not be disappointed.

Productivity and innovation is the first wave we will cover. Increasing productivity is the only source of future growth for ageing Western economies. It is therefore worrying that this source has become increasingly dry in recent decades. After the computer revolution, the digital revolution arrived a decade ago. To date, it has not brought a major acceleration in growth. Consumers do enjoy more wellbeing, more tools and apps that make their lives easy and, above all, more pleasant. But it has not had a concrete impact on our prosperity, on gross domestic product (GDP).

Artificial intelligence (AI) is fuelling hopes of accelerated productivity over time. The widespread diffusion of new technology takes time. Although we find it encouraging that a complex digital technology is being opened up to the general public so quickly.

From an investment perspective, you can consider AI as having as big of an impact as stealing fire from the gods, the invention of the wheel, agriculture or, more recently, the industrial revolution. That means there will be massive winners but also massive losers. This increases the danger that the winners will walk away with the lion's share.

ChatGPT is just one of many exponentially fast-evolving technologies coming our way. Others can be found in 3D printing, (green) energy, and biology. The unique thing about these technologies is that when their price drops, they pop up everywhere. And the more widespread, the faster the productivity growth. This is

encouraging, although high productivity growth is not written in the stars. Major dangers include high energy prices following Russia's invasion of Ukraine, and deglobalisation.

Globalisation promoted the spread of ideas and capital investment. But the period of hyper-globalisation is well behind us. Outsourcing the manufacturing process to so-called low-wage countries has reached its limit. Companies want to reduce the complexity of the global supply chain, especially since the Covid-19 pandemic and the war in Ukraine exposed its vulnerabilities. In recent years, the slowdown in global goods trade over the past decade has translated into what is known as *reshoring*, or bringing supply chains closer.

The trade war between the US and China comes on top of this. The US feels that its hegemony is threatened. On technology issues, the US draws the line and works against China as much as possible. Goal: nip China's rise in the bud before it can compete with the US technologically. The US also drags other countries into its struggle. Separately, resentment is also growing in Europe over unfair Chinese trade practices. The symbiosis of past decades – Western technology in exchange for a huge Chinese market – is in jeopardy now that China is also entering the European market with its own products. The massive imports of Chinese electric cars into Europe will sooner or later lead to redundancies in the car industry, which is very important for Europe. That will be the moment when the European powers-that-be will implement countermeasures.

So, industrial policy is making a comeback. Protecting its own industry and rebuilding a less dependent supply chain are the goals of the moment. Dependence on China must be phased out. That promises to be a huge challenge, especially for everything related to climate technologies, from the raw materials needed to the finished wind turbines and solar panels.

Does that mean that the world is doomed to deglobalisation? Today, we mainly observe that an additional link between the US and China is being added to reduce political risk. Diversification of the supply chain may cause other suppliers to be sought in addition to – or instead of – China. Thus, we are moving towards a deepening of globalisation, with more (developing) countries getting involved. Alongside a slowdown in the trade of goods, we also see that services are flourishing, courtesy of accelerating digitalisation. Think, for instance, of digital administrative services being outsourced to countries with much lower labour costs. That is not deglobalisation. We call it multiglobalisation. And that certainly need not

have a pernicious effect on global growth; quite the opposite. The winners here will mainly be the emerging countries, just as in the earlier period of globalisation. With the uncomfortable question of whether not only factory workers' jobs, but also service jobs in the West are now under threat.

From an investment perspective, it is clear that if the world breaks up into multiple blocks, we need to ask ourselves which of these blocks we want to participate in as investors. At the moment, it is not difficult to tell a horror story about China. The country has major economic and demographic problems, not to mention the upheaval in its real estate sector. But as investors, can we afford *not* to sit at the Chinese innovation table? It is true that emerging countries, with China as the prime example, have been doing remarkably worse than their more mature counterparts since 2008. However, this results in a relative undervaluation of biblical proportions.

And what about the hegemony of the US dollar? There has been a lot of talk lately about the erosion of its status as a world reserve currency. In the distant future, that may be a possibility. But right now, our reptilian brain says the greenback is still king. And if it falls from its throne, it won't be the yuan or the euro that will be the escape currency, but rather... gold. Anyone who says gold almost automatically says bitcoin, and anyone who says bitcoin quickly thinks of NFTs (non-fungible tokens). Progressive insight and interactions with students of the younger generation have led us to refine our views on this a bit.

Another threat to that important productivity is high energy prices. These are not entirely the fault of Russia's war in Ukraine. The – necessary – rapid climate transition results in a mismatch between the slow rollout of renewable energy and a too-rapid phase-out of fossil-fuel energy. Combined with geopolitical games, this increases price volatility for energy and commodities. The next few years promise to be chaotic.

The silver lining of the Russian-Ukrainian war cloud, insofar as there is one, is that it accelerated the climate transition by about a decade. We were massively behind on a net zero emissions scenario for 2050. Today, we are just way behind. The climate transition is the only one of the five trends covered that we consider 'new'. As such, the challenge is colossal. All previous energy transitions – from wood to coal to oil – were driven by technological and economic advantages and

took 100 years or more each time. The current one is driven purely by policy. ‘The objective of this transition is not just to bring on new energy sources, but to entirely change the energy foundations of what today is a \$100 trillion global economy – and do so in little more than a quarter century,’ explains resource specialist Daniel Yergin of S&P Global. That will require massive investments – now! The longer we delay investments, the faster our carbon budget – to keep the temperature increase below 1.5 degrees Celsius – is used up. The war jacked up investments sharply. Energy independence is suddenly right at the top of the priority list, with renewables as the saving grace. But most estimates assume another doubling of current investments of \$2.4 trillion (2.5% of GDP) to meet climate goals. In developed countries, this is a matter of political will. Emerging countries depend on money from those developed countries and the private sector.

Besides green investments, emissions will simply have to go down. The most efficient way to achieve that is through the ‘polluter pays’ principle. This can be done by introducing a carbon tax or through an emissions trading system, like the one in Europe. The minimum carbon tax to reach net zero by 2050 will cost a Belgian family of four around 2,200 euros annually. In France, where per capita emissions are lower due to the higher percentage of nuclear power, this is 1,200 euros. The French yellow vest protesters took to the streets in 2018 in protest against an increase in fuel taxes with an annual cost of 20 euros for the poorest families and 160 euros for the richest families. Such an incendiary reaction over relatively modest amounts shows that good communication about the purpose of a carbon tax becomes crucial. In addition, a climate dividend for the least well-off families could keep everyone on board.

The climate challenge is also a tough one for businesses. It is up or down. Companies that do not react quickly enough risk having to write off a lot of assets. But there are also opportunities. The world is moving from a consumption-driven to a more investment-driven economy. The winners are found in manufacturing, construction, service providers and transport companies. Mining companies without the ‘green minerals’, along with oil and gas producers, are the big losers.

For investors, the energy transition is possibly the biggest opportunity in the past 100 years. As the world evolves from *big oil* to *big shovel* – where the raw materials for electricity production have to be hauled up by spade – huge amounts of metals will be needed. Due to years of underinvestment, future

supply and demand can currently only be balanced at substantially higher prices. In any case, the climate transition is better guided by wizards who seek solutions, than by (false) prophets who only see salvation in catapulting our civilisation back to the era before the industrial revolution. It will be a matter of becoming as energy efficient as possible, as soon as possible.

The climate transition has another consequence: the rising debt trend will continue. The mountain of debt has never been higher in peacetime. But it is pointless to look only at those high debts. Ultimately, it is debt portability that creates crises. And that portability has steadily increased over the past 40 years thanks to persistently falling interest rates.

Average interest rates paid have recently started to climb again, and this will not change any time soon. Nominal interest rates in particular will rise due to structurally higher inflation, but real interest rates (adjusted for inflation) may also slowly creep higher. The huge demand for money to finance the transition in the coming years will be a driver of those higher interest rates. The hefty jump in interest rates following the expansionary fiscal policy announced by UK ex-premier Liz Truss illustrates that we are approaching a tipping point. Bond traders did not trust the situation: they sold UK government paper and interest rates promptly rose. The UK was close to a financial crisis. According to Martin Barnes, the former chief economist of the reputable research firm Bank Credit Analyst (BCA), there is a 75% chance that the US, with its high debt and huge budget deficit, will undergo the same reality check as the UK within five years. Shock therapy is needed to restore fiscal discipline. The ‘bond vigilantes’, the guardians of debt sustainability, are awakening from their years of hibernation.

In short, the whole debt story is extremely complex. Maybe we’d better play a game of monopoly, with debt.

The latest trend is an ageing population, which is a headwind pushing against economic growth. Labour force growth, together with productivity growth, is the source of economic growth. When that first engine sputters, developed countries have to rely on accelerating productivity to keep growing. Emerging and developing countries still enjoy the demographic dividend of a rising labour force. In the top six largest economies by 2050, there will be five growth countries. That is, if they don’t screw up. By 2100, the global population will have stabilised and eight

out of ten people will be living in Africa and Asia. Entrepreneurs know where growth can be found.

Anyone talking about ageing is also talking about rising costs for pensions and healthcare. How vulnerable are Western countries to those rising costs, taking into account the current debt situation and tax burden? Not coincidentally, Anglo-Saxon countries are the least financially vulnerable to ageing. This can be explained by their limited public pensions, counterbalanced by a large share of private pensions and savings. Japan, the UK and most Nordic countries show medium vulnerability. High vulnerability is found among northern and southern European countries. Italy and Belgium take the crown. Everyone knows the remedy for rising pension and health costs: work longer and put more people to work.

The baby boomers were, and remain, the pig in the python. They determine which products and services are consumed more or less. Baby boomers invest slightly more conservatively as they get older. But the 'asset meltdown' theory that postulates a collapse of stock markets due to 'dissaving' baby boomers will not materialise. Why not? Because baby boomers are not 'dissaving'.

More sensitive to that theory is real estate. The death of the baby boomer generation will undoubtedly have an effect on it. Their houses will then, on a massive scale, enter the real estate market, which will therefore come under pressure in ten years' time. While demographics have been driving house prices in the past decades, the ageing population is slowly threatening to put a brake on property values.

As we all move towards a, hopefully healthy, centenary life, not only are there huge investment opportunities that go well beyond healthcare, caravans and cruises; this will also reshape our society beyond recognition. In short, the coming decades present us with a host of challenges, but also just as many opportunities. We hope this book will help you seize those opportunities, surf the waves, or at least not get swallowed by the tsunami.

'It often seems that trends create events more than events create trends. The event itself is usually a reflection of everyone getting it as Ed (Seykota) calls it, an aha. By this time, the trend followers usually have well established positions.'

JASON RUSSELL

INTRODUCTION

'It all comes and goes in waves, it always does.'

DEAN LEWIS, WAVES

A new adventure

It is not easy to predict the future, let alone that of our economy and the stock market. And yet we like to make an attempt. On paper. In this chapter I, Philippe, kick off and tell you a bit more about the angle, context and underpinnings of this book.

'The beginning is a very delicate time.' This is the first sentence from the film adaptation of the book *Dune* by Frank Herbert. I am talking about the 1984 film version by David Lynch, not the more recent one we all know. It is the primal version from my childhood, in which Sting still plays a supporting role. I was 14 at the time. A strategic video game followed a few years later, a bit of a distant precursor to *Age of Empires*, linking strategic war engagements to an economic reality. You had to collect resources to buy buildings and weaponry. Around this time, my interest in economic developments and, above all, the stock market also developed. The fact that my father had always been involved in the stock market, and that it was regularly discussed at home, certainly gave me a boost. I have been reading books about history since I could read, or maybe just after comics. Then came literature, fantasy, philosophy and just about anything that had a cover and pages.

And yes, I have been lucky enough to have been able to turn my 'interest' into my profession, first at Generale Bank, then Fortis and now BNP Paribas Fortis. After an internship of just under two years, during which I went through just

about every division, and a relatively short commercial period in the Hageland, where I learned what a customer was but also learned to eat and drink and live, I soon found myself in the markets room. In fact, I never left it. I threw myself into analytical work on just about every possible asset class, from equities to bonds to commodities. Then, about ten years ago, I was also given the responsibility for the strategy of Wealth Management, the private bank and specialist teams.

As such, I also got to know Koen a good six years ago. Or rather, got to know him better. Because we had known each other since his days at that other bank. We started as acquaintances, we became friends, and we started working together more and more often. It culminated in the podcast *Stand van zaken (State of Affairs)*, which we enjoy recording every month with Francesca Vanthielen. This in turn led to many requests to tour business centres and private banking centres as troubadours to talk about the state of the economy and markets. Somehow, our audiences find the interaction between us fun and perhaps even instructive. And that is also the thrust of this book. When Koen suggested it, I did not hesitate for a moment.

In this book, we engage with each other. Koen provides the serious, reasoned economic work. And I do what I always do. I talk about markets, give direction where I can, say what I think I know and what I think I don't know, and tell stories. Because that's just the beauty of markets. Markets are made by people and words: stories and feelings are at least as important as numbers and calculations. In the end, all the rational considerations, as well as people's feelings and dreams, come together in one point, and that is the price of a stock or other asset. This makes that price the point where all disciplines converge: economics and mathematics, but equally or even more importantly psychology, technology, sociology, philosophy, geology and politics.

We thought long and hard about the form of the book. To keep it in line with the podcast and our presentations as much as possible, we opted for a somewhat unusual structure. I take charge of the first chapter. In it, I launch into some basic general ideas about how we look at markets and the economy. It is a look under our bonnet. What ideas and indicators provide a good basis for an analysis that should help us understand the world, or at least understand it a little better than what the consensus believes? In that last nuance already lies the first opportunity for gain.

We then look at trends, a crucial element in markets and the economy. Why are there trends and what are their building blocks? The answers will probably surprise you. In the chapters that follow, Koen explores some of the key megatrends

that will shape the world over the next 20 to 30 years. I engage in dialogue with him, and with you as readers, in the form of boxes that float above Koen's subject matter. Often those interludes contain questions (and sometimes an attempt at answers) about what the investment implications of the trends are. We try to answer not only the questions we grapple with ourselves on a daily basis, but also the questions we get from readers and clients on a daily basis. Is the dollar going to lose its status as a reserve currency? Is it a good time to invest in gold or perhaps bitcoin? And when will growth markets finally start to live up to their lofty expectations?

Inevitably, a lot of books will come into the conversation. We will travel with Prometheus, Keynes and the philosophers from the Salons on Rue Saint Roch in Paris. I am quite a book fanatic. My wife calls it a midlife crisis; I keep it to, as Nicholas A. Basbanes puts it, a gentle madness. So, the whole of this book is indebted to writers, economists, traders and thinkers such as Robert Shiller, Jack Schwager, Michael Covel, Jim O'Shaughnessy, Nicolas Thaleb, Tom Basso, Mark Minervini, Peter Zeihan, George Friedman, Robert Kaplan and, closer to home, Jonathan Holslag, Geert Noels and Peter De Keyzer. Or to anyone whose name appears under the titles of the books that pile up in my house, even on the stairs.

Gamboni

We start with a story.

It is a sunny Friday afternoon just before dusk. Jack, a top trader at a major US investment bank, is driving home in his sports car in good spirits. The markets have been volatile. But Jack has managed to catch the right waves and his gains are substantial. Moreover, just about all his open positions have been closed, so he can look forward to a quiet weekend.

Just then, when everything in life seems to be going too well and not enough sacrifices have been made to the trading gods, disaster strikes. Jack suffers engine trouble. He only barely manages to get his car to a small garage in an grimy small town whose name does not otherwise matter. The verdict is disappointing: the garage will have to order the broken parts and the car will not be ready until the following day at the earliest.

In slightly dampened spirits, Jack books a room in a small hotel. Boredom strikes and he walks down to the bar and drinks a few whiskies. Then he notices a poker game going on in the adjoining room. Jack is a more than decent player, or at least he thinks he is. And what can a few locals do against a top trader who trades many millions every day? *Right?* He wriggles through the bystanders – and the thick cigarette smoke – buys himself a stack of chips and starts playing.

An hour later, Lady Fortuna's tide has gone from ebb to flood and back several times. Jack's stack of chips has remained about the same. But then he gets a hand of three aces and two kings, a full house, which is one of the better hands in poker. With a substantial pot already on the table, he raises the bet by \$5,000. This is too much for most of the other players and they discard their cards with a sigh. But one last player, pretty much halfway between a lumberjack and Bill Gates, raises by another \$20,000. Our trader, meanwhile, is through his chips and cash, but since he has a particularly good hand and assumes his opponent is bluffing, he bets his Rolex after some hesitation.

The cards come to the table, the lumberjack puts down a mishmash of cards that look like not much, a two and a three of diamonds, a five of spades, a ten of clubs and jack of clubs. Jack shows his full house and wants to start raking in the pot.

'Wait a minute,' says the Bill Gates lookalike, while the murmur and a few mock laughs should already have set all the alarm bells ringing at Jack. 'I have a Gamboni here.'

'Gamboni, I've never heard of that,' Jack replied in bewilderment.

'Just look at that paper on the wall,' ripostes the opponent, smiling his teeth, at least what is left of them, exposed.

Jack reads: 'Two diamonds, two clubs and one spade together form a Gamboni, which is the highest possible combination in this establishment.'

Jack looks around angrily, but rules are rules. And right now he is not the man to give up after a setback. He pawns his gold pinkie ring, buys another stack of chips and the game goes on.

Again, a few hours pass, during which he manages to make up a small chunk of his losses. Until he gets his hands on a Gamboni. At that point, two other players, including the lumberjack with Jack's Rolex on his wrist, are in the game. Confidently, he bets everything. The two opponents show a pair of sevens and three ladies respectively. Triumphant, Jack throws his Gamboni on the table. Justice has been done and he prepares to rake in the pot.

This time the laughter in the room is no longer suppressed but exuberant. Jack looks around desperately.

‘Look at the back of the paper,’ says a voice that seems to come from very far away.

Jack turns the paper over and reads: ‘Only one Gamboni is allowed in this establishment per evening.’

Trader Jack leaves with the proverbial tail between his legs. The next day, he picks up his car and leaves town, a Rolex, a pinkie ring and a fair amount of cash poorer, but a life lesson richer: ‘Don’t play games if you don’t know the rules.’

This is an adapted version of a story from the book *Trader Vic, Methods of a Wall Street Master*, written in 1991 by Victor Sperandeo, described by the well-known investment weekly *Barron’s* as the ultimate Wall Street pro. I used this story as an introduction to a number of presentations many years ago. Investing and trading can perhaps be seen somewhat irreverently as a game. But if you want a chance at success, there are rules, and this first chapter is about those. What does the chessboard look like on which our strategy unfolds?

That does not mean it will be a walk in the park. It is sometimes said that there are thousands of ways to beat the market. Unfortunately, they are all very hard to find. But take it from me: markets are not efficient. This means trends emerge that we can use to our advantage. The most important rule here, though, is: let your winners run as long as possible and cut your losers off as soon as possible. Only in this way can you be successful in what management guru Simon Sinek calls an ‘infinite game’: a game that goes on until you quit. In our world, this means you give up or you run out of money to continue ‘playing’. In this book I hope to give you some insights on to avoid this. Fortunately, markets usually follow a certain constantly recurring pattern. This is because the world around us changes, but human nature always remains the same.

The market is going down: where is the news?

A first important observation is that big shifts in prices do not just happen on 'big news'. The 1987 crash is a good example. On Monday 19 October 1987, the US S&P500 lost more than 20% of its value for no apparent reason. Financial reporters had to go to great lengths to get something to the surface.

After many months, the most likely explanation was found in a hedging technique that went by the name of 'portfolio insurance' at the time. In short, it amounted to quasi-automatic, or fully automatic selling of stock futures to protect a portfolio from further losses if its value fell below a certain level. A perfect example of how sales leads to further sales, as we often see during a crash. Each further drop triggered new sales programmes. Because of the structure of the market, or the machinery behind it, market history was made that day. Pushing against one domino caused many others to fall in a market that, it has to be said, was overvalued.

But even when important news hits our screens, such as Russia's invasion of Ukraine or the outbreak of a pandemic, it can take days or even weeks for the market to correctly assess the gravity of the situation. In both cases, the market fell as it became clear to more people what the impact would be. This is at odds with the idea that all news is immediately reflected in prices. In this view, spreading news is a lot like the adaptation curve for a new product in the markets.

