



Dear Investors & Friends,

1918-2018

Paul, Henri and René Lepage, Georges Poulet, Charles, Désiré, François, Georges and Jean Moreau, François Badelon, Fernand Goumare... A century has passed; it happened yesterday. These are just a few of the names of young men of the 204th Infantry Regiment, who crouched in trenches on the Craonne plain facing the notorious *Chemin des Dames*.

In a better world, one that is forever progressing, Julien Lepage, David Poulet, Raphaël Moreau, François Badelon and Bastien Goumare, join the whole Amiral Gestion to wish you (since it is far too late for the Year of the Dog, or even Easter), a happy weekend of may.

The Double Six, or the probability of a Better World

We can manufacture the iPhone X and send rockets to Titan, but we still do not know which method is best to teach our children to read, or how to fight unemployment, or elect a US president, or implement the best possible economic and political policies, or build an efficient judicial system. We clearly do not know because these topics are still being debated, everyone is dissatisfied because there is no clear-cut answer, as opposed to the speed of light, for example (even if you and I understand nothing about it).

Of course, there is a difference between the natural sciences and the rest. In reading, for example, we have not moved beyond the question of the best teaching method: global, semi-global, mixed, or syllabic? As a result, over 10% of 15-year-olds cannot read or understand the meaning of a text. This is a fact today in France, one of the world's richest countries with a long history of education.

It is particularly frustrating when we consider that humanity has resolved problems that are a thousand times more complicated, with solutions that are incomprehensible to 99.999% of people. But there are reasons to be hopeful. Here are some of them:

Leonardo de Vinci, an artistic and scientific genius, could not calculate the probability of a double six. This is astonishing, as men have been playing dice for small fortunes since antiquity. Leonardo, a creative genius, had even discussed the problem of the « interrupted game » with his friend Luca Pacioli, the best mathematician of his time: two players interrupt their game of dice with the score at 5 wins to 3. How should they divide up the pool if 6 wins are required to win the game outright? The solution requires no mathematical skills, apart from basic multiplication and division. Stranger still, it could have been scratched on the earth floor of a Neanderthalian cave with a stick or even a hairy finger, without the least calculation. But our two friends, who had just invented double

book-keeping – a wonderful intellectual exploit – failed to resolve this puzzle. Dozens of Renaissance geniuses, and they were truly brilliant, tried in vain for over 150 years to find the solution, because the calculation of simple probabilities would have allowed them to win vast fortunes. The result: nothing, or all wrong. We had to wait for Pascal and Fermat, in 1654, to establish a base for the calculation of probabilities. Today, everyone over the age of 14 knows that the double six has one chance in 36 of occurring. And they can even prove it with a sketch in the sand of the school playground.

Fascinating, isn't it? Especially when you consider that the famous theorem $A^2 + B^2 = C^2$, which is infinitely more complex to grasp, was used long before Pythagoras, and three millennia before Pascal. It is easy to draw a parallel: tomorrow, in 10 or 150 years, our present social problems may appear amusingly simple to a child of 14. We do not know exactly why our ancestors, well before Pascal, failed to discover the calculation of probabilities. Perhaps it was due to cultural and ideological obstacles. If the Gods decide everything, why try to calculate the future? If the labour code is the result of 100 years of working-class struggle, why simplify it? If the global method has been used in public schools for 50 years, why change it? If winners of the Nobel Prize for Economics say that markets are efficient, why bother to point out a trivial mathematical error in their reasoning?

When man took his future in hand, he invented probabilities

Similarly, we would bet that when ideologies are set aside, we will build a better world. Impossible? Not if the solutions are as simple as a double six. I bet our children will read better. In Switzerland, in Singapore, and in private schools around the world, they use syllabic reading methods. Those which a mother would choose for her child. Those which yield the best results, quite simply. I bet our children will live in systems of direct democracy, with less professional politicians and more responsible citizens. It can work. Switzerland proves it every day, and no-one knows – or has even heard of – a Swiss political leader.

The equity market will remain fairly efficient, but not perfectly so. The labour code will be easy to read, and young entrepreneurs will no longer hesitate to hire. Government employees will continue to do very good work, but their productivity will be significantly higher. Companies will be created in a click, with very few bureaucratic constraints. These are simple ideas that have already been put into practice and shown to work. More ambitiously, humanity will realize that arms production and war, which are very lucrative for gun salesmen and wonderful glory-catchers for presidents, have strictly no benefits for the planet or for humanity. Bombs cannot be eaten and do not let you live better. Sadly, because there is no shortage of them. This is a collective absurdity not unlike the double six. One day the world will wake up. Impossible? I would say there is one chance in 36 before the end of the century. The best school the best form of



government, the best judicial system, the best organisation of our countryside and forests, the best way of avoiding wars and wasting our collective energy on the production of useless bombs. I bet that the solutions are not so very complicated. And if people think there are no more Leonardos, it is because there are so many of them that they pay no attention to geniuses. They are countless, spread around the world, and they exchange ideas at the speed of light. HOPE.

Another possible solution that is almost as simple as the double six: Gardening.

A true capitalist hates gardening, because the productivity of labour is too low. A true communist hates gardening, because he can take his tomatoes to the market and get rich. Both prefer large holdings and big landowners (or even one very big landowner: a syndicate of agricultural workers toiling together to create a radiant future).

However, Japan, Taiwan and South Korea, among the world's poorest countries after World War II, redistributed land among farmers at that time, breaking up large holdings into extremely small ones, and robbing the big landowners. A shameful business; action was required, but good action.

Nevertheless, agricultural output in these countries rose sharply. Farmers got rich and their savings were used to finance industrial development. Obvious, wasn't it? Little available land and lots of under-employed farm labourers. The collective interest was land redistribution and farmers working their small holdings with nail scissors. Clearly, in France and Europe the situation is different. Or is it? We have millions of unemployed people. Our forests and not very productive and prone to fires. The true optimist would sell his forestry investment company before it is confiscated for the collective good, and invest the proceeds in Sextant funds. For more information on your long-term investments, read *How Asia Works* by Joe Studwell, a book that has been recommended by Bill Gates himself.

Your Sextant funds

For the past 18 months, your funds have performed well – but not brilliantly. As our friend Pavel Begun, a top Canadian investor, says: "No Champagne in goods years; no tears in bad ones." In a nutshell, no emotion, but hard work and preparation. In 2002, we spoke French and English (but not very well). We are now fluent in Spanish, Russian, German, Italian, Mandarin, Cantonese, Hindi and Arabic. We can read too! We are not satisfied; our team and our organisation are not satisfied either. But we have made progress.

For the future, there are still the problems of interest rates and currency values. No-one understands fully why interest rates are so low, or why there is not more inflation. We can advance certain hypotheses, but that will not tell us much about the future course of events. Here is my analysis: the developed countries have so much debt that they have been insolvent for several years. How can a country get out of this trap? Kings

imprisoned or executed their bankers, for example. Not very creative, but efficient. There was also hyperinflation, which reduced the value of money to zero. Interest rates can then rise to very high levels, to infinity even, but $0 \times \text{infinity} = 0$.

Imagine we put all the counters to zero without warning. In a few months, savers lose all their savings. Less satisfying than the elimination of the banker, and more dangerous because this time the people would revolt.

The new solution – in the test phase at present, because it is the first time that it has been used – is ZIRP (zero interest-rate policy). Infinities come together to crush the value of government debt. But this time the destruction process is spread over 20 or 30 years. With zero interest rates and minimal inflation, your government bonds will be worth nothing if you hold them long enough. Why didn't they think of it before? If they are worth nothing for you the creditor, neither are they worth anything for the borrower, the government. One could say that zero interest rates are a way of declaring bankruptcy and allowing governments to default on their debt.

For this reason, I am prepared to bet that many interest rates will remain low for several years.

The crypto-currency phenomenon is clearly related to zero interest rates (in turn, the result of central banks purchasing massive amounts of their own government's bonds, creating artificial demand which lifts prices and thus lowers rates*) and insolvent governments. A few weeks ago, I had a chat with a bitcoin enthusiast. I found myself unable to explain why this "artifice" is not worth a cent. In fact, it is a problem of comparison.

All arguments to explain why bitcoin is worthless apply equally to the dollar or the euro. Bitcoin, the euro and the dollar no longer have any economic reality. Nobody understands anything, and they yield nothing or almost nothing. For all three currencies, there are counterfeiters "printing" new units without restraint: central banks for the dollar and the euro, and new crypto-currencies for bitcoin (anyone can create their own crypto-currency, it is thus economically untrue to say that supply of bitcoin is limited).

Are insolvent governments a danger to Sextant funds?

So most governments are tottering on the brink of bankruptcy, and everyone knows it. We might add that no-one seems to care. Certainly not the Republican party, which just lowered US taxes.

Frankly, I do not know what will happen. Nor does Leonardo de Vinci, apparently. I can say that we might be saved by productivity. Stated simply, government debt is your savings. YOU are the lender, and you hope that in a few years the government will return your money when you retire, so that you can finally afford that BMW. If the government goes bankrupt and gives you nothing, but at the same time finds a way of printing BMWs for almost nothing, your dream may come true anyway. Your present savings only serve to finance



your future. If the value of your savings falls, but at the same time the cost of living decreases, you might be all right.

This is wishful thinking, and I do not want to be accused of panglossian optimism. I am just suggesting a possible way out. It is a reality that brings its own risks. The price of a pair of children's pants from a factory in Bangladesh fell 12% from 2013 to 2017, because robots can now do work that was previously done by hand. The risk is that the textile industry in that country will only employ 60,000 people a year, instead of 300,000 previously. Let's hope that Bangladesh can create jobs in other sectors. The advantage, of course, is the money we save, but also the fact that textile factories may return to the developed countries thanks to the robots. They would bring few jobs, but there would be some.

To conclude, we live in a dangerous world, but less dangerous than that our great grandfathers in the trenches, and we are increasingly creative and surprising.

I did not say much about your Sextant funds. I will say that if governments go bankrupt (as they are already doing!), you will be safer in equities. We work hard to improve and widen our capacity for research, which allows us to find quality companies at attractive valuations. We will talk about it in more detail shortly.

Until the next time,

François Badelon

* I admit that I am not sure I understand everything I have written, as I would be unable to go into detail, and especially because I am a dunce in economics. On the other hand, even if it is a little counter-intuitive, when bond prices rise, interest rates fall. Yes, you read that correctly. When prices rise, that means there are many buyers competing for your bond. If you want to borrow money and there are many people willing to lend to you, you will let them bid against each other and thus lower the rate that you must pay. It took me several years to understand this, but it is really very simple :)