BANQUE
ERIC STURDZA

“MANAGING PRIORITIES IN AN INDEBTED WORLD WITH WEAK ECONOMIC GROWTH”

“Hell is truth seen too late” Thomas Hobbes.

Bruno Desgardins ***June 2018***

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse
T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

Nostalgia: during the high-growth years of the post-war boom, it was easy for ***Ivan Illich*** to denounce the consumer society and militate for a convivial society, for ***Georges Friedmann*** to bemoan piecemeal work and for ***Jacques Ellul*** to criticise the "technological society", while the ***Club of Rome*** preached in favour of halting growth. Today, however, everyone understands that without growth, there can be no reduction in poverty and inequalities, and the key question concerns the causes of the slowdown in potential growth – growth which has been almost twice as weak since 2008 than in previous cycles. We will be looking into the explanations put forward by economists ***Robert Gordon, Lawrence Summers, Paul Krugman*** and ***Jeremy Rifkin***, but it should be noted that the welfare protection that for many years was easily financed by growth is indeed now under threat, giving some credence to the oft-heard complaint that "things were better in the old days" - a stance mocked in some style in a recent book by ***Michel Serres***. In the wake of the oil crises, Governments sought to maintain the system by accepting to live on credit, building up budget deficits and debt. Hard choices and cuts do however have to be made.

Reality: although world GDP hit $80,000 billion in 2017, world debt amounts to three times that figure. With $19,400 billion, the US represents almost a quarter of that world GDP, but the country's GDP in 2017 is just 15 points up on 2007. Similarly, the GDP figures for Europe and Japan are 6 points and 5 points higher respectively than those in 2007. The emerging nations (China included) represent 58% of world GDP, but their debt ratios have also deteriorated. As growth is no longer what it used to be, financing welfare protection is becoming all the more problematic as Governments can no longer evade the problem simply by opting for debt. To accept this view is to be realistic, while to deny it is to slip into populism and demagogy, to kick the problem into touch and selfishly transfer the burden onto younger generations who already find themselves in a less favourable situation than their elders.

The necessary adjustment: the expansion cycle continues and world growth, according to the IMF, should come to 3.9% in 2018 and barely less in 2019. Make no mistake, however, vulnerabilities remain: the structural economic reforms that are so often difficult to implement are often postponed, inequalities are worsening visibly everywhere and the price to be paid by our democracies is a populist surge. The welfare expectations of the middle classes and the confused demands and hopes of populists on left and right cannot be financed, but instead of explaining this, there are those who prefer to hide behind dreams and fiction. That is the starting point of this analysis, and also the key stumbling block.

Increased financial needs and reduced financing capacities, those are the two sides to the issue. Expenditure/investment in education, training and research to adapt our economies to a changing world, retirement and health expenditure worsened by ageing of the population, these are today's needs. At the same time, State revenues are being hit by harmful tax competition between them and by the slowdown in growth, those are the constraints For two decades, private debt has made up for stagnating income levels, while public debt has covered budget deficits. Since 2008, the fall in interest rates (and therefore in the cost of debt) has been like a magic potion. This fool's paradise with all its subterfuges does however have limits, and they cannot be ignored.

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

I. Ever-rising financial requirements:

Given the economic situation, social welfare systems appear to be an essential rampart against the rise of populist regimes. However, they can no longer be funded. Always generous, undoubtedly expensive, sometimes spendthrift and not always efficient: such are the characteristics of the model which sets Europe apart and makes it fragile. It is a model that everyone wants to maintain but it must be amended. As Angela Merkel pointed out, "Europe has 7% of the world population but 50% of social welfare spending".

On average in Europe, welfare spending represents close to 29% of GDP, of which 45% for pensions, 36% for healthcare, 8.5% for the family and children, 5% for housing and 4% for unemployment.

Faced with a slowdown in growth which is holding back wealth creation, with competitiveness requirements that demand greater investment in education and vocational training, and with population ageing that is ramping up the costs of healthcare and pensions, governments can only borrow and/or make the difficult choice of a trade-off between generations. They cannot finance everything, and very often no longer have the option of offsetting the declining birth rate through immigration.

We will analyse the increased spending on education and training on the one hand, and on healthcare and pensions on the other.

a. *Employment and spending on education and training*:

In 1900, 20% of the global population knew how to read. By 1950 the figure was 50%, and now, notes ***Norberg***, it is up to four-fifths of the world. And according to the World Economic Forum, two-thirds of children who enter primary school will work in jobs which do not yet exist, showing the importance of education in general and vocational training in particular.

On the face of it, the global employment situation is pleasing. The unemployment rate, according to the ILO (International Labour Organization), was 6.4% in 2000 and is expected to stand at 5.5% at end 2018, even though, in the meantime, the labour force has risen from 2.8 billion to 3.45 billion. However, although the United States, Japan, Germany, the United Kingdom and Switzerland enjoy a situation of near-full employment, wages are scarcely increasing and a closer look reveals that there are many part-time, precarious and low-paid jobs.

Some, such as ***Rifkin***, fear a growing shortage of jobs and the end of salaried employment. This is by no means obvious, and we will stay true to the memory of ***Alfred Sauvy***, who noted that progress destroys fewer jobs than it creates. There are numerous changes underway in employment, but robots do not have the ability to replace human contact, and it is essential to invest in training to adapt to this.

So let us consider training as a necessity and education as an investment.

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

- ***Training as a necessity***:

The challenges facing the labour aspect in recent years, even with economies close to full employment, include the financialisation of economies and competition from the glut of cheap capital, which has resulted in a decline in the ratio of wages to value added, in addition to wage stagnation.

Nowadays, for governments, the strength of an economy is no longer rooted in the power of its multinationals but in the quality of its labour force. ***Robert Reich*** very rightly notes that what matters most for a government is the competitiveness of the labour force and no longer the competitiveness of large corporations. When the statistics reveal that out of 192 million jobseekers in the world, 75 million are aged under 25, one can only lament the shortcomings of education systems. In France, 80% of jobseekers have not gone beyond the school leavers' certificate ("baccalauréat"), and each year in France (and the situation is worse in the United States), 15% of a given age group, or 120,000 children, leave the education system without a diploma. Hence the importance of education. Investment in training brings savings on unemployment benefits and gains in competitiveness.

This is all the more true in that as well as the slowdown in potential growth in OECD countries holding back job creation, there is permanent competition from emerging countries in the exposed sectors, competition from robots in many sectors, and growing competition from artificial intelligence in the production of diagnostics, information search and correlation studies.

- ***Education as an investment and not as a cost***:

If developed countries are to maintain their comparative advantages, they will have to raise their level of education. Note that in France, for example, in 1970 there were five times more secretaries than engineers, and today the figure is similar. Education has a cost. With four million births in the United States each year, and with education costs of $150,000 for each child, the annual education budget stands at $600 billion, or about 3% of GDP.

Without suggesting the decline of Europe or of the United States, competition has increased. Statistics from the World Intellectual Property Organization (WIPO) show that whereas twenty years ago only 7% of patent applications came from Asia, and more specifically Japan-China-South Korea, today the proportion stands at 47%. And another WIPO statistic emphasizes that, in 2015, China filed 359,000 patents while the United States registered only 300,000. For China, therefore, there is clearly a growth reservoir in technology, an increase in spending on education, an increase in the research budget to 2% of GDP, and increased development of automation. China has its Facebook, namely Tencent, its Google, namely Baidu, and its Amazon, namely Alibaba, and all these are among the leading market capitalizations on the planet.

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

b. ***Inflation in spending on pensions and healthcare*:**

- ***Healthcare***:

Healthcare is no longer merely a cost. After education, it is a key factor of competitiveness. The sector has become globalized, because patients are far more mobile. International hospital groups are being formed, while medical equipment is produced by major transnational companies. Due to longer life expectancy and improved medical care coverage, health spending is on the rise everywhere. According to the OECD, it amounted to $5,400 billion in 2016 in Western countries and, on the planetary scale, accounted for 10% of GDP. The country which spends most is the United States: 5% of GDP in 1960, 12.5% in 2000, and 17% of GDP in 2017, or $3,200 billion, i.e. around $10,000 for each American. This increase is puzzling, because the country has far from the longest life expectancy. In Europe, by comparison, total spending is $1,600 billion, i.e. half the per capita spending of the United States at $5,000 per inhabitant, with one notable exception, Switzerland, which spends $7,900 per inhabitant. In Japan, the cost of healthcare is $500 billion. In emerging countries, per capita spending is far lower, for example $730 and $250 per person for China and India respectively, according to estimates by the World Health Organization (WHO).

Faced with the inflation in spending, we can understand the initiative taken by Berkshire, Amazon and JP Morgan. These firms have announced the formation of a joint venture in the United States to offer a more economical healthcare system for their million employees.

A lot can also be expected from progress in artificial intelligence to bolster the efficiency of health systems, improve risk prevention and diagnosis, develop the use of robots available round the clock, and promote the use of 3D prostheses (dental crowns, etc.).

- ***Pension spending***:

Since 1950 it has been necessary to cope with strong growth in the world's population, from 2.5 billion to 3 billion in 1960 and 7.5 billion today. Population growth is now far slower; according to estimates by the UN, the population will reach 9.7 billion in 2050. In other words, the annual growth rate of 2% fifty years ago has now slowed to 1% per year. Only the African continent posts rapid population growth: from 1.2 billion at present, its population will increase to 2.5 billion in 2050, thus doubling in thirty years. As of 2030, for example, Nigeria will become the third most populated country in the world, ahead of the United States.

Outside Africa, the problem is no longer population growth but population ageing. The average life expectancy of humans worldwide has risen considerably, from 50 years in 1960 to 69 years in 2015, and the number of those aged over 60 in the world will increase from 960 million in 2017 to 1,400 million in 2030. Faced with this longer life expectancy, an increase in the retirement age is logical, although workers will have to be made to accept it.

The problem of ageing is acute in Japan, where the population is declining each year. The country is a big user of automation, yet, despite a decline of around 4 million in the labour force aged 15 to 64 between 2012 and 2016,

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

it has managed to increase the number of people employed by 1.8 million. There are two reasons for this unlikely figure: a higher percentage of working women, now 68% for the 15-64 age group, and an increase in the number of those aged 65-69 who are still working, now 45% versus 28% in 2012. Nevertheless, the outlook remains gloomy because in 2017 there were only 940,000 births, the lowest figure since 1899 (at their peak they numbered 2.7 million) and the number of those aged 20-29 has fallen from 18.3 million in 2000 to 12.8 million at present and will be only 10.5 million in 2050! The free day-care centres and education proposed by Prime Minister Abe will not reverse this trend, and although the number of foreign workers has increased, it does not exceed 1.2 million, or less than 1% of the population.

This Japanese example is extremely interesting, but elsewhere mindsets are not yet ready for such measures. Just consider Italy, one of the European countries, alongside Spain and Germany, with the lowest birth rate (1.3 children per woman). It is a country where one-quarter of women have no child and where another quarter have only one, a country where the population is decreasing by more than 150,000 each year, and yet the new coalition in power has apparently agreed to lower the retirement age! In France, in the past 50 years, the number of pensioners has increased by 11 million to reach 14 million, whereas the working population has increased by only six million. The numbers are clear, and it is understandably difficult to balance the system.

One critical case, seldom mentioned, is China. Although the number of children per woman has fallen from 6.4 in 1965 to 1.6 at present, although the one-child policy prevented 300 to 400 million births, and although the population will increase little between 2015 and 2030 (from 1.37 billion to 1.45 billion), the percentage of those aged over 60 will increase from 16% to 25%. The population in the 15-59 age group has fallen since 2014 and will decline by 80 million by 2030 and by 250 million by 2050. It seems likely that President Xi will impose an increase in the retirement age, which is currently 55 for women and 60 for men, but nevertheless, this population ageing will hit economic growth and the savings ratio. China's pension systems are embryonic, since the widespread adoption of social welfare dates from only 2014, so the Chinese will still have significant precautionary savings, which are detrimental to consumption. And the abandonment of the one-child policy has had hardly any effect on the birth rate: 17.2 million births in 2017 following 17.8 million in 2016 and 16.5 million in 2015.

One of the solutions is an increase in the retirement age. The United Kingdom has gone down this path by raising the age to 68 for those born after 1970. It is necessary to encourage work after age 62, but an analysis of the US example teaches us that this is more readily accepted by those with a university degree than by others: while only one-third of school leavers go on to work between age 62 and 74, two-thirds of those with more than five years of university-level education continue to work.

Apart from the retirement age, the debate should be about solidarity between generations:

Young people are often burdened by student loans, have difficulty finding a first job, and face the spectre of a crisis of pension funds penalized by low interest rates, a deteriorating ratio between workers and the non-working population, and weak economic growth. The elderly in OECD countries have benefitted from decades

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

of high growth and years of inflation which boosted their real estate investments. In Europe, they also often benefitted from rises in minimum pensions: in France, for example, the percentage of poor retirees decreased from 28% in 1970 to 10% in 2016, while in the 18-29 age group the poor were now at 18%.

This first part of our analysis has shown that investment in education, training and healthcare are costs, but can also be drivers of economic growth. Digital technology should make major contributions to education and healthcare, two of the most expensive parts of the welfare state, and we should be grateful for this. Other factors make a contribution, such as the quality of infrastructure, the level of research, the flexibility of the job market, and the ease of setting up a business. We will analyse these various points in Part Two.

II. **The growth slowdown and its palliatives**:

According to ***Krugman, "productivity isn't everything, but, in the long run, it is almost everything". A***lthough we are unable to quantify the growth resulting from innovation, it is indisputable. In 2017, global growth, according to the IMF, was 3.4%, following 3.1% in 2016. This trend is continuing in 2018 and the economic growth cycle is therefore the second-longest since the war. Should we be pleased by this? Not really, because compared with previous cycles, growth is weak and above all, is financed by a rise in borrowing at low interest rates.

Let us look at the growth slowdown and the accumulation of debt.

a. ***The slowdown in productivity and growth***:

We will first outline this slowdown, then determine the causes and look at future prospects.

- ***Observation: the benefits of growth periods.***

Growth is key to standard of living. In 1789 in France, 85% of the household budget was spent on food, whereas today the figure is 15%. ***Jacques Marseille*** has shown that per capita income in constant money increased from €1,400 in 1843 to €22,000 in 2008. This means that everyone can earn in one month what their ancestors earned in a year, bearing in mind that, in the meantime, working hours have been halved. Research by ***Fogel*** leads to similar conclusions for the United States: the proportion of average income spent on food fell from 49% in 1875 to 5% in 1995, that spent on clothing from 12% to 2%, and that spent on housing from 13% to 6%. Along the same lines, ***Cette*** and ***Lecat*** have shown that per capita GDP increased by a factor of 10 in the United States between 1896 and 2015, by 8 in France, by 6 in the United Kingdom and even by 23 in Japan. And this can mainly be explained by an increase in hourly labour productivity, multiplied during this period by 13 in the United States, 21 in the Eurozone and 44 in Japan.

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

Between 1948 and 2000, annual per capita GDP growth was 2.3% in the United States, but since then it has dropped to less than 1%. In France, GDP growth was 5.6% per year in the 1960s, 3.7% per year in the 1970s, 2.2% in the 1980s, 1.9% in the 1990s, 1.5% in the 2000s and 0.3% since then!

The trend is the same for productivity: in the United States and the Eurozone, productivity growth has not been linear since the end of the 19th century. Growth in hourly labour productivity was high between the two wars, significant during the post-World War II economic expansion, modest between 1975 (the date of the first oil shock) and 1995, again substantial between 1995 and 2007 due to the dissemination of progress in information technology, and weak since then. Whereas productivity growth in the non-farm market sector was 2.8% per year between 1995 and 2004 in the United States, it fell to 1.3% in the following decade. In Japan, productivity decreased from 3.2% per year in the 1980s to 0.5% as an annual average in the past ten years. There is fierce debate as to whether the effects of digital technology on corporate productivity have already been factored in or whether they lie ahead.

Admittedly, it is possible to dispute these figures and accept that, in a service economy, it is hard to measure growth. The qualitative aspects of food and housing are hardly visible; and free services, for example access to Wikipedia, are not recorded. Philippe ***Aghion*** accordingly considers that GDP growth since 2006 has been underestimated by 50% because we are unable to measure the growth generated by innovations in digital technology. For example, what is the use of comparing an iPhone with a conventional telephone? ***Joel Mokir*** also has an optimistic approach: his view is that the pause in productivity growth is transient, because the spread of robots, the shutdown of bank branches and the automation of checkout counters in stores will raise productivity. His view is that work is no longer measured in hours but is assessed in terms of expertise, and that it is not easy to assess work times outside of fixed working hours. Lastly, his view is that the internet generates savings on intermediaries. Others are more pessimistic, seeing in the use of Facebook and other such media a cause of declining productivity, because so much time is consumed in this way. Ultimately, perhaps wage stagnation is the only indicator to watch.

- ***The causes of the growth slowdown***:

Given the importance of this issue, there have been numerous studies on the subject. We will merely mention the most interesting ones here.

Gordon has a pessimistic approach because, in his opinion, numerous factors contribute to the growth slowdown: the stagnation of education, population ageing, high debt levels, the weak stimulating effect of new technologies, weaker demand for investment in industry, a slowdown in public investment, and a reduction in mobility in the United States because young workers, already indebted, stay and live with their parents. And he considers that the positive effects of the spread of digital technology are in fact behind us.

Arrow's approach shows that the confidence factor is decisive for growth, and prevails over the effects of progress and education. Without confidence, there is less investment and less innovation.

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

Larry Summers explains the growth slowdown by both the concentration of savings and insufficient investment opportunities. He points to the fall in the investment rate and insufficient market outlets.

According to the ***Roosevelt Institute,*** low productivity is the result of weak demand which discourages productivity investment. This amounts to saying that the already lengthy stagnation will persist if there is no stimulation of demand.

J. Sachs, focusing on the US economy, points to the low level of enterprise creation. He estimates there would be 1.8 million additional jobs if the country had the same number of start-ups as in the 1980s.

To these causes we can add others. Some structural such as the diminishing catch-up effect in many emerging countries and the diminishing additional effects of female employment, and others cyclical such as the reduction in the unemployment rate of the less skilled, which would explain the weaker growth in hourly productivity. On the other hand, the arrival of skilled migrants leads to the observation that, after initially accepting any job, their choice of a more skilled job will have a positive effect on hourly productivity. From the economic viewpoint, competition from migrants is insignificant. The best example is Germany, which, after integrating more than 1 million Syrians, still has the lowest unemployment rate of all the major European countries.

- The outlook:

Innovation can be expected to stay strong. Firstly because of a major increase in the number of researchers worldwide. Secondly because the reward for the winners, the leading firms, is huge: in a few years they can attain a quasi-monopolistic position on a global scale. You need only look at the stock market performance of GAFAM, whose capitalization exceeds that of Germany, and, not surprisingly, three of the five largest market capitalizations in the world are platforms.

The countries best positioned, those which spend the most on research, are Israel, with 4.3% of its GDP, South Korea 3.7%, Sweden 3.3%, Germany 2.8%, and the United States 2.7% (2011 figures). In 2008, the economies which spent most on research and development were those which were most resilient, and symmetrically, the southern European countries spent little and experienced a deep crisis. Hence the importance of this public and private effort.

Automation is an opportunity for European and American industry. In this regard, Harvard Professor ***Dani Rodrick*** mentions the risk of premature deindustrialization of the emerging countries. The head of the World Bank considers that around 70% of jobs in India and 77% of industrial jobs in China are threatened in this way. In the textile industry, 27 million jobs in India, Pakistan and Bangladesh are estimated to be exposed, and almost 10 million in the ASEAN countries (Association of Southeast Asian Nations). Just a few years ago, many of these jobs were in China, but now China has comparable labour costs to Portugal. The development of 3D printing has already led to relocations. In 2016, Adidas inaugurated an automated factory in Germany. Automation is going further: in the United States it is starting to be seen as an alternative for the jobs of

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

journalists, translators, accountants, certain legal professionals and checkout clerks in stores. Although these jobs appear threatened, ultimately the customers will decide.

The number of catalysts for the next growth cycle is matched by as many promising stock market themes, such as automation and artificial intelligence, ecological transition, the "silver market", and the middle classes of emerging countries. Additionally, some emerging countries have great productivity catch-up potential, because progress in education has been recent there and many fifty-year-olds did not receive any education.

a. ***Rising debt ratios masked by persistently low interest rates***:

To offset the impacts of the growth slowdown, the easy way out has been to increase debt. Given the very low level of interest rates worldwide, borrowing, by governments wanting to finance infrastructure projects for example, or by companies wanting to buy back their shares, appears to be an opportunity. However, the risk cannot be overlooked, because outstanding debt is large, more than three times global GDP, and a potential loss of confidence leading to a rise in interest rates must be considered a risk.

Since 2008 there has been an increase in public debt in OECD countries, a sharp acceleration in borrowing by companies and the Chinese provinces, and a significant increase in emerging-market debt.

Let us examine this worsening debt situation, then the effect of low interest rates, and finally the outlook:

- ***The worsening debt situation***:

According to estimates, each year between 2001 and 2007, the worsening household debt ratio added 0.6 percentage points of growth in the United States, 0.8 percentage points in the UK and 0.5 percentage points in the Eurozone excluding Germany. A substantial contribution, but one which is not infinitely reproducible.

The 2008 crisis was due to excessive private debt, and the exit from the crisis was made possible by an accumulation of sovereign public debts, amounting to almost $19,000 billion in the United States, more than $10,000 billion in Japan, almost $5,000 billion in China, $2,500 billion in the UK, and scarcely less in Italy, France and Germany. In a nutshell, the global debt burden has increased by 50% since 2008.

<u>United States:</u> An important point worth noting is that the country has always been indebted, because at the time of its constitution debt represented 30% of GDP. However, it is also worth remembering that the federal government, unlike many others, has never defaulted, except by allowing its currency to fall, i.e. by despoiling international investors. In 1945, the public debt amounted to 1.1x GDP, and in 1980 it was 35% of GDP. Then there was the Reagan presidency which, by cutting taxes and increasing defence spending, brought the debt/GDP ratio up to 55%. Since the Bush presidency in 2001, the same upward spiral has continued for the same reasons. In 2001 the public debt was only $3,300 billion, while in 2018 it is $20,000 billion. Since 2008, the federal debt has increased almost twice as fast as GDP growth, to more than 100% of GDP, and the Fed has bought 25% of this debt. So $2 of debt have permitted only $1 of growth. Likewise, there has been increased borrowing by US

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

companies, with $1,700 billion in borrowing for full-year 2017 alone, and more than $500 million since the start of 2018. This borrowing is often used to finance share buybacks. In all, the country's debt amounts to 3.3x GDP.

It is in China that, in absolute value terms, debt has increased most since 2008, by the equivalent of around 20 percentage points of GDP each year, and it now represents 2.8x GDP, of which 1.6x GDP for companies. This has led the rating agencies to downgrade the country's credit rating. Conversely, the central government and households are still moderately indebted, each at around 40/45% of GDP. By itself, the country accounts for 40% of the additional global debt. This helps to explain the overcapacity in many sectors, and the government now has no other choice but to reduce capacity and endeavour to improve the return on borrowed capital. Because it is mistaken to imagine that the foreign exchange reserves, of around $3,100 billion, offset the debt. In 2016 we saw that the growth slowdown led to capital outflows and a decline in the reserves by $1,000 billion.

It is in Japan that, for many years now, debt as a percentage of GDP has been highest: 4 times GDP, because for more than 20 years the average annual budget deficit has exceeded 6%. As a reminder, in 1973 Japan's public debt was only 10% of GDP, in 1985 60%, and now 240%. Fortunately the cost of this debt does not exceed 2% of GDP, because the Bank of Japan (BOJ), which in 2008 held only 12% of the sovereign debt, now owns 40% of it, or the equivalent of 75% of GDP, through a policy of unprecedented scale. But the cost of debt servicing nevertheless consumes one-quarter of the budget, almost as much as welfare spending, which captures one-third. It is easy to assess the crowding-out effect. Faced with such a trend, the pension fund for civil servants, the GPIF, which has €1,250 billion under management, has had to revise its investment policy, halve the bond allocation from 60% to 30%, and, more or less at the top of the cycle, increase its allocation in Japanese and foreign equities, thus adding a currency exposure.

In the Eurozone, public debt was 65% of GDP in 2007, 89% in 2017, and has declined slightly since 2015. The ECB intervened massively, acquiring €920 billion in bonds in 2016 and €720 billion in 2017, while the budget deficit, hence new debt, did not exceed €250 billion. It was therefore able to purchase 25% of the debt stock and sharply reduce the cost of debt. It is startling to note an interest rate of less than 2% for the debt of Portugal, which has a debt ratio of 130% of GDP.

Emerging-market debt has also reached a record level. For some countries such as South Africa and Malaysia, which have only small reserves and a large quantity of dollar-denominated debt, the recent rise of the US currency is a worrying factor. The extreme case is of course Venezuela. On the other hand, for countries such as India and the Philippines which have substantial foreign exchange reserves and limited external debts, the situation is low-risk.

- ***Persistently low interest rates as a substitute for debt***:

To cushion the cost of debt and facilitate its absorption, the balance sheets of the largest central banks have increased fivefold in the past ten years. They exceed $17,000 billion and a return to normal seems complicated. A liquidity injection, or quantitative easing, means providing a fictitious purchasing power without wealth

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

creation in return. In the case of negative interest rates, there is a redistribution of wealth between the government and savers, because negative interest rates are a sort of tax.

There are two paradoxical effects of maintaining these low interest rates: firstly, they exacerbate inequality because they boost the stock market. Secondly, they encourage the substitution of capital for labour, accounting for the fall in the wages/value added ratio, and they allow the survival of companies which are objectively doomed, thereby maintaining overcapacity which discourages investment. Thus, both growth and the "creative destruction" process dear to ***Schumpeter*** are held back! For these two reasons, it could be said that public debt stokes populism.

To ensure the placement of their bonds at low interest rates, governments fiddle with the regulations. For example, Basel III encourages banks to hold government bonds by classifying them as risk-free assets demanding little equity capital.

- ***What outlook***?

It will be remembered that, between 1995 and 2007, several large countries sharply reduced their debt ratios. The best example is Ireland, which reduced its public debt from around 80% of GDP to 25%. And other European countries such as Belgium, Denmark, Sweden and the Netherlands reduced their debt ratio by more than 25 percentage points.

As long as quantitative easing persists and investor confidence has not been eroded, the situation seems manageable. Insofar as central banks pay back to governments, in the form of profits, the interest received which corresponds to the interest rate paid by the government, the purchase of debt by the central bank is equivalent to a cancellation of debt. What about the future? Some, such as Fed member Stanley Fisher, consider it unnecessary to reduce the Fed's balance sheet. Others go further and recommend the cancellation of part of the debt. Conversely, still others are worried to see that interest rates have lost their role as a market indicator, and would like to return to central-bank balance sheets similar to that of 2008. The first option has a major drawback that can be called "euthanasia of the rentier" to use Keynes' expression: low interest rates undermine pension funds, obliging them to diversify their investments by moving into more volatile asset classes. The liquidity glut causes a decline in the return on all asset classes, hence a decline in pensioners' purchasing power. The other two options are more ambiguous: on the one hand, a cancellation would be an incentive for laxness, while on the other hand it is hard to see how governments could substantially reduce their debts, because discretionary spending is very small.

It is an illusion to imagine that central banks have caused cycles to disappear. We are living in gentle lethargy: liquidity injection without inflation, low economic growth but with no impoverishment, and budget deficits which allow investment in research and infrastructure. But we should be alarmed by the fact that these injections do not boost credit and hence growth more strongly. A worsening debt burden is an obstacle to growth, because taxpayers will fear an increase in taxes and will therefore rein in their consumption. So, let's be careful. We are at

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

the top of the cycle, monetary policies are still expansionary in the Eurozone and Japan, and fiscal policies are also expansionary in the United States and Japan. If, in the future, official rates (we are not speaking of long-term rates) were to rise to 3%, 9% nominal GDP growth would be needed to stabilize a country's debt at 3x GDP. This challenge is hard to imagine, and Europe could cushion its cost by deciding to mutualize part of the debt at the federal level.

Conclusion: ***"One golden age was ending while another was rising, edged in black" Paul Morand***.

At the end of ***Voltaire***'s Candide, when Pangloss asks "What must be done?" the Dervish replies "Be quiet". We have chosen not to follow that advice in this note and to highlight 4 kinds of fragility:

- Political fragility: economic crises always occur in three phases: they all begin with a stock market crisis, as in October 1929 and 2007/2008. Then comes the economic crisis phase, in the 1930s and in 2009-2013 in the Eurozone. Finally, political crisis follows with the emergence of populism, as in Germany and Central Europe after 1933, and in the European democracies and the United States today. ***Snyder*** was right to point out recently that ***"we are no wiser than the Europeans who saw democracy yield to fascism"***. How could a high-growth country like Poland fall into the hands of Kaczinski and his entourage? How can there be a surge of populism and the far right in countries such as Denmark and Norway, renowned for their high levels of welfare protection, ranked among the top countries for their quality of life, and which enjoy full employment? How can the democratic way that was all-conquering after the fall of the Berlin Wall, whether in Eastern Europe, Africa or Latin America, be in retreat today? Although ***Norberg*** counted 30 democracies in 1974, 76 in 1990 and 125 in 2015, there are a number of large countries where that democracy is decidedly not so, such as Russia and Turkey.

- Economic fragility: the difficulty of finding a response to today's economic challenges – ten years of weak growth, widening inequalities, stagnating middle-class income, more fragile labour markets with more insecure jobs, plus the migration issue – contributes to this spread of populist parties with the illusions they sell. And the prospects are not good, for the migration challenge has not reached its fullest extent: while the share of Europe in the world population has fallen from 21% in 1950 to 10%, that of Africa has risen from 9 to 16% and will pass the 25% mark in 2050. It is difficult to imagine the flow of migrants drying up!

- Financial fragility: globalisation should not be a social dumping competition. Although tax competition is a reality, the declining revenues that come with it constitute a handicap when it comes to financing welfare protection and feeding populist movements, while the impact on productivity and growth remains negligible: corporate income tax is much lower everywhere than it was in the 1960s, but growth is only half the rate it was then. The UK cut its corporate income tax from 30% to 19% in 2007, but productivity increased only 0.6% per annum until 2015. On the European level, ***Zucman*** assessed

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch

aggressive tax planning in the Netherlands, Luxembourg and Ireland as amounting to $600 billion, which represents the equivalent of almost 6% of European GDP.

- Stock market fragility: the central banks are the planet's leading investment funds today and have an influence on the profitability of the different asset classes, diverting attention from bonds and driving the rise in the stock markets (but for how long?). Liquidity injections penalise pensioners by driving interest rates down, while debt amounts to a loan on the future, impoverishing the younger generations by leaving them with the burden of the interest charges. Behind their apparent neutrality, monetary policies have far-reaching consequences in the medium term.

Banque Eric Sturdza SA • Rue du Rhône 112 • Case Postale 3024 • 1211 Genève 3, Suisse

T +41 22 317 9811 • F +41 22 310 3880 • www.banque-es.ch