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THE AGE OF UNCERTAINTY: PROSPECTS FOR CHALLENGING TIMES

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ABSTRACT

The dawn of the new millennium was as promising as any milestone achievement usually is. Nevertheless, unforeseen uncertainties and difficulties continue challenging businesses across the world, similarly to what was foresighted by Galbraith in the 1970s. From economic crises to humanitarian and health crises; technological disruptions that keep diminishing the need for humans in the labour market; extreme political views that are dividing the internal politics and also leading to international tensions; information chaos with social media replacing traditional media news; the climate changes and the need to really go green, for the sake of our planet; among so many other issues that we are facing today and that necessarily affect businesses and management.

The purpose of this paper is to discuss the issue of business management at times of uncertainty, while presenting some prospects for the new millennium, from the current pandemic condition, to the effects arising from hyper-leveraged economies and businesses, while addressing some of the dynamics that will continue affecting the business world in the next years, with a particular emphasis on the analysis of the effects of worldwide business trends, with a particular emphasis on Morocco.

Accordingly, this paper addresses several issues concerning the links between economic growth, employment, public debt and monetary policies, that keep forging the business environment worldwide, from the United States of America (USA), to the European Union (EU) countries, Japan, and Morocco.

Keywords: *Business environment; Uncertainty, Crises, Global trends, Europe, United States of America (USA), Morocco.*

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1. INTRODUCTION

The dawn of the new millennium was as promising as any milestone achievement usually is. Nevertheless, unforeseen uncertainties and difficulties continue challenging businesses across the world, similarly to what was foresighted by John Kenneth Galbraith in the 1970s (Galbraith, 1977). From economic crises to humanitarian and health crises; technological disruptions that keep diminishing the need for humans in the labour market; extreme political views that are dividing the internal politics and also leading to international tensions; information chaos with social media replacing traditional media news; the climate changes and the

need to really go green, for the sake of our planet; among so many other issues that we are facing today and that necessarily affect businesses and management.
The purpose of this paper is to discuss the issue of business management at times of uncertainty, while presenting some prospects of the new millennium, from the current pandemic condition, to the effects arising from hyper-leveraged economies and businesses, while addressing some of the dynamics that will continue affecting the business world in the next years, with a particular emphasis on the analysis of the effects of worldwide business trends, with a particular emphasis on Morocco.
Accordingly, this paper addresses several issues concerning the links between economic growth, employment, public debt and monetary policies, that keep forging the business environment worldwide, from the United States of America (USA), to the European Union (EU) countries, Japan, and Morocco. The starting point of the examination of such links is the issue of debt and its possible effects on business and economic growth versus the occurrence of crises, followed by the examination of the extreme actions taken by the central banks, with particular emphasis on the EU and the European Central Bank (ECB) monetary policies, concerning, in particular, its extremely low interest rates policy and the result of other quantitative easing measures, while attempting to understand whether such extreme ease of monetary policy resulted in significant economic recovery and growth, particularly regarding the employment level.

2. THE ISSUE OF DEBT AS A LEVERAGE OF SUSTAINABLE BUSINESS AND ECONOMIC DEVELOPMENT

The discussions on whether the debt can effectively contribute to a sustainable economic growth are everlasting, as examined before in Ribeiro and Pereira (2021a). Accordingly, this section follows such earlier discussion, which was more focused on the European Union countries, and extends it to other geographies, with a particular focus on Morocco.
Arguing on the public debt benefits versus disadvantages is always controversial. Such controversy is amplified as many have opposite views on the government's role on economic affairs. Different views lead to diverse arguments about how economic policies should be orientated while pursuing the goal of increasing wealth and economic growth. In this paper, such examination is made within the framework of the European Union (EU) in recent times, from the time of the inception of the recent monetary union.
The new millennium brought promises of a fresh dawn of stability and enduring economic growth for Europe. The European Union member states gathered efforts and managed to successfully generate a new, not only regional, but global currency as well: the Euro. Together with the new currency, a pack of controlling instruments for price stability, public budget and public debt was implemented and the future seemed to be the most auspicious possible for the European people.
Nevertheless, not even in someone darkest dreams could be possible to imagine that, soon after the Eurozone creation, the Euro was at risk of collapsing, following a severe global financial and economic crisis, labelled as the Great Recession. Furthermore, no one could ever imagine that a few more years later a major global public health crisis would follow, tearing apart the feeble recovering efforts from the precedent financial crisis. Not to mention the turmoil resulting from the so-called Brexit process, which led to the astonishing exit of the United Kingdom (UK) from the EU.
Consequently, twisted monetary policies were implemented, which included very aggressive quantitative easing programs and negative interest rates, turning the not-so-old and very rigid Maastricht criteria in a kind of fairy-tale. Indeed, it took only two decades on the new millennium for the European Union to forget the 60% public debt-to-GDP (Gross Domestic Product) criteria, as nowadays the average ratio for the Eurozone bloc is a staggering figure of around 100%.
The 2008's debt crisis, consequence of over-leveraging, was eased by the means of issuing even more debt, but at very cheap prices. Finally, when the conditions to start reducing significantly the extremely high levels of debt seemed to be met, the pandemic came and the same recipe was employed once again: even more debt issuance and more twisted monetary policies to ensure a long period of very cheap money and enduring humongous stocks of debt.
While seeming obvious that the public debt is likely and should generate economic growth, the reality is that such link may not exist. At worst it may even be a negative relationship. Therefore, literature is all but

consistent, as the spectrum of findings is quite high: from a positive relationship between public debt and economic growth, to a negative one, while some authors could not find any significant link (vid. e.g. Pegkas et al., 2020; Reinhart and Rogoff, 2010; Ribeiro et al., 2012; Mhlab and Phiri, 2019; Snieska and Burksaitiene, 2018; Burhanudin et al., 2017; De Vita et al., 2018; Liagat, 2019; Esteve and Tamarit, 2018, Amann and Middledtich, 2017; Intartaglia et al., 2018; Chiu and Lee, 2017, Brida et al., 2017). Overall, while trying to resume the inconsistent findings from this strand of literature, one can argue that the relationship between GDP and public debt is more likely to be positive in the short term, but more possibly negative in the long run. Several factors contribute to such diversity of outcomes, as is the case of the level of public debt-to-GDP for a given country: the higher it is, less likely is supposed to have public debt contributing positively for the economic growth. This is one of the reasons why the Maastricht criteria of the 60% public debt-to-GDP ratio was set.

Such broad suggestions for public debt may be regarded as well for the debt phenomenon in general. In fact, one can similarly make such assumptions for the private debt, as broadly discussed in the literature (vid. e.g. Cafiso, 2019; Levine, 2005; Bernanke and Gertler, 1995; Ribeiro et al., 2012).

Some other factors may also interfere in the strength of the relationship between public debt and GDP growth. For example, in the European Union is common practice for Member States to use the public debt as tool to attract foreign investment. Furthermore, it is also very common for Member States to be forced to issue public debt in order to finance and to have access to European funds. Unsurprisingly, there are many authors researching about the link between public debt and economic growth. As in the cases presented previously, the relationship between these two factors is not always found to be significant (vid. e.g. Pegkas et al., 2020; Srinivasan et al., 2011; Srinivasan and Ibrahim, 2010; Azam et al., 2013; Azam et al., 2014; Azam and Ibrahim, 2014; Muhammad and Gavrila, 2015; Azam and Ather, 2015; Ribeiro et al., 2012).

3. THE ROLE OF DEBT ON GROWTH VERSUS CRISES

Another critical question on debt is whether it may be more strongly correlated with the occurrence of crises than with business and economic growth, as such growth may be unsustainable on the long run.

We will use the case of the European Union and its Economic and Monetary Union (EMU) in order to illustrate some of these questions, together with some data for USA, Japan, as a proxy of Asia, and Morocco. As discussed earlier in Ribeiro and Pereira (2021a), in Europe, within the EMU and in order to be able to join the Eurozone, adopting the Euro as national currency, a country must meet first the Maastricht criteria. The 60% limit of Public Debt as a percentage of GDP is particularly relevant. From Figure 1, shown below, one we can outline several conclusions inherent to the data presented graphically.

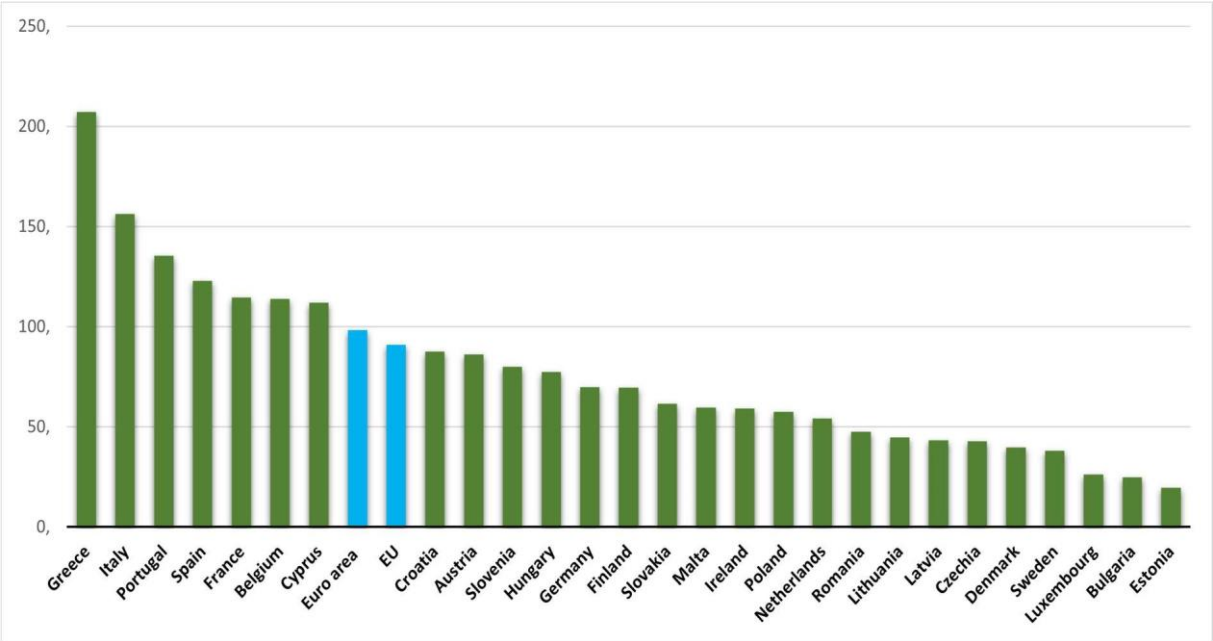

Figure 1. Government Debt to GDP Ratio, 2021 Q2, in Percentage.

(Data source: Eurostat, 2021)

As mentioned in the introduction, many countries which were still recovering from the 2008 financial crisis aftermath, were more recently confronted again with another major challenge to their economies: the covid-19 global pandemic.

The graph in Figure 1 reflects the global cumulative picture of such effects, as the succession of crisis resulted on the countries' public debt figures as a percentage of GDP to soar again, to even more extreme values. Indeed, the countries with the highest values are those that in 2008 also suffered severe problems in their economies, which shows the vulnerability of their economies, even after a decade in which many of them managed to recover slowly. Interestingly, and unsurprisingly, the Eurozone average ratio is relatively close to 100%, indicating that all the wealth produced in the Eurozone during one year would have to be used in order to cover entirely the public debt of the Eurozone group of countries.

Nevertheless, it is worthwhile to mention that most of the countries managed to keep their debt levels at or close to the Eurozone and European Union average, almost 100% for the first and a little bit lower for the later, although the figures for many of these countries are on excess of the 60% threshold. In fact, only around half of the European Union's member states are complying the 60% public debt limit, although some of such do not belong to the Eurozone bloc, as is the case of Denmark and Sweden, countries with some of the lowest relative values of public debt.

On the flip side of the coin, Greece, Italy, Portugal and Spain, countries that suffered previously very much with the severe crisis of 2008, are in even worst financial condition now, as a result of the current pandemic economic limitations, further aggravating their situations and putting some of the previous recovery in question. These four countries continue to present public debt-to-GDP ratios well above 100%, with a particular negative note for Greece, with a value above 200%, while, conversely, Estonia, being the country with the lowest percentage, has only a public debt level of 20%.

It should also be highlighted that, while the average of the Eurozone, as well as the European Union, is well above 60% of the Maastricht criteria, the following countries: Malta, Ireland, Poland, Netherlands, Romania, Lithuania, Latvia, Czechia, Denmark, Sweden, Luxembourg, Bulgaria and Estonia do comply with the criteria even with the public debt criteria, even with the pandemic crisis at a critical stage.

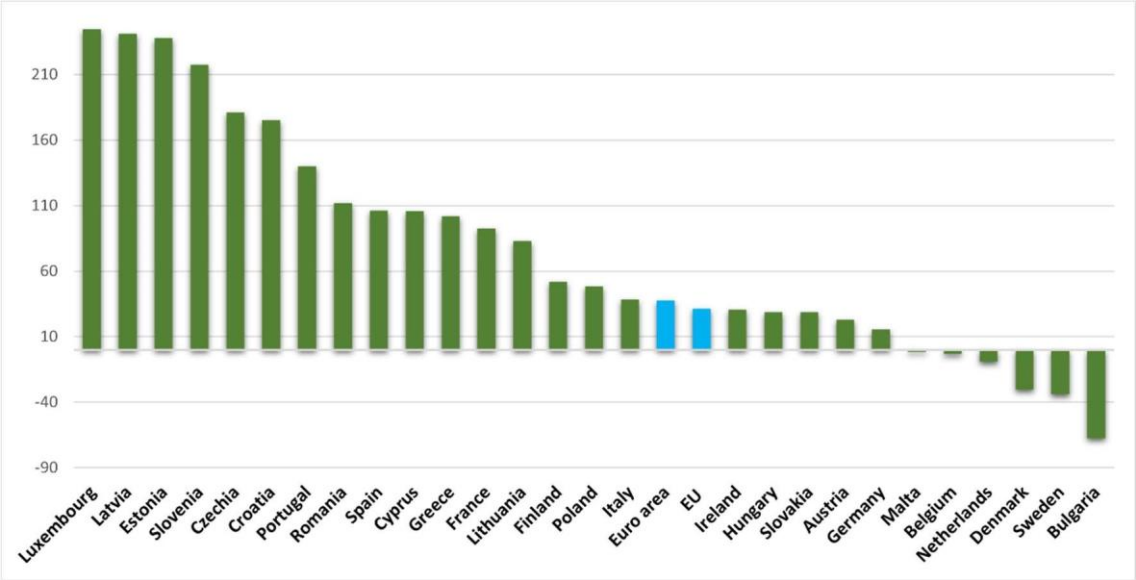

Figure 2. Changes in Public Debt to GDP Ratio, 2021Q2 compared to 2000Q1, in percentage. (Data source: Eurostat, 2021)

In figure 2, shown above, one can compare the values of the Public Debt as a percentage of GDP in the second quarter of 2021 versus the ratio of the first quarter of 2000, and, therefore, understand the evolution on the EU countries across the two first decades of the new millennium. Through their policies, some

European countries managed, in some cases, to reverse the direction of their public debt values as a percentage of GDP.

The overall evolution for the Eurozone area was an average increase of around 40% from 2000 to 2021. However, there are many countries which present figures well above the average, mostly small-medium economies, such as Luxembourg, Latvia, Estonia, or Slovenia. These four countries display increases on the Public Debt-to-GDP ratio of above 200%, being followed by Czechia and Croatia, with increases of 150%, and Portugal, a little under 150%. Being more accurate, the three countries with top increases on the public debt ratio are close to 250%, which could be otherwise considered as absurd values. Nevertheless, the starting points of these countries are extremely low, with single digit, or close, Public Debt-to-GDP ratios, as can be observed below, in Table 1.

On the other hand, it is worth highlighting the public debt ratio decreases of Bulgaria and Sweden, as well as those of Denmark, the Netherlands, Belgium and Malta, although the latter display figures closer to positive.

	% Public Debt-to-GDP				***Difference in PP of GDP, 2011 compared with:***		
	1999	**2008**	**2011**	**2020**	***1999***	***2008***	***2020***
Austria	70,2	68,7	82,4	83,2	12,2	13,7	-0,8
Belgium	117,4	93,2	103,5	112,8	-13,9	10,3	-9,3
Bulgaria	76,2	13,0	15,2	24,7	-61	2,2	-9,5
Croatia	31,8	39,4	64,3	88,9	32,5	24,9	-24,6
Cyprus	54,4	45,5	65,9	115,3	11,5	20,4	-49,4
Czechia	15,2	28,1	39,7	37,7	24,5	11,6	2
Denmark	57,1	33,3	46,1	42,1	-11	12,8	4
Estonia	5,8	4,5	6,2	19,0	0,4	1,7	-12,8
Finland	45,7	32,6	48,3	69,5	2,6	15,7	-21,2
France	59,5	68,8	87,8	115,0	28,3	19	-27,2
Germany	60,4	65,7	79,4	68,7	19	13,7	10,7
Greece	102,6	109,4	175,2	205,7	72,6	65,8	-30,5
Hungary	60,7	71,7	80,3	80,1	19,6	8,6	0,2
Ireland	45,2	42,5	110,5	58,4	65,3	68	52,1
Italy	112,9	106,2	119,7	155,6	6,8	13,5	-35,9
Latvia	12,7	18,5	45,1	43,2	32,4	26,6	1,9
Lithuania	24,4	14,6	37,1	46,6	12,7	22,5	-9,5
Luxembourg	7,6	14,6	18,5	24,8	10,9	3,9	-6,3
Malta	61	61,8	70,0	53,4	9	8,2	16,6
Netherlands	59,5	54,7	61,7	54,3	2,2	7	7,4
Poland	38,7	46,7	54,7	57,4	16	8	-2,7
Portugal	56,4	75,6	114,4	135,2	58	38,8	-20,8
Romania	22,4	12,3	34,0	47,4	11,6	21,7	-13,4
Slovakia	47,7	28,6	43,4	60,1	-4,3	14,8	-16,7
Slovenia	25,2	21,8	46,5	79,8	21,3	24,7	-33,3
Spain	59,6	39,7	69,9	120,0	10,3	30,2	-50,1
Sweden	57,2	37,5	37,2	39,7	-20	-0,3	-2,5
Euro Union	69,2	65,0	81,7	90,1	12,5	16,7	-8,4
Euro area	71,5	69,7	87,6	97,3	16,1	17,9	-9,7
Morocco	61,62	45,44	55,63	-	-5,99	10,19	-
Japan	90,53	138,52	175,80	256,85	85,27	37,28	- 81,05
UK	42,62	54,94	94,69	148,71	52,07	39,75	- 54,02

USA	37,73	64,06	90,05	161,50	52,32	25,99	-71,45

Table 1. General government gross debt by Member State, Maastricht criteria for EU countries (Data sources: Eurostat, 2021; World Bank, 2022; OECD, 2022).

Table 1 shows the public debt figures as a percentage of GDP, as well as a comparison in percentage points of period of the 2011 versus certain key comparing periods, namely the crises periods of 2008 and 2020, representing therefore the beginning of the 2008's financial crisis and the beginning of the pandemic crisis, respectively. It is important to note that the variations on Table 1 are on Percentage Points (PP) of public debt on GDP, while on previous Figure 2, the variations were calculated using simple percentages figures.
In relation to the values obtained in the first section of the table, referring to the percentages of public debt GDP, one can draw a few interesting conclusions. In 1999 it can be concluded that there was a serious effort of a large number of EU countries to have public debt values below the 60% of Maastricht criteria. This effort is evident as many countries display values under or close to 60%, such as Portugal, France, Cyprus, Sweden, Spain and the Netherlands. Nevertheless, there are countries which did not manage to comply with this criterion, namely Belgium, Greece and Italy. Conversely, it is possible to observe some cases of positive exception, as having very low debt values in the beginning of the period of analysis, such as Luxembourg, Latvia and Estonia.
As of deep impact, was the period beginning on 2008, when the effects of the financial crisis began to have clear and devastating effects on the economies of the EU countries. Portugal, Italy and Greece, were some of the countries in worst condition, and therefore less prepared for the negative impacts coming from the financial crisis. With this regard, the cases of Italy and Greece were of particular seriousness, as they would require over one year of full GDP to cover their very much excessive amounts of public debts, i.e. well in excess of 100% of the GDP. Similarly, in Asia, Japan also presented a very high level of Debt. Conversely, Morocco displayed a very comfortable debt ratio of 45,44% only. The USA also presented a manageable debt level of 64,06%
A decade later, debt values have, curiously, risen in general, a phenomenon that could be perceived as somewhat puzzling, since the debt crisis was initially tackled with austerity measures. Nevertheless, such measures, intended to reduce the very high leverage levels, led to a severe economic downturn, resulting in a ten-year period of anaemic economic growth, with very slow recoveries for the most affected countries. Consequently, and as a result of improved financial and economic conditions, such austerity measures were gradually lifted, being replaced by more expansionary economic and monetary policies.
In the most recent period of 2020, we can start perceiving the most serious effects of the Covid-19 crisis, from which inevitably the countries suffered severe consequences and, therefore, returned to more expansionary monetary and financial policies, meaning another stage of debt increase, mostly of public nature.
It is clear that some of the countries most affected by outbreaks of the virus were those that observed their public debt values rising higher, with several hotspots as Cyprus, France, Spain, Portugal, Italy, and the usual laggard, Greece, which returned to extremely high levels of public debt. Also, for 2020, Japan continued with extremely high levels of public debt, which continue to be even worse than for Greece. Finally, both the UK and the USA recorded a serious worsening of their public debt ratios, with 2020 figures that more than double (almost tripled) the ones from 2008. With this regard, we could not get any recent data for Morocco, it was only possible to understand that the ratio improved from 2008 to 2011.
On the second section of the Table 1, one can examine the variation of the public debt in percentage points, providing some useful evidence about the effects that have already been mentioned in the analysis made in terms of percentual variation of public debt on GDP. During the period of analysis of 1999, comparing with 2020, we can find some curious aspects: Bulgaria managed to decrease its debt, as well as Denmark, and Sweden. Some other countries experienced a reduction of public debt levels, but not so much meaningful.
Most countries increased their public debt levels over the last two decades. Most noteworthy, Greece observed a three-digit variation, which is clearly an exaggerated figure.

In terms of analysis of the evolution from the financial crisis period to the current pandemic crisis, i.e. the period of 2008 compared with 2020, Malta recorded a decrease of its public debt weight, but very marginally only, while Germany and Sweden recorded very low increases. Conversely, Greece and Spain are the countries experiencing very high increases, similarly to the USA, UK, and Japan, as highlighted before.
The broad conclusion is that the pandemic has in fact worsened the economic financial conditions worldwide, from some European countries, to Japan and the USA, making the inequalities between them even more evident, even though they are often partner economies, working together to mitigate the negative effects of the crises.
Overall, when comparing with the period of inception of the Euro currency, after an initial stage of public debt increases, the financial crisis of 2008 led to a generic decrease of such levels. Nevertheless, as an aftermath of such dramatic crisis, during the following decade, the public debt levels would return to their increasing path. This led to overall debt levels on 2020, just before the pandemic peaked, to be higher than just before the financial crisis evolved 2008. Finally, as the pandemic worsened the economic and financial conditions in the EU, the public debt ratios would experience another layer of fast increase, leading to record high levels of public debt across most EU countries, UK, USA, and Japan.

4. DEBT, CRISES, AND MONETARY POLICY AS PANACEA

Crises, deflation, lack of business dynamism, excessive leverage. Every sort of convenient evidence was used as an argument to adopt extreme monetary policies, in particular in the USA, EU, and other developed economies, as Japan. As discussed extensively by Ribeiro and Pereira (2021b), another key argument used to justify the use of such extreme ease of the monetary policies was the need for economic growth.
One of the possible variables that could contribute to a reversion from a sluggish economic condition was the increase of debt, which has been incentivized by the ease of access to credit, often priced at negative interest rates. This resulted in a new world of extremely low interest rates, that can easily be very negative, i.e. a new dystopic financial world.
Despite the optimism of the economic policy-makers, the literature finds it hard to prove a clear positive and long-term relationship between economic growth and both public debt (vid. e.g. Pegkas et al., 2020; Reinhart and Rogoff, 2010; Ribeiro et al., 2012; Mhlab and Phiri, 2019; Snieska and Burksaitiene, 2018; Burhanudin et al., 2017; De Vita et al., 2018; Liagat, 2019; Esteve and Tamarit, 2018, Amann and Middledtich, 2017; Intartaglia et al., 2018; Chiu and Lee, 2017, Brida et al., 2017), and private debt (vid. e.g. Cafiso, 2019; Levine, 2005; Bernanke and Gertler, 1995; Ribeiro et al., 2012).
Some policy-makers also argued that the ease of financial and monetary policies would contribute to increase the volume of foreign investment, therefore supporting more economic growth. Nevertheless, once again, the literature is not consensual while trying to prove such positive relationship (vid. e.g. Pegkas et al., 2020; Srinivasan et al., 2011; Srinivasan and Ibrahim, 2010; Azam et al., 2013; Azam et al., 2014; Azam and Ibrahim, 2014; Muhammad and Gavrila, 2015; Azam and Ather, 2015; Ribeiro et al., 2012).
Regardless such academic doubts and other possible question marks, the fact is that one of the novelties that came from the 2008's financial crisis seems to be a paradigm shift in relation to interest rates.
Interest rates are also important for the countries' bargaining power in relation to public debt, for example. Due to the ultra-expansionary monetary policies implemented by the European Central Bank, generally referred to as quantitative easing, interest rates were eventually crushed at near zero and even negative values in several European Union countries (ECB, 2021).
In Figure 3, shown below, it is possible to observe the evolution of interest rates, measured according to the Maastricht Criteria for the Euro area countries, from the beginning of the year 2000. There was already a tendency of interest rates reduction before the 2008 financial crisis. However, this Great Recession environment raised the panic among creditors and investors, resulting in even more severe negative effects on the most fragile economies, some of which were highly leveraged. Therefore, with the financial crisis, the weaker economies suffered interest rates increases, while the economies regarded as safer managed to keep them stable, and even benefited from rates reductions, as in the case of the so-called safe-haven economies, as Germany, or The Netherlands. By opposition, countries as Greece were severely punished with extremely high interest rates.

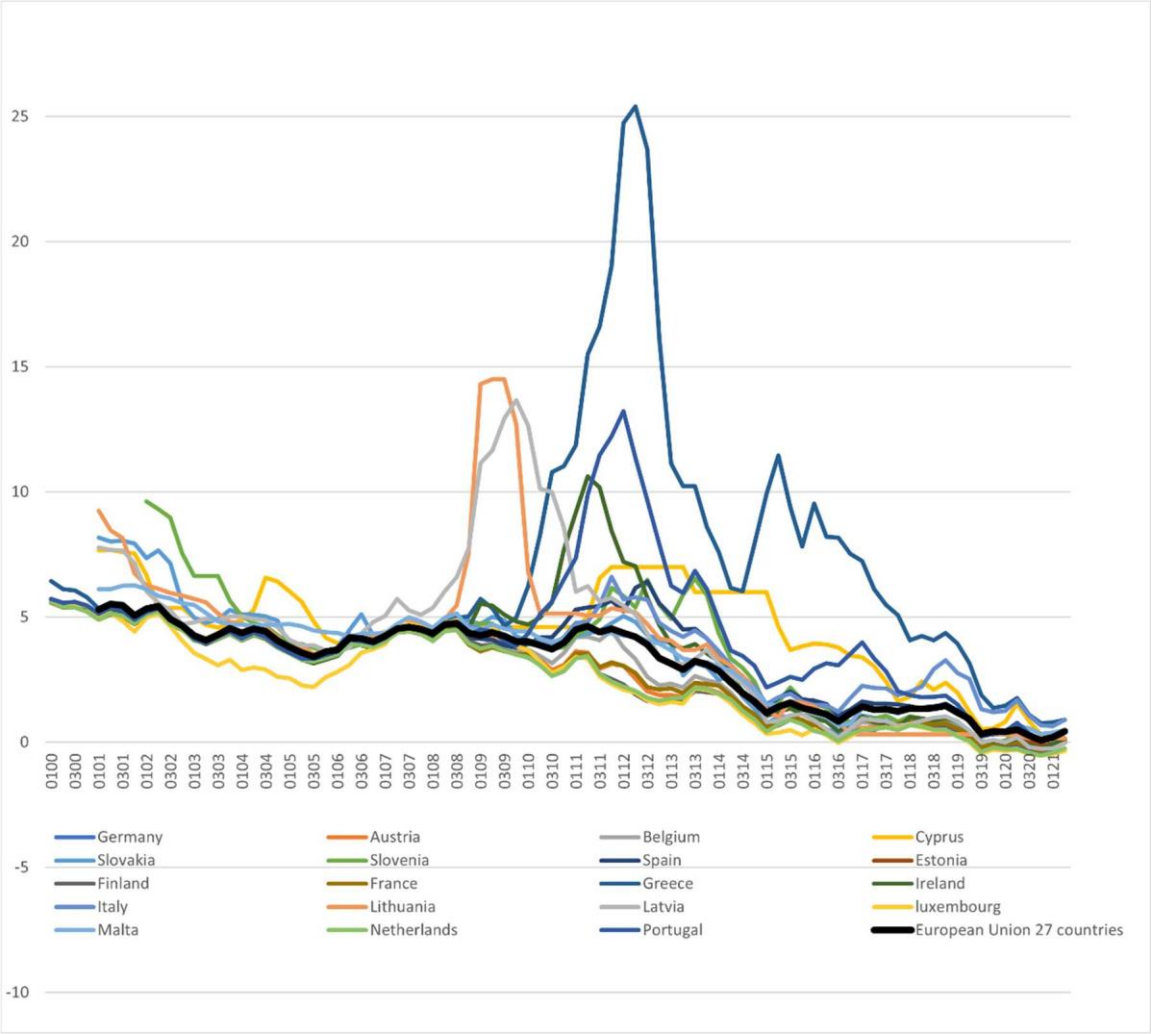

Figure 3. Interest rates according to the Maastricht Criteria for the Eurozone countries (Data source: ECB, 2021)

A more detailed analysis allows to observe that from 2000 to 2008, i.e. before the financial crisis started, the Greek's interest rates were around 5%. However, with the effects of the financial crisis, the rates rose steeply for around four years, to reach a figure close to 30%. Only with the support of special measures from the EU and the ECB was possible to revert such chaotic and unsustainable situation which naturally led to an equally sharp drop by the end of 2012. Nevertheless, still very high values of interest rates persisted for Greece in the following years, between 5% and 15% until 2016. Finally, from here there was a continuous drop on rates to end close to 0% by 2021.

Portugal also similarly started the new century with interest rates around 5%, but it would suffer similar effects from the crisis of 2008, recording record high rates, even if not as high as those of Greece, but still situated close to 10% to 15%. After the end of 2011, rates returned to more moderate values, even if fluctuating and with some peaks for a few years, until 2017, when rates begin to finally fall in a steady way, until reaching values close to 0%.

Lithuania and Latvia followed a path over the years relative to interest rate values very similar to Portugal and Greece, with the particularity that their highest peaks being reached in 2009, soon after the start of the financial crisis, contrasting with the highest peaks of Portugal and Greece, which would only take place later, between 2010 and 2012. Latvia and Lithuania were also lowering their interest rates to close to 0% by 2021.

Interestingly, Germany, Luxembourg and the Netherlands were the countries that were keeping their interest rates the more constant and there were no major fluctuations and peaks, even during periods of crises. These

countries not only approached their rates to 0%, but even reached and maintained negative rates during several periods of the past decade.
Overall, the path of the interest rates for every Eurozone country resulted in the same fate: interest rates around zero, with many countries benefiting from negative rates.
Looking globally to the interest rates of the 27 countries of the European Union, they were more or less constant reaching slightly the highest values between 2010 and 2013, the result of the peak of the financial crisis that led to extreme high rates of both Greece and Portugal, whose panic contributed to such generic increase. These countries even had to be helped with special assisting programmes financial. Italy, Spain and Ireland would also benefit from special support programs. It is also worthwhile to note that rates have gradually been lowering to close to 0%, even being negative in the last 2/3 years, despite that in the meantime a new economic crisis has begun, generated by the pandemic of the Covid-19, which has forced to take even further the ultra-expansionary monetary policy of the European.
The trends discussed above were also followed by the USA, UK and Morocco, as can be observed in Figure 4, shown below. The only exception in Japan, because it is using very low interest rates for decades.

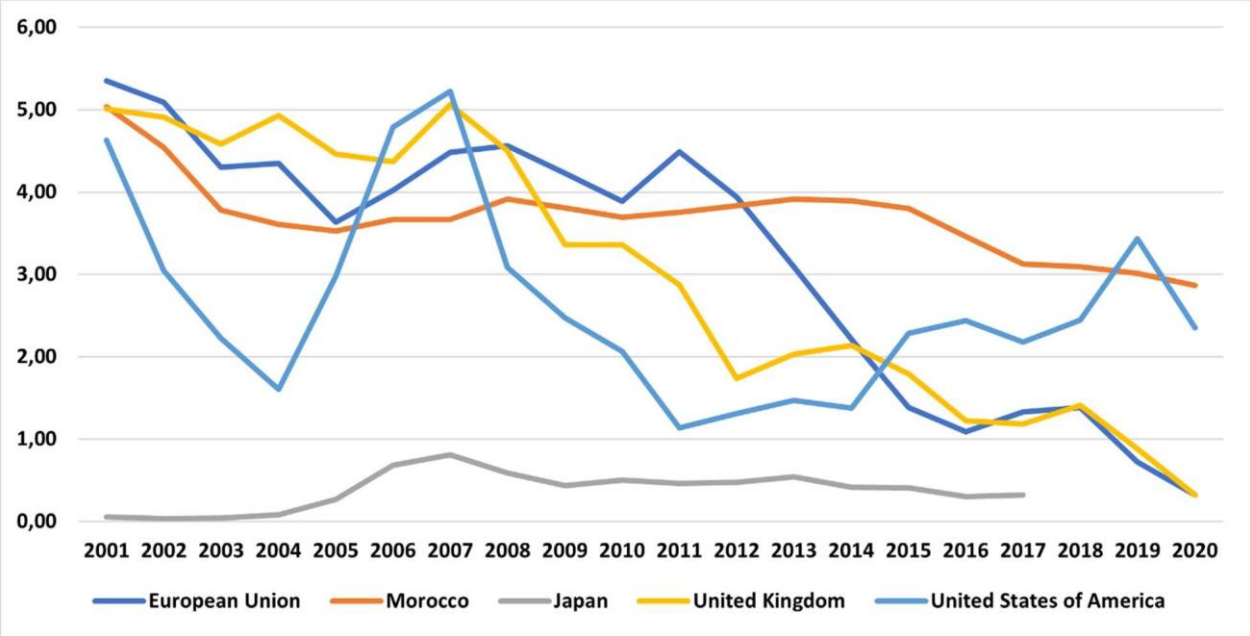

Figure 4. Deposit interest rates (Japan, Morocco), Real interest rate (USA), and Convergence rates (EU, UK) (Sources: World Bank, 2022; Eurostat, 2021)

About Figure 4, it is important to note that interest rate proxies were used as we could not find the same standard figures for every country and blocs used. For Japan and Morocco was used the deposit interest rate, which is the rate paid by commercial or similar banks for demand, time, or savings deposits (World Bank, 2022). Real interest rate was employed for the USA, being the lending interest rate adjusted for inflation as measured by the GDP deflator (World Bank, 2022). Finally, for the UK and EU, the same standard convergence rate was used as in previous Figure 3 (Eurostat, 2021).

5. THE EFFECTS OF MONETARY EASING ON GROWTH AND EMPLOYMENT

This section of the paper follows Ribeiro and Pereira (2021b), while discussing the results of the quantitative easing policies adopted in most developed economies on business dynamics and employment.
Theoretically, it is important to note that besides the literature on interest rates (vid. e.g. Christiano et al., 1999; Werner, 1996, 2005), there are other strands of research which examined the possible impacts of financial crises on the economic growth (Afonso et al., 2010; Jannsen et al., 2019; Ribeiro et al., 2012; Reinhart and Rogoff, 2010), and the inflation impacts as well (e.g. Reinhart and Rogoff, 2010; Afonso et al., 2010).

Nevertheless, the main question remains: to understand whether such extreme ease of monetary policy resulted in significant economic recovery and growth. In order to attempt to side away such doubt, very long-term time series of GDP growth for EU, Eurozone, USA, Japan, and Morocco, are shown below, in Figure 5.

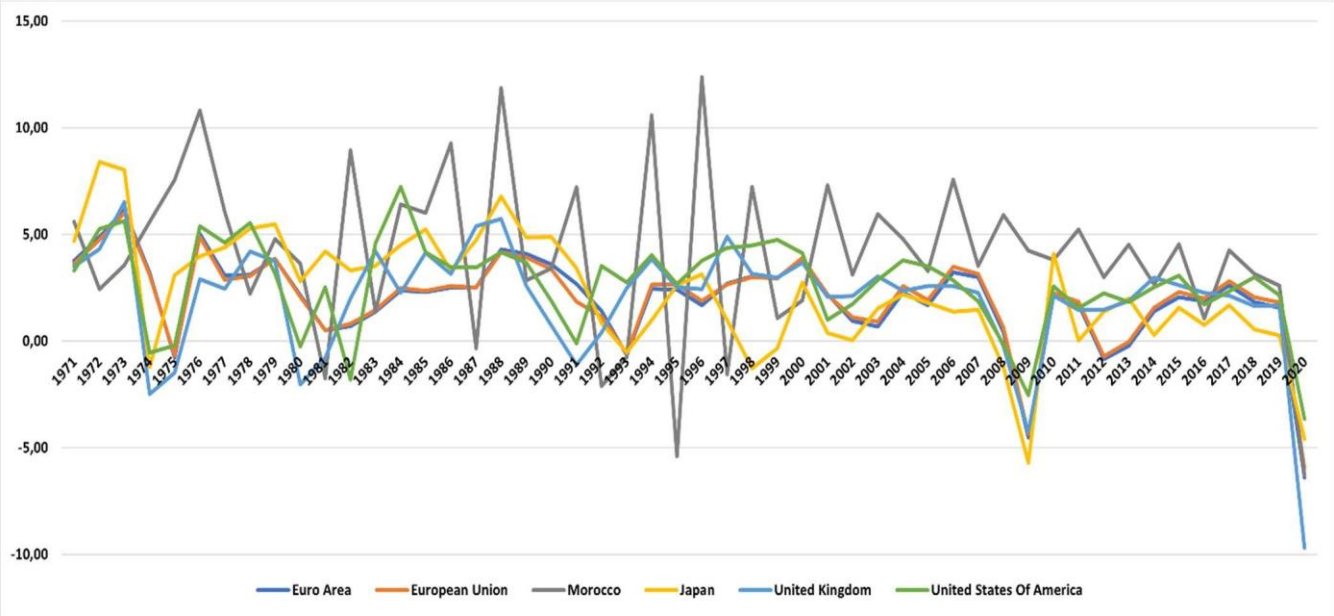

Figure 5. Fifty years of annual percentage growth rate of GDP, based on constant 2015 prices. (Source: World Bank, 2022)

Due to the global health crisis, countries worldwide felt the effects of confinement measures, such as lockdowns, and more protectionist policies, causing the economies to stagnate and even forcing to temporarily shut them down. Consequently, another financial crisis has rose at a global level. This one stands out for appearing at a time of economic growth and some global stabilization, which for non-economic reasons was difficult to predict and somehow impossible to take preventive measures to cause less impact, due to the uncertain nature of the Covid-19 virus.

Figure 6 illustrates very well the dramatic effect of the pandemic crisis on the economies. There is nothing similar in 50 years of economic growth records. Even the crash resulting from the 2008 financial crisis seems somewhat limited, when compared with the collapse recorded when the pandemic started.

More broadly, one can clearly identify the major two crises of the last 3 decades: the 2008 crisis, which started in the United States, but quickly spread across the globe, therefore dragging the rest of the world, from Japan to Europe, which were severely affected. Nevertheless, countries resumed their growth cycles again, until when in 2020 a more serious crisis than the 2008 one arose, the Covid-19 crisis.

The graph reflects the effects of confinement, high death rates and some lack of global preparation for this type of event, which led to uncontrolled focus of infections, a condition worsened by the absence of a vaccine, resulting in a very difficult year of 2020, for the European Union countries, UK, USA, Japan and Morocco, with significant negative GDP values, down to almost two-digit figures. It is also noteworthy that Morocco could avert a significant downturn on the financial crisis, but could not repeat such performance during the current pandemic crisis.

Fortunately, the dissemination of the Covid-19 vaccines, together with new preventive measures, and with high vaccine administration rates, allowed countries to gradually resume their normal economic activity. Somewhat surprisingly, the initial abrupt crashes would be reversed as well with a similarly strong, but opposite, effect, resulting in some remarkable economic recoveries soon after.

While the extreme low interest rates contributed to a rapid recovery of the economic growth, the question of understanding whether they contributed as well to recover the jobs lost with the pandemic remains. Indeed, severe crises are commonly associated to slow recovery paces of employment.

The Figure 6, shown below, summarises thirty years of employment levels for the European Union, as well as for the Eurozone, UK, USA, Japan, and Morocco.

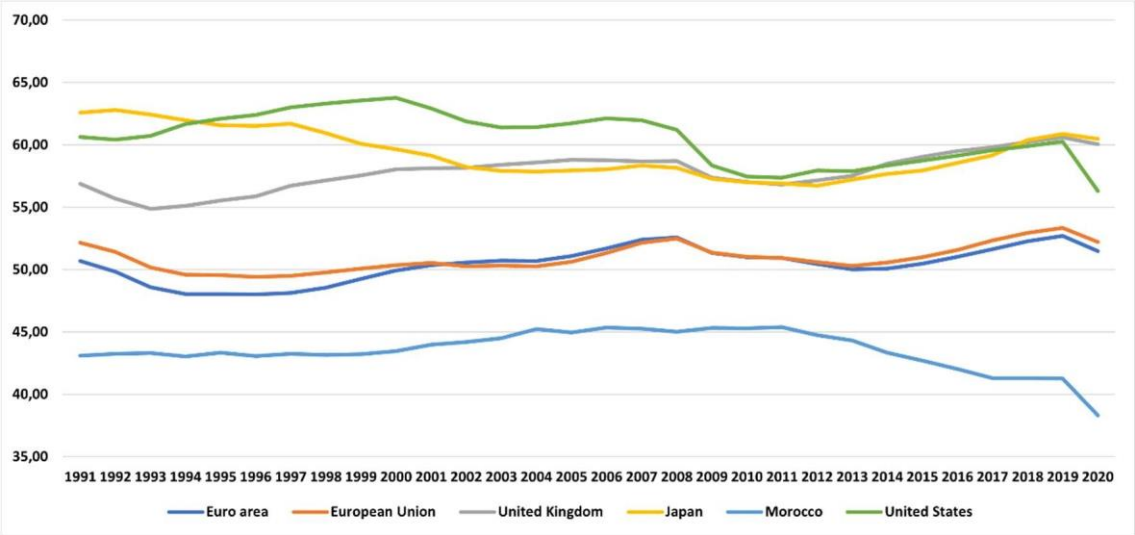

Figure 6. Percentage of employment to working-age population ratio.
(Source: World Bank, 2022)

The data shown in Figure 6 considers employment as the persons of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period, i.e. who worked in a job for at least one hour, or not at work due to temporary absence from a job, or to working-time arrangements (World Bank, 2022). According to the World Bank definition, people with 15 years and older are generally considered the working-age population.

The time series display lines which move very much similarly, particularly at times of crisis. Indeed, it can be easily concluded that crises and employment have a strong dependence on each other. On the one hand, a reduction of employment may trigger an economic crisis. On the other, crises can affect very negatively the employment rate, as is the case of the current pandemic crisis.

This was also verified during the 2008 crisis, where the employment values reached some very negative values as well. The recovery from the financial crisis was slow, but steady. Despite some difficulties to fully recover the employment lost, the fact that the 2008 crisis was essentially a financial crisis, being, in some way, predictable and expected, helped to recover in a relatively easy way.

However, the 2020 pandemic crisis is of a different nature: an unpredictable crisis, which led to significant abrupt falls of employment across the globe. For the reasons previously mentioned, and by joint efforts which started in 2021, in order to recover from the effects of confinement and lockdowns, mortality rates and high infections, some significant recovery of employment was achieved.

The overall analysis, over the 30 years period depicted, is that employment levels are being reduced, with notorious downturns during economic crises. The scenario in the EU and in the UK is somewhat stable, while Japan could rebound slightly from a decreasing trend in the very long run. The USA continues to lose people employed and faced a steep reduction in 2020. Particularly worrisome is the case of Morocco, which exhibits the lowest level of population employed and a persistent and significant trend of reduction.

6. CONCLUSIONS

The turn of the new millennium seemed to be promising, but the reality is that recent times are being plagued by severe crises Uncertainty continues challenging businesses across the world, from economic crises to humanitarian and health crises; technological disruptions that keep diminishing the need for humans in the labour market; extreme political views that are dividing the internal politics and also leading to international tensions; information chaos with social media replacing traditional media news; the climate changes and the

need to really go green, among so many other issues that we are facing today and that necessarily affect businesses and management.

The occurrence of such severe crises, which led inclusively to long deflationary environments in the past decade, justified the use of ultra-expansionary monetary policies, including quantitative easing measures, resulting in massive financial assets purchases and negative interest rates. However, such monetary easing has also resulted in some inconvenient situations, some of which may include the reversion from a deflationary to a strong and dangerous inflationary environment, as seems to be the case currently.

Of particular importance, the current pandemic crisis came in an unpredictable way and led to significant disruptions and major losses of employment across the globe. The overall evidence suggests that employment levels are being reduced in recent decades, with notorious downturns during economic crises. Morocco looks particularly fragile in terms of employment, even while registering interesting levels of GDP growth in the last decades. Nevertheless, the already weak labour activity of Morocco is suffering a major downturn with the current pandemic. If such condition continues and if the decreasing labour trend continues in the coming years, one can expect negative consequences on business activity and economic growth. Such low level of population employed, together with a persistent and significant negative trend on overall employment, will likely result in an increase of inequality and a decrease of living conditions, which can inclusively lead to social unrest, and other undesirable effects.

On the other hand, the level of public debt appears to do not be very high in Morocco. The public debt to GDP ratio was 61,62% in 1999 and decreased even during the early stage of the financial crisis: 45,44% in 2008. The latest figure one could obtain was of 55,63%, which would be, for example, well below the 60% Maastricht threshold to join the Euro currency. If the current public debt ratio remains low, it is expectable that public expenditure and debt may raise in order to tackle the economic downturn and the weak employment market. Concurrently, the easing of the monetary policy would be recommended as well. Nevertheless, the inflation scenario continues to gain ground worldwide and Morocco is not expected to be an exception. Therefore, the budgetary policy, which seems the most powerful tool available, must be used with some care, as, while being expansionary, it may lead to even further raises in prices.

It is a crossroad that we are living in, currently. Not only Morocco, but the majority of the economies worldwide. The major hope is that the inflationary scenario may be effectively temporary, as many central bankers continue to believe. If so, Morocco will be able to use more effectively monetary and budgetary policies in order to stimulate businesses and to improve its labour market.

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