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World War 1

- some economic aspects and considerations

Ву

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Abstract: Up to the outbreak of the First World War, expectations on economic

matters were in general rather positive. However, the outbreak of the war along

with its consequences dramatically changed this scenario for decades to come. Far

from being an economic environment of economic growth, the future became one

of troublesome economic as well as political turbulence. Early on, in 1919, John

Maynard Keynes had in his book The Economic Consequences of the Peace given

a prognosis of the troublesome times which lay ahead of Europe as presented in the

present paper. Furthermore, this paper addresses some empirical evidence

concerning various macroeconomic variables in order to depict some

important economic consequences of the war.

Keywords: World War 1, John Maynard Keynes, Versailles Treaty,

economic crisis & the European economy.

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Introduction

Up to the outbreak of the First World War, expectations on economic matters were in general rather positive. Now at last, the vision of Adam Smith – a macroeconomic outcome of harmony and optimality with economic growth and a significant high level of wealth for the first time in modern history – seemed to be within reach for many of the European countries and the USA. Trade between countries looked like a game from which all countries could benefit ¹. However, the outbreak of the war along with its consequences dramatically changed this scenario for decades to come, as we know from history. Far from being an economic environment of economic growth, the future became one of troublesome economic as well as political turbulence.

In his book *The Economic Consequences of the Peace* from 1919, the English economist John Maynard Keynes made an early prognosis on what could and should be expected to be the economic reality for the years to come not only for Germany but also for the victorious countries of the war. As history has shown, Keynes, unfortunately, was rather spot on with his prognosis. Somehow, the Versailles Treaty signalled the coming of the Great Depression of the 1930s. Likewise, from now on, Great Britain was no longer the world's most powerful Empire economically as well as politically. Her position was overtaken by the USA, which to a large degree had financed the expenditures of the war effort of both Great Britain and France.

The aim of this paper is primarily to give a thorough examination of the book *The Economic Consequences of the Peace*, which Keynes published in 1919. In this book, Keynes focused not only on economic consequences of the war he also took political considerations into account. Secondly, it is to present some empirical evidence concerning various macroeconomic variables in order to depict some important economic consequences of the war.

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¹ As pointed out by (Broadberry & Harrison, 2009: 3): "Globalisation has been under way for centuries. The modern wave of globalisation that dates from the early nineteenth century gave a significant boost to world trade, world capital flows, and worldwide migration, with great powers competing for colonial empires on a global scale. The Great War of 1914 to 1918 then interrupted and, for a time, set into reverse the process of globalisation".

Keynes-1919: troublesome times ahead?

In the history of economic thought, the focus is primarily on *The General Theory of Employment, Interest and Money* from 1936 when the writings of John Maynard Keynes are discussed and evaluated. However, the writings of Keynes consist of more than just one interesting book. During all of his life, he made several important contributions. The main characteristic of many of these was that they were not written only with a narrow focus on pure economic principles. In general, Keynes's perspective was a much broader one. In his writing, he acted not only as an economist but also to a large degree rather like a social scientist. He understood very well indeed that society develops and changes as time goes by and the process of such a transformation could be rather complex to analyse. Therefore, you have to have an eye on economic, political, cultural and other relevant aspects when you study such processes.

The scene is set

In 1919, Keynes wrote the book *The Economic Consequences of the Peace* after the Peace Treaty of Versailles had been agreed upon. As stated by (Skidelsky, 1992), this book is seen by many as one of the best contributions that Keynes ever made in so far as he focused not only on an economic understanding of the Treaty, he also presented a political discussion of the dangers of a possible future European conflict².

² Aside from this, the book is also very famous because Keynes acted in the book as a 'biographer'. During his time at Versailles, Keynes was able to get a first-hand impression of the political leaders (the Council of four). Perhaps especially his portrait of the French Premier Minister Georges Clemenceau made Keynes famous as a 'biographer' as he wrote: "Clemenceau was by far the most eminent member of the Council of Four, and he had taken the measure of his colleagues. He alone both had an idea and had considered it in all its consequences. His age, his character, his wit, and his appearance joined to give him objectivity and a defined outline in an environment of confusion ... His walk, his hand, and his voice were not lacking in vigour, but he bore nevertheless, especially after the attempt upon him, the aspect of a very old man conserving his strength for important occasions. He spoke seldom, leaving the initial statement of the French case to his ministers or officials; he closed his eyes often and sat back in his chair with an impassive face of parchment, his grey-gloved hands clasped in front of him ... [he was] dry in soul and empty of hope, very old and tired ... He had one illusion – France; and one disillusion – mankind, including Frenchmen, and his colleagues not least. His principles for the peace can be expressed simply. In the first place, he was a foremost believer in the view of German psychology that the German understands and can understand nothing but intimidation, that he is without generosity or remorse in negotiation, that there is no advantage he will not take of you, and no extent to which he will not demean himself for profit, that he is without honour, pride, or mercy. Therefore you must never negotiate with a German or conciliate him; you must dictate to him. On no other terms will he respect you, or will you prevent him from cheating you ... therefore, it was the policy of France to set the clock back and to undo what, since 1870, the progress of Germany had accomplished ... This is the policy of an old man, whose most vivid impressions and most lively imagination are of the past and not of the future. He sees the issue in terms of France and Germany, not of humanity and of European civilization struggling forwards to a new order"; (Keynes, 1919: 18, 19, 20, 22 & 23). Later on, perhaps with the benefit of hindsight, Keynes gave the following short presentation of the three most important political leaders of the Council of Four: "Clemenceau, aesthetically the noblest; the President, morally the most admirable; Lloyd George, intellectually the subtlest. Out of their disparities and weaknesses the Treaty was born, child of the least worthy attributes of each of its parents, without nobility, without morality, without intellect"; (Keynes, 1933: 26).

In the spring of 1919, Keynes participated in the peace negotiations as a representative of the British Treasury. As it became clear to Keynes that the negotiations would end with a Peace Treaty that could only be explained by a thirst for revenge especially towards Germany, he finally resigned from the British delegation in June 1919. As explained by (Skidelsky, 1992), this was not a sudden reaction from Keynes's side. He had for a long time been very unhappy with the negotiations. Already as soon as by the end of October 1918, he had argued in a memorandum that it should be of essence that the winning side of the war should only put reparations on especially Germany of a size that she was able to pay. In this paper, Keynes estimated that: "very roughly ... £1.000 million could be obtained without crushing Germany"; (CW XVI: 342). The capacity of Germany to pay reparations was hinged upon its capacity to acquire a surplus on its trade balance. No one nation would gain by forcing reparations on Germany that were unrealistic. That would harm not only Germany but also both Europe and America as well.

As a representative at the Peace negotiations Keynes had tried to persuade the allied countries of this conviction. Nevertheless, he did far from succeed. In the beginning of May 1919, it was clear to Keynes that the Allies would put forward reparations of such a magnitude that Germany had no chance of fulfilling. At May the 26th, Keynes seems to have made up his mind. As he states in a letter to the Chancellor of the Exchequer Austen Chamberlain:

"We have presented a Draft Treaty to the Germans which contains in it much that is unjust and much more that is inexpedient ... It is now right and necessary to discuss it with the Germans and to be ready to make substantial concessions. If this policy is not pursued, the consequences will be disastrous in the extreme ... The Prime Minister is leading us all into a morass of destruction. The settlement which he is proposing for Europe disrupts it economically and must depopulate it by millions of persons. The New States we are setting up cannot survive in such surroundings. Nor can the peace be kept or the League of Nations live"; (Harrod, 1972: 294)³.

³ Finally, at June the 5th, Keynes addresses the Prime Minister Lloyd George: "I ought to let you know that on Saturday I am slipping away from the scene of nightmare. I can do no more good here. I've gone on hoping even through these last dreadful weeks that you'd find some way to make of the Treaty a just and expedient document. But now it's apparently too late. The battle is lost. I leave the twins [Lord Cuncliffe and Lord Sumner, two members of the British delegation who both advocated a hard line towards Germany] to gloat over the devastation of Europe, and to assess to taste what remains for the British taxpayer"; (Skidelsky, 1992: 375).

At June the 28th, the Versailles Peace Treaty was signed by the Allies as well as by Germany.

The need to explain the wrongdoings

Back home, Keynes felt that he had to set the record straight⁴. He felt he had to address the public about the harm that had been done at the conference. Because of this, he decided to write a book. At 12th of December 1919, it was published. It immediately took on as sales rapidly went up. In August the next year, it had been translated into 11 languages and it had already sold more than 100.000 copies.

The intentions behind the need to write such a book were clearly expressed by Keynes himself in his Preface to the French edition. He stated that he had a need to demonstrate that:

"our representatives at the Paris conference committed two grand errors against our interests. By demanding the impossible, they forsook the substance for the shadow and will in the event lose everything. By excessive concentration on political objects and on the attainment of an illusory security, they overlooked the economic unity of Europe – illusory because security is to be found least of all in the occupation of extended frontiers, and also because the political contrivances of the moment will be largely irrelevant to the problems of a later decade"; (Keynes, 1919: xix).

The economic aspects

In his book, Keynes seems in some important aspects to challenge the mainstream economic thinking of his time, especially concerning its view on economic stability. Actually, he was not sure that an overall optimal macroeconomic outcome would be brought about automatically by the market mechanism itself. Rather, the outcome could be one of disequilibrium and it was possible that economically unstable conditions could develop into a serious economic crisis. Moreover, more importantly, seen from a 1919 perspective, such a situation might be the result of the terms put forward in the Peace Treaty. Not only Germany was in for troublesome economic times; that was the case for all of the European countries as they were now more than hitherto interrelated with one

⁴ With (Harrod, 1972: 303): "The book was not written as a definitive history of the Peace Conference. It was quite intentionally designed as a polemic; it was composed in two months at a white heat of passion, immediately after the events. It sought to influence public opinion at once. Europe was disintegrating and must be saved".

and other through trade. Therefore, it should be expected that an international economic crisis could develop in the years ahead, because as Keynes warned us with his opening words of Chapter 1:

"Very few of us realise with conviction the intensely unusual, unstable, complicated, unreliable, temporary nature of the economic organization by which Western Europe has lived for the last half century"; (Keynes, 1919:1).

That is, you cannot take macroeconomic stability for granted. Economies can be fit by recessions as well as more boom-like situations. The macroeconomic outcome is, in general, probably not one of full employment. Furthermore, you also have to acknowledge the fact that macroeconomic stability is partly dependent on political stability. Political turbulence can make economic decision-making processes very problematic to conduct the proper way. Therefore, potential political turbulence could be transformed into potential economic turbulence, just as troublesome economic times could question the stability of political institutions. The two systems – the economic and the political system – interact with each other nationally as well as internationally. It is due to this understanding that Keynes was worried about the peace terms that has been presented to Germany. These terms would not only with certainty harm Germany; they are at the same time also harmful to the international society as well. In addition, if an international economic crisis should occur due to this, then the Peace Treaty is bound to break down. If that should happen then who knows what the consequences might be in the longer run.

Although Keynes, challenged the mainstream economic view on stability, he nevertheless acknowledged that Europe should be characterized as "so organised socially and economically as to secure the maximum accumulation of capital"; (Keynes, 1919: 11). Not surprisingly therefore, accumulation of capital had been an important feature of Western economic development up to 1914. However, the war had torn apart that process of accumulation, Keynes points out. And there is nothing in the peace terms that tries to readdress this fact. On the contrary, the terms will only worsen the already pessimistic after-war macroeconomic environment in Germany and in Europe. Therefore, to Keynes, the peace negotiations have been totally in vain. In sum, he finds that:

"I cannot leave this subject as though its just treatment wholly depended either on our own pledges or on economic facts. The policy of reducing Germany to servitude for a generation, of degrading the lives of millions of human beings, and of depriving a whole nation of happiness should be abhorrent and detestable – abhorrent and detestable, even if it were possible, even if it enriched ourselves, even if it did not sow the decay of the whole civilized life of Europe. Some preach it in the name of justice. In the great events of man's history, in the unwinding of the complex fates of nations, justice is not so simple. And if it were, nations are not authorized, by religion or by natural morals, to visit on the children of their enemies the misdoings of parents or of rulers"; (Keynes, 1919: 142).

How Europe might develop economically after the war is analysed in Chapter 6 of the book. Generally speaking, this is sadly "one of pessimism" as Keynes points out. Firstly, he questions if the population of Europe is capable of feeding itself in the years to come. Surely, many of the European countries and perhaps especially Germany and Russia might have serious problems in this regard. Secondly, many of the European countries lack the right infrastructure, which is damaging to the process of economic growth in so far as: "modern industrial life essentially depends on efficient transport facilities"; (Keynes, 1919: 148). To trade efficiently with each other, countries need a well-functioning infrastructure. And trade is essential in stimulating the processes of economic growth, Keynes points out. Thirdly and most importantly, there is the threat of inflation. Prices are already going up in Europe and probably that process would be enhanced in the years to come, Keynes tells us. If this happens, Europe has to foresee tremendous economic troubles. It will not only harm trade and thereby economic growth, it also induces to "the waste and inefficiency of barter"; (Keynes, 1919: 152). And then of course, the nightmare of hyperinflation might have very severe damaging effects indeed to the working of the macroeconomic system:

"By a continuing process of inflation, governments can confiscate, secretly and unobserved, an important part of the wealth of their citizens. By this method they not only confiscate, but they confiscate *arbitrarily*; and, while the process impoverishes many, it actually enriches some ... As the inflation proceeds and the real value of the currency fluctuates wildly from month to month, all permanent relations between debtors and creditors, which form the ultimate foundation of capitalism, become so utterly disordered as to be almost meaningless; and the process of wealth-getting degenerates into a gamble and a lottery ... The process engages all the hidden forces of economic law on the side of

destruction, and does it in a manner which not one man in a million is able to diagnose; (Keynes, 1919: 148 & 149)⁵.

If this scenario is going to become reality, the consequences are catastrophic, as Keynes points out very pessimistically. If this happens:

"An inefficient, unemployed, disorganised Europe faces us, torn by internal strife and international hate, fighting, starving, pillaging, and lying. What warrant is there for a picture of less sombre colours?"; (Keynes, 1919: 157).

Political considerations

According to Keynes, Germany should be treated differently than stated in the Peace Treaty. This was not due to economic arguments alone; Keynes also took some political considerations into account. Peace terms had to be not only economically acceptable they should also be political fair and just. That is, you have to focus on international relationships between countries due to trade patterns and other economic relations between countries as well as political arrangements. Society and its development could not be analysed the right way with only a narrow national focus. Therefore, as Keynes pointed out at the very beginning of his book:

"If the European civil war is to end with France and Italy abusing their momentary victorious power to destroy Germany and Austria-Hungary now prostate, they invite their own destruction also, being so deeply and inextricably intertwined with the victims by hidden psychic and economic bonds; (Keynes, 1919: 2).

Because of this view, Keynes argued that the Treaty had to be revised:

⁵ If this should happen, the entrepreneurs will be put under a severe pressure and that would be harmful to society in general: "By combining a popular hatred of the class of entrepreneurs with the blow already given to social security by the violent and arbitrary disturbance of contract and of the established equilibrium of wealth which is the inevitable result of inflation, these governments are fast rendering impossible a continuance of the social and economic order of the nineteenth century"; (Keynes, 1919: 150). Or as Moggridge has interpreted Keynes's general views on inflation: "Thus, as well as producing the currency fluctuations that impaired international trade and recovery, inflation was destroying the basis for capitalist accumulation itself"; (Moggridge, 1992: 333).

"By fixing the reparation payments well within Germany's capacity to pay, we make possible the renewal of hope and enterprise within her territory, we avoid the perpetual friction and opportunity of improper pressure arising out of treaty clauses which are impossible of fulfilment, and we render unnecessary the intolerable powers of the reparation commission"; (Keynes, 1919: 168).

Rather visionary, Keynes states that one should hope that a Trade Union could be established in the near future including not only the European countries but also Turkey, Egypt and India. Such a Union "might do as much for the peace and prosperity of the world as the League of Nations itself"; (Keynes, 1919: 169). If such a free trade area is established one would expect Germany to be the core country of union, Keynes goes on arguing that such an institution "might go some way in effect towards realizing the former German dream of Mittel-Europa".

Furthermore, you have to take into consideration that:

"A debtor nation does not love its creditor ... If, on the other hand, these great debts are forgiven, a stimulus will be given to the solidarity and true friendliness of the nation's lately associated"; (Keynes, 1919: 177)⁶.

A way out, is to propose, Keynes goes on arguing, to set up an international loan scheme. The task of such an institution would be to finance Europe's – including Germany's – net import. And the financier of such an arrangement has to be the United States. Initially, the Americans might be expected to be very sceptical about such an international loan scheme. However, this scepticism would probably go away when the Americans realise the benefits of such an arrangement. As Keynes argues:

"In this manner Europe might be equipped with the minimum amount of liquid resources necessary to revive her hopes, to renew her economic organisation, and to enable her great intrinsic wealth to function for the benefit of her workers"; (Keynes, 1919: 183).

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⁶ As we know presently from the case of Greece; probably most Greek would agree with Keynes on this matter!

Finally, it is important not to put Russia aside, Keynes argues. She should not be brought into a situation of isolation despite her new political regime of communism. Instead, the European countries should try to integrate Russia economically with Europe. That would be to the benefit of both. In trying to achieve this, Germany has an essential role to play, as Keynes sees it. In this respect, the Allies should "encourage and assist Germany to take up again her place in Europe as a creator and organiser of wealth for her eastern and southern neighbours"; (Keynes, 1919: 187).

To sum up

The Economic Consequences of the Peace had a very clear and decisive message to deliver to its reader. The scheme of reparations stipulated in the Peace Treaty of Versailles, especially those concerning Germany, was not only not fair and just; the terms of the Treaty were also indeed very harmful to the future economic environment in Germany as well as in Europe. You had to expect that not only Germany, but also the allied countries themselves, would run into very severe economic as well as probably also politically troublesome times. A deep and widespread economic depression could most certainly not be ruled out. Moreover, perhaps it could even be so deep an economic depression that the forces of destruction – economic and political – would become victorious in the end. Seen from Keynes's point of view, the harmonious, optimistic and prosperous economic times of pre War Europe were forever gone. That was the prophecy of Keynes in the December of 1919.

As we all know, Keynes was certainly right in his prophecy in many ways. Unfortunately, it took some time before the politicians got around to revise the Treaty of Versailles. Therefore, the 1920s and 1930 became indeed a damaging period in history, with worldwide tremendous negative consequences economically as well as politically. These events came to pave the road to the regime of Hitler and to the outbreak of World War II.

Some empirical evidence

Of course, warfare has serious consequences. It affects human life immensely in many ways. So did of course the First World War. It was, as stated by (Singleton, 2007: 42):

"an economic disaster of the highest order, especially in Europe. Its greatest impact was felt at the level of the individual - millions were killed or wounded and others lost relatives, wealth and incomes. It is impossible to put a dollar figure on the 'cost' of the war. What level of compensation would have been adequate to satisfy those who suffered, whether materially or psychologically, as the result of the war?".

In what follows, some economic aspects of the First World War are presented.

Seen from the perspective of an economist, powers of war are basically depended partly on manpower – the size of population – and partly on the economic strength of the country in question as recognised by (Broadberry & Harrison, 2009: 16):

"The richer countries were not only able to mobilise more men. Regardless of distance, they also supplied them better. Capital-abundant economies were able to support capitalintensive warfare".

That is, the supply of armament in the First World War was determined by the wealth of the individual country. The better off economically, the bigger the supply of weapons. Obviously, as indicated in Table 1, both the UK and the USA were better off than France and Germany.

Table 1: The wartime change in real GDP, 1913-1918

-	UK	USA	France	Germany
1913	100.0	100.0	100.0	100.0
1914	92.3	101.1	92.9	85.2
1915	94.9	109.1	91.0	80.9
1916	108.0	111.5	95.6	81.7
1917	105.3	112.5	81.0	81.8
1918	114.3	113.2	63.9	81.8

Source: (Broadberry & Harrison, 2009: 12).

⁷ Alternatively, stated more precisely: "The evidence of the chapters that follow suggests that the comparative success of the various economies in mobilising their resources depended on three factors that varied independently: their level of economic development, their proximity to the front line, and the duration of their engagement"; (Broadberry & Harrison, 2009: 14).

Perhaps the reason why Germany seems to perform better than France is due to the strict economic planning in Germany – when the 'Totalen Krieg' was declared, the pressure was put on the population, which to a huge extent lacked basic necessities.

Furthermore, as a consequences of wartime activities the share of government spending as a percentage of GDP had to grow. Once again, France — and Germany were hit the hardest as shown in Table 2⁸. And of course, government spending must be financed either by taxes or by cuts in non-wartime activities or by borrowing.

Table 2: The share of government spending (percentage of GDP), 1913-1918

	UK	USA	France	Germany
1913	8.1	1.8	10.0	9.8
1914	12.7	1.9	22.3	23.9
1915	33.3	1.9	46.4	43.8
1916	37.1	1.5	47.2	50.3
1917	37.1	3.2	49.9	59.0
1918	35.1	16.6	53.5	50.1

Source: (Broadberry & Harrison, 2009: 15).

As an example, the UK budget deficit rose from 334 (£m) in 1914/15 to 1,690 (£m) in 1918/19. Because of this, the debt/GDP ratio rose from 26.2% in 1913/14 to 127.5% in 1918/19 (around 80% of the national debt was domestically held). In general, debt problems restricted the economic development in Europe after the war. The USA had provided Britain and France with war loans, that made Britain and France to extend their own credits to Italy and Russia keeping them both in the coalition fighting much longer than they otherwise would had been able to.

Likewise, due to warfare activities, the economy is stressed as total aggregate demand has to match that of a maximum of supply, or stated differently, economies at war experiences both a demand pull as well as a cost-push kind of inflation. As such, the GDP deflator of the UK rose from an

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⁸ It must be remembered, of course, that the war was fought in France as part of its territory was occupied. Therefore: "the economic impact on the war effort was high, since all the ten *departments* (out of a total of 87) that were occupied stopped producing for (and paying taxes to) France"; (Hautcoeur, 2009: 172).

index of 100 in 1913 to an index of 225 in 1919 (as a percentage of 1913); (Broadberry & Howlett, 2009: 218 & 219). Hurt the most was of course Germany who experienced a period of hyperinflation in the beginning of the 1920s, which brought its financial system to break down. In general, most European countries suffered from inflationary tendencies.

Not surprisingly, in general, the World War I combatants had a lower annual growth in real GDP than World War I neutral countries. That is the case concerning the war years as well as the interwar period. As pointed out by (Ritschl & Straumann, 2010: 159-160), most of the European countries experienced growth rates that were below their historical growth paths. Seen from their perspective, full recovery in this regard had to await the golden age of the 1960s: "In the three decades after 1914, Europe's economy was in recession relative to trend during fourteen years, and cumulatively lost forty percent of its potential output".

As such, the UK, Germany, the USA, and to a lesser extent, France all experienced problems with unemployment from 1921 and onwards. Especially during the Great Recession in the 1930s unemployment rates grew to very high levels as indicated by Figure 1.

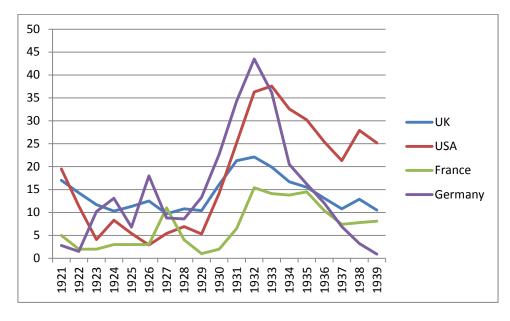


Figure 1: Unemployment rates in industry, 1921-39 (%)

Source: (Garside, 2007:52).

In the period 1913-1929, the UK had an average growth rate of only 0.7%, Germany one of 1.2% and France – probably the country most stressed economically during the war years ⁹ – had the highest growth rate of 1.9%, whereas for instance Denmark had one of 2.7%; (Broadberry & Harrison, 2009: 33). That Germany has a rather low growth rate comes as no surprise due to the burden of reparations. That was to be expected because, as stated by (Ritschl, 2009:68): "The harsh clauses of the Treaty of Versailles can be interpreted as a desperate attempt to achieve an *ersatz* victory by economic means" ¹⁰.

More surprisingly, the UK had an even lower growth rate in the above-mentioned period. However, this might be explained, as stated by (Greasley & Oxley, 1996), by a poor competitiveness which stressed the British industry tremendously in the 1920s, making the macroeconomic outcome, in general, to be one of unemployment. The interesting question is then, which – if any – role did the First World War play in this story? Based on their statistical analyses the answer seems quite clear: the impact of the war had indeed an important role to play – likewise, (Broadberry & Howlett, 2009: 229) also argue that the First World War had a significant negative long run impact on Britain's wealth (a setback of 11.0% to 14.9% of pre-war wealth). Or as (Greasley & Oxley, 1996:94) conclude:

"there were statistically significant breaks in British industrial production during the period 1879 to 1938 ... [their statistical analyses] ... emphasize that the First World War marked the major structural discontinuity in Britain's industrial growth ... The macroeconomic shock of the First World War had enduring consequences for British industry ... [therefore] ... the origins of the depressed interwar industrial economy appear to lie in the macroeconomic shock of the First World War, since neither the return to gold in 1925 nor the 1929 US crash had more than a transitory effect on British industrial production" 11.

⁹ As pointed out by (Hautcoeur, 2009: 170): "If the war did not come as a surprise, its development and duration were unanticipated ... the war represented an enormous shock to the economy".

¹⁰ "Germany's debt burden was clearly less outrageous than it would appear. As long as a full return to the gold parity was expected for Britain and France, it seemed reasonable to burden Germany with a debt total not far below those borne by the victorious powers ... However, an additional constraint was the fact that, for the most part, German debt was foreign-owned rather than domestic"; (Ritschl, 2009: 70). And of course, payment was based on a surplus of Germany's trade balance, which puts a limit to the amount of goods that could be imported.

¹¹ That is the First Word War "interrupted the long-established growth pattern by adversely affecting British industry's competitiveness"; (Greasley & Oxley, 1996:98).

Furthermore, by use of supply side economic arguments, (Broadberry, 1990) tries to explain why the UK developed serious problems with its level of competitiveness due to a rise in the real wage which resulted in the emergence of mass unemployment in the UK. From 1921 to 1938 with an exception of the year 1927, the unemployment rate was above 10% - in the range of 10.3% to 22.1%; (see Figure 1 & (Chick & Pettifor, 2010)). At the same time, due to the regulation during the First World War there was a built up of unsatisfied demand. Because of this, Broadberry argues that workers in general desired more leisure rather than more income. However, the reduction in hours worked 12 – "the major supply shock of the interwar period"; (Broadberry, 1990:276) – was not accompanied by a similar reduction in the money wage and with a fall in the general price level, we have an increasing real wage. Therefore:

"it was the unfortunate combination of the scale of the hours reduction, the maintenance of the weekly wage, and the appreciation of the exchange rate which was so devastating for British industry in the aftermath of World War I"; (Broadberry, 1990: 282)¹³.

That France performs as well as illustrated may also seem surprising. As stated by (Hautceour, 2009), France adapted growth-wise, apparently, quite astoundingly well to the war in comparison with its neighbours, although France had an ongoing severe budgetary crisis until 1926. Perhaps this fact, to some degree, could be explained by the huge state intervention in the economy as the state took a massive part in macroeconomic management (an enormous rise in government expenditure, the state's demand for resources e.g. in the labour market as well as financially). However, according to (Hautceour, 2009: 201), France was hit hard by the fact that it lost its old position in the world, economically as well as politically 14. Similar to the UK, France's position in the 'new' world order was less superior than it had been before the outbreak of the First World War.

¹² Data on per capita hours covering the period 1913-1938 is reported in (Nason & Vahey, 2009: 23). Their findings fully support those of (Broadberry, 1990). Furthermore, this paper delivers other data series on relevant macroeconomic variables on business cycles for the UK during the First World War and the interwar period.

¹³ However, this explanation is questioned by (Glynn & Booth, 1992: 731) as they find his "effort to explain the slump of the early 1920s entirely in these terms is mistaken". This point of view is, however, totally rejected by Broadberry's reply; (Broadberry, 1992).

¹⁴ "Before 1914, France had a central financial and political position in continental Europe and the Mediterranean, which balanced the industrial position of Germany and complemented the mostly intercontinental position of Britain"; (Hautcoeur, 2009: 201).

Although the USA became an active war partner rather late, the war had influenced the US economy from the very beginning as the European purchases of goods turned the recession around and created a rather long period of boom like times. In general, the First World War highlighted the magnificent economic strength that she had; economically as well as financially. From now on, the USA took the first rank among countries as *the* industrial nation. Moreover, the USA was not affected negatively to the same degree by wartime activities as was the case with the European combatants. As a result of this process of transformation – Britain's economic weakness and the increasing strength of the USA – it meant, for instance, that the war "undoubtedly contributed to the emergence of New York as a centre of capital export". From now on, "entrepreneurs and governments would look to the one industrial nation that had remained largely unscathed by the war"; (Rockoff, 2009:335). However, seen from the perspective of (Rockoff, 2009: 338), the most important long run impact of the war might have been political rather than purely economic, as the war had an impact "on the ideology of the nation's economic and political leaders". That is, the lessons of the 1st World War gave way to a new understanding of the "reforming liberalism of the 1930s that inspired future generations of would-be reformers".

That the First World War had an impact on economic¹⁵ and political matters in the 1920s and 1930s for many countries is a fact. In addition, of course, to some extent, economic and political matters were interrelated with each other. When the war ended, all kinds of economic organisations were challenged, as economic conditions were in general very fragile indeed¹⁶.

To some countries, the war had an even more devastating impact.

In Germany, it gave birth to a new kind of democracy with serious economic problems, which later on broke down as Germany transformed itself into the Nazi regime and gained economic

¹⁵ Not only concerning the level of GDP growth and fluctuations in the level of employment but also financially. As pointed out by (Oliver, 2007: 195): "the list of countries that experienced banking and currency crises by the end of the interwar years reads like an atlas of the world".

¹⁶ Therefore: "Politicians, bankers, economists, businessmen, union leaders and workers had to make important decisions on the basis of incomplete or misleading information ... Instead of working for the common good, many preferred to act in their own perceived best interests. Politicians sought re-election, bondholders campaigned for deflation, workers demanded higher wages and so on. Suffice is to say that the problems were immense and the actors poorly informed, confused and selfish"; (Singleton, 2007: 29).

recovery¹⁷. In Russia, it meant the building up of the communist state of Lenin and Stalin and depressive economic living conditions for most of the population. In the UK, it gave her an inferior position than hitherto, politically as well as economically – for many years, the UK suffered economic hard times with huge unemployment. In the USA, it gave birth to her as a modern superpower; although hit hard by the Great Depression, the Roosevelt administration gave its citizens not only hope of a better future but also a macroeconomic plan that early on in the 1930s began stimulating the level of effective demand in the USA and made the economic recession less severe.

Concluding remarks

With the benefit of hindsight, it is difficult to see why a World War was not avoided in time. Why give away prosperous times for nothing? What were the motives for war?

As pointed out by (Broadberry & Harrison, 2009), the liberalism that followed the classical economic period of Adam Smith and David Ricardo was challenged in the late nineteenth century by imperialistic political views. Now, more priority, politically, was directed towards being able to control more territory at the cost of trade benefits. As such, these politicians reasoned that "it was worth Germany's while to break up world trade for a while in order to grab territory from the older powers"; (Broadberry & Harrison, 2009: 3). Perhaps more territory could be a way to more wealth ¹⁸. As we all know, that was not the outcome of the war. Instead, the First World War produced a fragmented Europe with countries that were "ensnared in reparations and debts, and incapable of returning to political and economic stability"; (Eloranta & Harrison, 2010: 134).

That is, as Keynes had prophesised in 1919, the decades to come were indeed dramatic. For some, there were times of enormous economic prosperity; for others it was years of heartbreaking

¹⁷ As seen from Figure 1, the unemployment rate drops down from 1933 and onwards. Perhaps not surprisingly, election results in Germany confirm that the support to the political extremes (the Nazi party and the Communists) could be seen as a 'function' of the economic situation – the deeper the recession the greater the support.

¹⁸ That is "in continuity with the period before 1914 was the rivalry for colonies"; (Eloranta & Harrison, 2010: 140). According to (Broadberry & Harrison, 2009: 7 & 10), 1913-GDP per capita data gave the USA and the UK first positions with 5,301 \$ and 4,921 \$ compared with Germany's level of only 3,648 \$ (almost the same as that of France: 3,485 \$).

depressive economic realities¹⁹. On the ruins of the First World War, the foundations of the coming Nazi regime were laid down brick by brick²⁰. Once again, the quest for *Lebensraum* became the keyword for Germany. However, at the end, they did not achieve this goal. Once again, Europe was torn apart.

Furthermore, Britain lost its superior position in the world, economically as well as politically. From now on, the international scene was dominated by the USA as the one and only superpower²¹. And this is a position that she more or less has held ever since.

On the ruins of the Second World War, the foundations of the coming process of European integration were built. Also in this respect, Keynes had foreseen what probably would be the best solution for peace in Europe. This time, Germany succeeded in so far as she became one of the two founding partners – the other one being France – of the European project that, until the recent crisis, paved the road to economic prosperity for most European countries. In this respect, as the most economically important member of the European Union – and the EMU – Germany finally 'conquered' Europe the third time.

Finally, the First World War also, at least to some extent, triggered a rather long period of massive unemployment in the UK and elsewhere. It was due to these empirical facts of depressive economic times that Keynes undertook the role, being the most internationally known economist of his time, to try to get economic theory to be in better accordance with real life phenomena. His long life struggle succeeded at last with his publication of his *General Theory* on the 4th of February 1936. As we all know, it was based on the content of this book that the Keynesian Revolution emerged,

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¹⁹ "The First World War cast a long shadow over interwar economic development that international institutions failed to disperse. Unresolved tensions eroded the possibilities of returning to a normal world, and Europe became fatally polarized between wealthy and poor, democracies and dictatorships"; (Eloranta & Harrison, 2010: 149).

²⁰ With (Ritschl, 2009: 72) on the Versailles Treaty: "It sought economic safeguards in the absence of a credible security arrangement. It prolonged the agony of Germany's economy for several more years. It strengthened the elements aimed at revenge instead of promoting change and modernisation. And when its feeble controls ultimately collapsed, nothing was left to prevent Germany from rearming for World War II".

²¹ As pointed out by (Aldcroft, 1987: 33), Europe in general experienced a decline in economic importance as the European "economic machine became impoverished and run-down during the course of hostilities, while she became increasingly dependent on external sources of supply and finance. The United States became the great provider, and as Europe lost overseas investments and contacts so America increased her influence and emerged from the war as a strong net creditor".

which for decades to come, set the scene for macroeconomic thought. Based on this economic understanding and its economic policy recommendations, prosperity was brought to many Western countries as argued, among others, by (Skidelsky, 2009)²².

²² As stated by (Carabelli & Cedrini, 2010), it seems as if Keynes with the *Economic Consequences of the Peace* got his understanding on the complexities of international economic relations in place early on. With this understanding, Keynes tried to pave the way to "a sounder political economy between nations", (Carabelli & Cedrine, 2010: 1026), with his plan for an International Clearing Union. The result of the negotiations at the end of the Second World War became known as the Bretton Woods system. Also in this respect, it seems, might the First World War have had a lasting impact.

References

Aldcroft, Derek (1987) From Versailles to Wall Street – 1919-1929. Penguin Books.

Broadberry, Stephen & Harrison (2009) "The economics of World War I: an overview" in Stephen Broadberry & Mark Harrison (eds.) *The Economics of World War I*. Cambridge University Press.

Broadberry, Stephen & Howlett, Peter (2009) "The United Kingdom during World War I: business as usual?" in Stephen Broadberry & Mark Harrison (eds.) *The Economics of World War I*. Cambridge University Press.

Broadberry, Stephen (1992) "The emergence of mass unemployment: a reply", *Economic History Review*, XLV(4): 739-742.

Broadberry, Stephen (1990) "The emergence of mass unemployment: explaining macroeconomic trends in Britain during the trans-World War I period", *Economic History Review*, XLIII(2): 271-282.

Carabelli, Anna & Cedrini, Mario (2010) "Keynes and the Complexity of International Economic Relations in the Aftermath of World War I", *Journal of Economic Issues*, XLIV(4): 1009-1027.

Chick, Victoria & Pettifor, Ann (2010) "The Economic Consequences of Mr. Osborne – Fiscal consolidation: Lessons from a century of UK macroeconomic statistics", www.debtonation.org.

CW XVI (1971) The Collected Writing of John Maynard Keynes – Volume XVI: Activities 1914-1919. Macmillan St. Martin's Press.

Eloranta, Jari & Harrison, Mark (2010) "War and disintegration, 1914-1950" in Stephen Broadberry & Kevin O'Rourke (eds.) *The Cambridge Economic History of Modern Europe*, Vol. 2. Cambridge University Press.

Garside, W.R. (2007): "The Great Depression, 1929-33" in Michael Oliver & Derek Aldcroft (eds.) *Economic Disasters of the Twentieth Century*. Edward Elgar.

Glynn, Seán & Booth, Alan (1992) "The emergence of mass unemployment: some questions of precision", *Economic History Review*, XLV(4): 731-738.

Greasley, David & Oxley, Les (1996) "Discontinuities in competitiveness: the impact of the First World War on British industry", *Economic History Review*, XLIX(1): 82-100.

Harrod, Roy (1972) The Life of John Maynard Keynes. Penguin Books.

Hautcoeur, Pierre-Cyrille (2009) "Was the Great War a watershed? The economics of World War I in France" in Stephen Broadberry & Mark Harrison (eds.) *The Economics of World War I*. Cambridge University Press.

Keynes, John Maynard (1933) "Mr. Lloyd George: A Fragment" in *The Collected Writing of John Maynard Keynes – Volume X: Essays in Biography*. Macmillan St. Martin's Press.

Keynes, John Maynard (1919) *The Economic Consequences of the Peace*. Macmillan St. Martin's Press.

Moggridge, Donald (1992) Maynard Keynes – An Economist's Biography. Routledge.

Nason, James & Vahey, Shaun (2009) "UK World War I and Interwar Data for Business Cycle and Growth Analysis", *Federal Reserve Bank of Atlanta – Working Paper 2009-18*.

Oliver, Michael (2007) "Financial crises" in Michael Oliver & Derek Aldcroft (eds.) *Economic Disasters of the Twentieth Century*. Edward Elgar.

Ritsch, Albrect & Straumann, Tobias (2010) "Business cycles and economic policy, 1914-1945) in Stephen Broadberry & Kevin O'Rourke (eds.) *The Cambridge Economic History of Modern Europe*, Vol. 2. Cambridge University Press.

Ritschl, Albrecht (2009) "The pity of peace: Germany's economy at war, 1914-1918 and beyond" in Stephen Broadberry & Mark Harrison (eds.) *The Economics of World War I*. Cambridge University Press.

Rockoff, Hugh (2009) "Until it's over, over there: the US economy in World War I" in Stephen Broadberry & Mark Harrison (eds.) *The Economics of World War I*. Cambridge University Press.

Singleton, John (2007) "'Destruction ... and misery': the First World War" in Michael Oliver & Derek Aldcroft (eds.) *Economic Disasters of the Twentieth Century*. Edward Elgar.

Skidelsky, Robert (2009) Keynes: The Return of the Master. Penguin Group.

Skidelsky, Robert (1992) John Maynard Keynes – Hopes Betrayed, 1883-1920. Macmillan.