



IKERLANAK

**THE OHLIN-KEYNES DEBATE ON
THE GERMAN INTERWAR
REPARATIONS REVISITED**

by

Kepa M. Ormazabal

2008

Working Paper Series: IL. 32/08

Departamento de Fundamentos del Análisis Económico I

Ekonomi Analisiaren Oinarriak I Saila



University of the Basque Country

THE OHLIN-KEYNES DEBATE ON THE GERMAN INTERWAR REPARATIONS REVISITED

ABSTRACT

This paper analyzes the debate between Ohlin and Keynes on the question as to whether Germany was able to make the payments specified in the Dawes Plan. Keynes argued that Germany was able to collect the money but unable to transfer it to the victors because there existed an insurmountable “transfer problem”. Ohlin replied that such a “transfer problem” did not exist and, therefore, that Germany was able to make the payments stipulated by the Dawes Committee. This paper analyzes the positions of the two contenders and argues that the problems are not correctly delimited and that the theoretical bases of the contenders show serious deficiencies. It also brings to light some interesting theoretical and practical paradoxes that neither Keynes nor Ohlin dealt with.

Key words: transfer problem; price adjustment; income adjustment; German Reparations

JEL classification: B11, E42, E52

Kepa Ormazabal
Department of Economic Theory I
University of the Basque Country
Lehendakari Agirre etorbidea 83
E-48015 Bilbao
Spain
Phone: 34-94-6013772
Fax: 34-94-6013891
e-mail: kepa.ormazabal@ehu.es

Introduction

In 1919, the victorious winners imposed upon Germany the obligation to pay Reparations in the Treaty of Versailles. In a first moment, the sum that Germany should transfer to the victors was left uncapped. Thus, Germany would pay the most she could for as long as possible. Not surprisingly, Germany did not feel at ease under such an arrangement and, in 1922 she defaulted amidst hyperinflation. As a reprisal, the French army invaded the wealthy Ruhr valley in 1923 in order to force Germany to resume the payments of the Reparations.

This move of France was not welcomed by the other victors. In order to settle things down, a Committee chaired by the American banker Charles Dawes was convened in 1924. The Committee produced its results and its advise in 1925. Unlike the Treaty of Versailles, the Dawes Committee capped the amount of money that Germany had to transfer to the victors. The Committee stipulated that Germany had to pay the now determined sum in annual installments, one fraction of which was invariable while the other was variable and depended on the performance of the German economy in the year in question. The payment of reparations would be completed by 1988. To get things going, the Dawes Committee arranged a huge loan to Germany, about which Chernow says:

“[The loan] was enthusiastically received and oversubscribed. By seeming to settle the German question, the loan lifted a weight from financial markets. It electrified Wall Street and spurred foreign lending to Latin America and elsewhere. For Weimar Germany, it was a turning point. It became the decade’s largest sovereign borrower. American capital and companies poured in: Ford, General Motors, E. I. Dupont, General Electric, Standard Oil of New Jersey, and Dow Chemical.” (Chernow, 1990, 250)

However, the Dawes plan was not very successful, and Germany eventually ceased again to make payments. In 1929 another Committee to design a new arrangement was convened, now chaired by the General Electric executive Owen Young. The Young plan, which was not substantially different from the Dawes plan and extended another huge loan to Germany, turned out to follow in the footsteps of its predecessor and ended up again in German default. The main contribution of the Young plan was the replacement of the Agent General by the Bank of International

Settlements. There was of course much recalculation of figures and periods of payment, but the basic structure of the Dawes plan was still there. The problem of the Reparations was not taken up again until 1931, when president Hoover granted Germany a one year moratorium after which she would have to resume payment, but the Great Depression got in the way and the Reparations were definitely suspended in 1933.

The debate between Keynes and Ohlin, which appeared in the pages of the "*Economic Journal*" in 1929, took place before the Young plan. In principle, the question at issue was a practical one, namely, whether or not Germany was able to meet the payments stipulated by the Dawes plan, but, as we shall presently see, it took on a strong theoretical character.

The Dawes Committee split the problem of Reparations into two problems, namely, the *budgetary* and the *transfer* problem. The debate between Keynes and Ohlin was about the *transfer* problem, not about the budgetary problem. In a nutshell, the budgetary problem is whether Germany was able to *collect* the money that she was to transfer to the victors; the transfer problem, by contrast, was whether Germany was able to *transfer* the collected money to the victors. Keynes and Ohlin agreed that the budgetary problem could be solved, that is, that Germany was able to raise the sums stipulated by the Dawes Committee. Their disagreement was about whether the transfer of those sums was feasible: Keynes held that it was not, whereas Ohlin held that Germany was in condition to transfer the money as easily as the French had done from 1871 onwards.

It is convenient to define the problem better. There is, on the one hand, a practical problem, which is whether the debtor is indeed able to pay the sums required from him. This is a problem that is to be examined in every loan and does not pose any special theoretical difficulty. By contrast, the debate between Keynes and Ohlin wants to be a debate about theory. The theoretical problem is about the effects of the transfers of money in general, and has therefore a wider field of application than the German Reparations after the First World War. The reason why Keynes challenged the Dawes plan was not because the Committee had not correctly assessed the figures; his view was that there was a theoretical problem that had no solution and that doomed the Dawes plan to failure. It is on this point that Ohlin came to grips with Keynes.

Keynes does not seem to very happy about the distinction of the Dawes Committee between the budgetary and transfer problems, but he does not question it, (at least explicitly) and his thesis is that Germany cannot pay the Reparations because the transfer problem cannot be solved. It seems, accordingly, that the question in the Keynes-Ohlin debate on the German Reparations is who is right.

One immediately thinks that the first step to answer this question is to formulate the transfer problem, and I wholeheartedly agree with this view, but the problem is that, indeed, the literature converts the Transfer Problem in a problem about the demand for goods, instead of about money and the foreign exchange markets, which are what the story is all about. In fact, one of the main tenets of this paper is that neither Keynes nor Ohlin nor any other posterior author comes up with a good formulation of the transfer problem because they all pose the problem in terms of conditions for the demand for goods.

In the standard literature on the Keynes-Ohlin debate, the accepted diagnosis is that Keynes held that Germany was unable to transfer the Reparations to the victors because that would require a price adjustment that was unfeasible. To this, Ohlin replied that the transfer of the money of the Reparations from Germany to the victors did not require the price adjustment envisaged by Keynes, but an income adjustment. Since no price adjustment is required, but an income adjustment, and since price adjustments were for Keynes the obstacle to the solution of the Transfer Problem, it follows that there is no difficulty in principle to carry out the transfer.

It is convenient to start by introducing some historical data that are absent from the standard literature on the Keynes-Ohlin debate. Evans (Evans, 2005, 97) notes that the Reparation payments stipulated at Versailles had two parts, one in specie and the other in gold. This information is very interesting in order to understand the debate because it tells us that the victors did not request payment in their own national currencies, but in gold. Evans says that after the war, the victors confiscated 2 million tons of merchant ships, 5.000 railway locomotives, 136.000 wagons, 24 million tons of coal and “many other things” –that is, *things*, and not *gold* or *German money*. According to this, the discussions around the Reparations were all about the *gold* payments that Germany had to transfer to the victors in the coming years. The Treaty

obliged Germany to get gold and transfer it to the victors (without any counter-flow of goods from the victors, of course) for a very long time and in massive amounts.

What about the German reserves of gold? Faith (Faith, 1984) says that, after the war, the victors tried to lay their hands on the gold and assets that the Germans had hidden in Swiss banks. According to Faith, they were not very lucky. This is relevant because there are no references in the literature to a confiscation of German gold or assets by the victors, which suggests that the victors knew that the Germans had hidden gold and that one goal of the Reparations clause of the Treaty was to force Germany to hand over the hidden gold to the victors. The question is whether the victors purported to extract from Germany more gold than what Germany actually had, hidden or openly, in which case we are led to a different scenario in which the point was not only to confiscate the gold of Germany (whatever that means), but to force Germany to purchase gold abroad with its commodities in the future in order to transfer that gold to the victors. This means that the Treaty obliged Germany to buy gold for the victors with its goods and, therefore, that Germany was forced to run a trade surplus on a permanent basis until the victors deemed their claims fulfilled.

Since the transfer problem is whether the unilateral transfer of money abroad will generate the equivalent trade surplus and since Keynes answers to this question in the negative, the conclusion is that Keynes held that the payment of Reparations would not bring about the equivalent trade surplus in the German balance of trade, and that Ohlin rejected this view. Thus, the “transfer problem” comes down to be the problem as to whether Germany can produce as many goods as required and sell them to the victors at such low prices that the victors stop to produce goods and instead buy them cheap from the Germans with the money given to them by the Germans themselves.

The course of events after the First World War was interestingly different from the course of events after the Second World War. Instead of sinking into poverty, as in the 1920's, Germany rapidly rose to the status of industrial power during the 1950's, with a large and sustained trade surplus (*West* Germany, I mean, of course); indeed, one of the main problems in the international scene in the 1960's was the strength of the Deutsche Mark and the sustained German trade surplus. As the reader will presently see, much of the debate between Keynes and Ohlin is about the possibility of a Germany sustained trade surplus in the 1920's!

The paper is divided into four sections. In the first, I critically analyze the 1929 paper of Keynes. In the second, I do the same with Ohlin's 1929 paper. In the third section I pay special attention to a theme to which both Ohlin and Keynes do not pay much attention but which, as far as I can see, is of fundamental importance. This theme is the relation between the financial and the industrial capital. Both the papers of Keynes and Ohlin show a conflict between these two varieties of capital which, in the end, represents a conflict between money and goods and is, therefore, of great theoretical interest.

1. Keynes' 1929 Paper

Keynes starts his paper posing the "transfer problem" as a problem about the *foreign exchange market*:

"The Dawes Committee divided the problem of the payment of German Reparations into two parts –into the *Budgetary Problem* of extracting the necessary sums of *money* [KMO: my emphasis] out of the pockets of the German people and paying them to the account of the Agent-General, and the *Transfer Problem* of *converting the German money so received into foreign currency* [KMO: again, my emphasis]." (Keynes, 1929, 161)

As we are about to see, Germany *can* collect the sums of money stipulated by the Dawes Committee. The problem lies in the *transference* of those sums; therefore, the question at issue is not whether the Dawes Committee is demanding too much money from Germany, but whether the workings of the foreign exchange markets allow Germany to transfer that money (that she can indeed collect) to the victors; more exactly, whether the money collected by Germany can be *converted into foreign currency* as required. Therefore, the "transfer problem", in this initial formulation of Keynes, is all about the foreign exchange market, all about exchange rates. This is in line with the following statements of Schacht, then Director of the German central bank, that Chernow reproduces in his book on the House of Morgan:

"Schacht began by saying Germany's problem was not default but a transfer difficulty resulting from a lack of foreign exchange. Then he veered off into bombast and mad whimsy: "Whether you may threaten me with death or not will not alter the situation because here is the plain fact that I have no foreign valuta [foreign exchange], and whether you may call me immoral or stupid or whatever you like it is beyond my power to create dollars and pounds because you would not like falsified banknotes but good currency." (Chernow, 1990, 456)

Converting the German money into the currencies of the victors can be a very serious problem because, if the foreign exchange markets are flooded with German money, the value of the German currency may fall to such an extent that Germany simply cannot purchase the sums of the foreign currencies of the victors demanded from her, or the currencies of the victors may become too dear. Indeed, since the very beginning of Reparations, Germany made the Reparations payments not through the foreign exchange market, but through the so called "Agent General". The Agent General was an agency erected by the victors; it was a sort of imposed foreign government on Germany the mission of which was, basically, double: first, to put pressure on the German official government to raise the money with which Germany would pay for the Reparations, and secondly to manage the conversion of that money into the currencies of the victors. In 1929, the Young Committee replaced the Agent General with a more formal institution, the Bank for International Settlements (still alive today despite the end of the Reparations about 70 years ago), the whole purpose of which was to manage the problem of converting the German currency into foreign exchange.

"Those who think that the Transfer Problem is secondary argue thus. The German people receives its income in return for its current output of goods and services. If an appropriate part of this income is sequestrated, there will be no buyers for a corresponding amount of goods, which will therefore be available (in addition to what would be available otherwise) to expand exports or in diminution of imports. Since not all the consumption of goods and services, which the German people are compelled to forgo, is suitable for export, there will have to be a certain amount of change-over in the character of production. There is, however, no reason to suppose that ordinary economic forces will not bring this about within a reasonable space of time. Thus -according to this school- the real question is, how much cash can the German Government raise by sound financial methods and pay over to the agent general. Once this is settled, we can be sure that a way will be found to look after the Transfer Problem." (Keynes, 1929, 61-2)

It is convenient to clear up the meaning of some expressions that appear in this passage. First of all, the goods that "the German people are compelled to forgo" but are not "suitable for export" are those for which there is no demand in the victor countries. I point this out because, as we shall presently see, it is crucial to identify the cause why there is no demand, which may be a deficiency in *preference* or in *price*. I do not consider the possibility of a deficiency in *income* in the victor countries because it is a premise that their income is increased by the reception of the Reparations. The problem

if demand is insufficient is that the money transferred from Germany to the victors does not find its way back to Germany in exchange for German goods. Again, it is important to note this because it is implicitly assumed that the subject of the Transfer Problem is the German *goods*, not the German *money*. The deficiency of demand for German goods in the victor countries is said to require “a certain amount of change-over in the character of production”, that is, the adaptation of the structure of German production to the preferences of the victors. This implies that the cause of the deficiency of demand that stands in the way to the solution of the Transfer Problem is a problem of *preference*, not of *price*, namely, that Germany is not producing the specific goods that the victors demand in excess as consequence of their increased income after the transfer of Reparations.

The “ordinary economic forces” in which the adversaries of Keynes trust for the solution of the Transfer Problem are *profit and competition*. The question is, therefore, whether profit and competition will be enough to adapt the structure of German production to the preferences of the victors; in other words, whether or not the rearrangement of German production requires *intervention against the market forces*, that is, against profit and competition. The view of the adversaries of Keynes, with which Keynes does not seem to agree, is that no intervention is necessary. Since the German structure of production will be adapted to the preferences of the victors without intervention, it follows that the only problem that the payment of Reparations (and, in particular, the Dawes plan) poses is about measures to “sequester” the required amount of money from the “German people”. That the German government has to raise money to pay for the Reparations by “sound financial methods” means, basically, that it must not raise the funds by printing money (as, by the way, it did in 1922, which unleashed the famous Hyperinflation).

The strange feature in this presentation of Keynes’ of the view that he intends to refute is that no mention is made of the *foreign exchange market*. This is strange because Keynes started his paper saying that the Transfer Problem is about the conversion of the German money into foreign currency. If the problem really is about the conversion of currencies, one expects a discussion about rules or policies for the Agent General or the BIS, or an alternative proposal of payments to that specified in the Dawes plan. However, Keynes does not do so, and, far from it, when his turn to

formulate the problem comes, he does so in a way that, as in the passage just quoted, the foreign exchange market is not even mentioned:

“If £1 is taken from you and given to me and I choose to increase my consumption of precisely the same goods as those of which you are compelled to diminish yours, there is no Transfer Problem.” (Keynes, 1929, 163)

There is no *transfer* problem because, with the pound I get from you, utility maximization leads me to purchase exactly the goods that you “release” when giving me the pound that you would otherwise have exchanged for them. The reduction of your purchasing power (of your *money*; of your *budget constraint*) resulting from your giving me one pound of yours releases goods; if it happens that my maximization of utility leads me to spend that pound in exactly the goods that you release. there would be no “transfer problem”, says Keynes. One wonders: where is the foreign exchange market in this story? Moreover; Keynes is saying here that there is no Transfer Problem when the *money already transferred* by a country to another returns to the transfer-making country in exchange for its goods. He is implying that there would be a transfer problem if the *goods* that the recipient of the transfer demands in excess are not the *goods* that the transfer-making country releases from consumption.

This means that, here, the subject of the “transfer problem” is the *goods of the transfer-making country*, not its *money*; indeed, Keynes starts by assuming that I give you one pound, which obviously implies not only that I already have one pound (that is, that the *Budgetary Problem* has already been solved), but also that *I have already transferred* that money to you; therefore, that both the Budgetary and the Transfer Problems have already been solved! The question, as posed here, is about what *will happen* after the collection and transference of the Reparations, that is, about the *effects* of a *transference* of money.

The only connection I can think of between Keynes’ two formulations of the Transfer Problem is that the victors’ increased *demand for German goods* represents a corresponding increase in their *demand for German currency*. Germany collects German money (solves a budgetary problem) and proceeds to the *transfer* of that money to France, in order to which she purchases French Francs with Reichsmarken. The transfer problem, in this second formulation of Keynes, is not about the conversion of

Reichsmarken into Francs, as it was in the first, but about whether France will reconvert those Francs back into Reichsmarken. The tacit premise in the second formulation is that France will reconvert her extra Francs back into Reichsmarken if she wants the goods that the Germans cease to consume. It is understood that the Germans *cease to consume because they part with money*. The French demand for *goods* is taken to rise when the French get *more money*, because more money is taken to mean more *income* or, as Ohlin will continuously say, more *purchasing power*.

The orientation of the extra French demand for goods to Germany is taken to be crucial for the stability of the French-German exchange rate because it involves an extra demand for German currency equal to the initial extra supply. If, on the contrary, the victors do not find in Germany the goods that they demand in excess as a consequence of the rise in their budget constraints, the extra supply of German currency to the foreign exchange market will not be offset by an equivalent extra demand and, as a consequence, the German currency will fall in value as against the currencies of the victors.

This does not necessarily mean that Germany is made unable to purchase the sums of the currencies of the victors demanded from her, but it does mean that the burden of the Reparations for Germany increases. The Transfer Problem arises when the price of the currencies of the victors in terms of German currency increases to such an extent that Germany cannot purchase the sums of foreign currencies demanded from her; in such case, Germany becomes unable to bear the burden of Reparations not because she cannot collect the Reichsmarken that would pay for them, but because those Reichsmarken cannot be converted into the required sums of Francs or Pounds, and this will happen if the transfer of Reparations devalues the Reichsmark. The view that the payment of Reparations as stipulated in the Dawes plan poses an *insurmountable transfer problem* means that the projected conversion of German currency into the currencies of the victors will become impossible.

One might object that this is a *quantitative*, not a *theoretical* problem, the solution of which would be to rearrange the stream of payments from Germany to the victors or the creation of an agency such as the Agent General or the Bank for International Settlements. The literature has understood that, in addition to this undeniable quantitative problem, there is a theoretical question. However, and Keynes is

an example of it, it does not seem to be very sure about what the theoretical question exactly is. In the case of the German Reparations, it would be more proper to speak of Transfer Problems, in plural, rather than of a single Transfer Problem, because what is at issue is the sustainability of a stream of payments. If we look at Keynes' second formulation in terms of the first, the theoretical problem seems to be whether transfers devalue the currency of the transfer-making country to such an extent that she cannot go on making transfers.

“Those who minimise the question of transfer seem sometimes to imply that the above is a fair representation of the present facts.” (Keynes, 1929, 163)

That is: “Those who minimise the question of transfer” claim that the fact is that the victors do indeed demand the goods that the Germans release, that *preference* is not a problem, and, therefore, that the extra supply of German currency is being balanced by an equivalent rise in the demand for it because there is a preference for the goods that the Germans release when paying the Reparations, in such a way that the exchange rate of the German currency as against the currencies of the victors remains and will remain fairly stable, which means that the Dawes plan is posing no significant transfer problem.

“To the extent that high taxation causes German consumers to buy less foreign goods, it is a fair representation.” (Keynes, 1929, 163)

The question was whether the victors want the goods that the Germans release. It may be true that German imports have fallen, and it may be true that they have fallen as a consequence of the Reparation tax, but what does this have to do with the question as to whether the victors demand the goods that the Germans are forced to release? The cut in German imports (regardless of its cause) releases goods for consumption *not in Germany*, but *in the countries from which Germany used to import*. The only connection I can think of is that *a cut in German imports involves a cut in the German demand for foreign currencies* and, thus, contributes to relieve the pressure that the transfer of Reparations puts on the value of the German currency.

“But clearly only a proportion of their abstention from consuming will be in respect of foreign goods, and, so far, as one can judge at present, not a very large proportion.” (Keynes, 1929, 163)

However it may be, it is secondary. The main question is whether the victors

want the goods that the Germans release, or looked at from the standpoint of money, if the victors are increasing their demand for German currency to the same extent that the Reparations force an increase in the supply of German currency.

“Moreover, the German balance of trade already has most of the benefit of this, inasmuch as individual Germans are already paying enough, or nearly enough, taxes to solve the Budgetary Problem, and are, therefore, already reducing their personal consumption to the requisite extent.” (Keynes, 1929, 163)

If the Transfer Problem is solved when the money transferred by Germany to the victors finds its way back to Germany in exchange for goods, then the cut in German *consumption* is a necessary (but not sufficient) condition for the solution of the Transfer Problem *in so far as it provides Germany with goods to export*. This provision is a necessary but not sufficient condition because the victors may not want the goods that the Germans release.

Let us go back to the argument. If “those who minimise the Transfer Problem” have got the facts right, are they right and the transfer problem is being solved? What argument has Keynes against them? Keynes himself has admitted that if the recipients of the Reparations send the money of the Reparations back to Germany in exchange for German goods, there is no transfer problem. Does he intend to claim that “those who minimise the Transfer Problem” have *not* got the facts right?

“For the last two or three years the transfer problem has been temporarily solved by Germany borrowing abroad for capital purposes at home, cash which she does not bring home in the shape of imports [KMO: Ohlin will deny this].” (Keynes, 1929, 163)

Note well: the problem that Germany has been solving with the American loans is not the *budgetary*, but the *transfer* problem. This means that Germany is not making payments to France and Britain with American loans, but with *German taxes*. What the American loans are solving (albeit “temporarily”) is the *transfer* problem. Had it not been for the American loans, Germany would have been unable to *transfer* to the victors *the money that she was indeed able to collect* out of taxes. Now, how does the enhanced American demand for German money sustain the value of the German currency as against the British and French currencies? Keynes does not tell. If the American demand for German money increases without a parallel increase in the

German demand for American money, it is the Americans who are in risk of seeing their currency devalued against the German currency and of experiencing a “transfer problem”, the consequence of which would be the interruption of American loans to Germany.

In contrast to Keynes, Chernow suggests that the problem that Germany was solving with the American loans was the Budgetary, not the Transfer Problem:

“The world was trapped in a circular charade in which American money paid to Germany was handed over as reparations payments to the Allies, who sent it back to the United States as war debt.” (Chernow, 1990, 251)

At this point, it is convenient to briefly summarize the relations between the different parties involved in the Reparations business. There were two sides in the winning side: on the one hand, France and Britain, heavily indebted to the US; on the other hand, the US, which, during the war, had extended huge loans to France and Britain and, after the war, to Germany. The US was, therefore, a sort of a global giant lender to whom everybody owed money and, one would expect, in need of repayment of the loans, for, otherwise, the American banking system would experience serious liquidity problems. Britain and, especially, France relied on German Reparations in order to meet their obligations towards the US, as they had already liquidated many of their assets and sold a good part of their gold holdings during the war. The American reserve of gold had become the largest in the world (and was to become even larger in the Second World War).

What is not clear is how the enhanced American demand for German money can sustain the value of the German currency against the British and French currencies. It rather seems, as Ohlin will say, that Germany has been solving the *budgetary* problem out of the American loans. In this case, the US would be extending more credit to Britain and France through an indirect way. According to Keynes, on the contrary, Germany has not used the American loans to pay for the Reparations, but to undertake investments within Germany. Germany “has not brought home in the shape of imports” the money borrowed from the US because this money has remained within Germany as investment. This means that the US has not lent the money to Germany for Germany to purchase American goods. However, Keynes will tell us later that the American loans

are being invested in the German money market at short-term, not at long-term, in productive equipment, and, so, his story does not look entirely consistent.

Indeed, if the sums demanded from Germany as Reparations were significant, it is difficult to see how the impoverished and defeated Germany of the post-war could have possibly have collected large sums of money. A poor nation cannot pay any significant amount of money, no matter how much heavily you tax her. The First World War did not have a military end, but ended because the belligerents run out of resources and, mostly, money. Germany had to surrender because in 1918 she was closer to economic exhaustion than France or Britain, which, let us not forget it, also were much consumed by the long war effort.

Interestingly, Harrod (Harrod, 1959) says that the US did not lend out the vast amounts of money (and in particular, of *gold*) that they had accumulated during the war, in sharp contrast to what Keynes says here. It seems to me that Keynes is here right against Harrod. Harrod says that the Americans *sterilized* their increased holdings of money after the Great War in order to avoid domestic inflation, instead of doing what the British had traditionally done according to Harrod, which was to lend abroad the money obtained from the favorable balance of trade. Harrod tells off the Americans for having done so, for having hoarded their huge balances of money and for restricting international liquidity, something that the British, always desirous to help the others, had so generously done by lending their surplus balance of trade abroad at interest. However, and this is what Keynes is saying to us, as a matter of fact the Americans were as generous as the British; in the 20's, they lent their trade surplus to Germany (and maybe more? Did Wall Street became too enthusiastic about the prospects of vast gains from purchasing Germany cheap and invested too much in those hopes?)

“She [KMO: Germany] has been using this cash [KMO: the dollars borrowed from the US] to buy back from the Agent General the proceeds of taxes paid over to him, out of which she then pays the wages of German workmen employed on capital improvements within Germany.” (Keynes, 1929, 163)

This looks like a funny financial scheme. Let me note, by the way, that Keynes makes no mention of which currency was used in which transaction. Let me also note that, quite interestingly, although the US extended large loans to Germany (according to

Ohlin, *twice* as much as what Germany owed in concept of Reparations!) *she experienced no transfer problem*. This is a very remarkable asymmetry.

Let us try to reconstruct the mechanics of this financial arrangement. Germany collects Reichsmarken in payment for taxes and hands over the proceeds to the Agent General. This money is deposited with the Agent General, and not sent straight away to the foreign exchange markets. The Agent General will manage the conversion of his deposits of German money into British and French money as the circumstances advise. But then we have the American loans to Germany, loans of US dollars. According to Keynes, the German government is handing over those dollars to the Agent General in exchange for the Reichsmarken previously deposited with him. Were it not for the dollar borrowings, the German government would have no means to rescue the Reichsmarken deposited with the Agent General, in which case there should be a terrible scarcity of money within Germany.

This has an interesting implication which is examined neither by Keynes nor by Ohlin. If Germany is forced to alienate her money, money will be very scarce in Germany and, as a consequence, the *interest rate* in Germany will be very high. But if money gets too dear in Germany, it is the end of German industrial production. If the allies want to get Reparations, they'd better contain the rise of the price of money in Germany; otherwise, German industrial production will *fall* as a consequence of the high cost of money, when what the allies need is exactly the contrary, namely, the *expansion* of German production –if they want *more German goods*. Meanwhile, Germany is assuming a second obligation in addition to Reparations, namely, the obligation to repay the American loans *with interest*. Thus, this arrangement to contain the excessive rise of the price of money in Germany may be just burying her deeper, as it increases the debt burden on Germany.

“Clearly this process of borrowing from abroad cannot go on indefinitely. When it comes to an end it will be necessary to divert the labour which it now employs to producing for export.” (Keynes, 1929, 163)

As Keynes puts it, the effect of the American loans has been to build capacity in Germany *for the German domestic market*. Germany has been using the American loans to rescue the Reichsmarken that she had deposited with the Agent General; this

suggests that the Agent General has been paying Britain and France with those dollars; therefore, that those dollars have been sent to the foreign exchange market in exchange for Francs and Pounds. However, those Francs and Pounds will have to be exchanged again for Dollars because France and Britain have to repay the large American war loans. This operation involves a gain for the US in so far as she would be getting interest from the winners as well as from the losers.

Meanwhile, the German government has been using the rescued Reichsmarken to expand the capacity of industries that produce goods for the German domestic market. One wonders whence may come the income that absorbs that expanded production for the domestic market, for, as Keynes himself acknowledged, German income is being dramatically *cut by the payment of the Reparation tax* to the Agent General. Again, something seems not to square in the story. What is clear is that if the factor responsible for the expansion of the German production for the domestic market is the American post-war loans to Germany, that expansion will be reversed when the flow of dollars from New York to Berlin comes to an end. When that happens, the new industries that cater to the German “unknown consumer” will have to be dismantled and, according to Keynes, reconverted into export industries.

Why? As Keynes puts it, because Germany would not otherwise have goods to offer to the victors. This has two sides. First, if the Germans do not produce for export, the *return* of the money transferred by Germany as Reparations will not take place and there will arise a “transfer problem” in the improper sense that the equivalent in *goods* will not flow from Germany to the victors. A German trade surplus in relation to the victors would be the sign that the money transferred by Germany as Reparations and that the victors are getting the goods, as the purchase of goods is taken to be the ultimate function of money. But in addition to this, Germany needs a trade surplus in order to solve the Budgetary Problem, for if the German domestic market is to be cut to the lowest possible level, the only source from which Germany can get the money demanded from her is from purchasing it to the foreigners with her commodities. Thus, Germany has to cut its domestic market to the extent required to bring about a trade surplus of the size required to pay the Reparations (and to repay the American loans with, of course, the corresponding interest). As it seems, it is Keynes’ opinion is that the

American loans to Germany had given rise to an allocation of the German capital that makes blocks the way to the solution of the Transfer Problem.

Chernow says that the main reason why Wall Street embarked on a policy of massive loans to defeated Germany was to sustain the export of American goods, contrary to Keynes. This is basically the same policy that the US had adopted towards France and Britain during the war. Such policy is doubly beneficial; first, it produces *profits* for the industrialists and, then, interest for the *money lenders*.

“I conclude, therefore, that the solution of the Transfer Problem must come about, in the main, not by the release to foreign consumers of goods now consumed by Germans (e.g. wheat, sugar, cotton), but by the diversion of German factors of production from other employments into the export industries.” (Keynes, 1929, 164)

This means that the Transfer Problem is a problem about *preference*, or rather, a problem about “coupling preferences”. It arises because the victors do not demand in excess with their increased budget constraints the goods that the Germans release. The victors do not demand in excess “wheat, sugar or cotton”, the goods that the Germans release, but *other goods* that Germany is not currently releasing and, that, therefore, she will have to produce. Thus, Germany has to be forced to produce what the consumers in the victor countries demand in excess if the transfer problem (again, of *goods*) is to be solved.

The source of the Transfer Problem in this passage is that the preferences of the German consumers and of the victor countries are not “coupled”. The Germans release goods as a consequence of the contraction of their budget constraints; this contraction leads them to choose new optimal consumption bundles that contain less goods than before. On the contrary, the optimal consumption bundles of the victors include more goods because their budget constraints have been increased by the Reparations. There arises a Transfer Problem because the outcome of utility maximization by the Germans is not coupled to the demands of utility maximization by the victors. The Germans do indeed transfer the Pound to, say, the British, but this Pound does not find its way back to Germany in exchange for German goods because the British do not want the goods that the Germans release. The only way the Pound can find its way back to Germany is to force Germany to “release” the goods that the British want, and the only way to do this is to force Germany to *produce* those goods. Thus, the solution of the Transfer

Problem can only come from a change in the German structure of production, no matter whether this implies a further worsening of the consumption of the Germans.

In order to establish that connection with the foreign exchange markets that we are expecting (because Keynes referred to them at the beginning of his paper) but fail to find anywhere, we could make the guess that if the victors manage to get Germany producing the goods that their consumers demand in excess, there would be a counter-demand for German money that will sustain its value and let the transfer of Reparations go on.

“What prevents Germany from having a greater volume of exports at the present time? [KMO Keynes had already answered this question: the American loans, which divert the German “factors” away from the export trades] Is it that the export trades cannot attract more labour at the present level of remuneration? [KMO: that the German workers do not want to work in the export industries because they are better paid in the domestic sector?] Or is it that they cannot sell an increased output *at a profit* [KMO: emphasis mine] unless they can first reduce their costs of production?” (Keynes, 1929, 164)

It does not make much sense to ask questions like these while the American loans continue. We should reformulate the problems as follows: when the American loans to Germany cease, will Germany expand her export sector and, thus, be able to transfer the Reparation payments stipulated by the Dawes scheme? The problem is, indeed, double: first, that Germany is not producing for export the equivalent of the money that she is transferring to the victors and, secondly, that the goods that Germany produces for export are not the goods that the victors want. This means that the solution of the Transfer Problem requires not only the adaptation of the *structure* of German output to the preferences of the victors, but also its *expansion* in absolute terms. What is what stands in the way of those necessary developments? That the German wage structure has to be changed or that the capital invested in the export trades is not sufficiently profitable? It seems that Keynes opts for the second alternative, but in actual fact, he does not do so and introduces an altogether different view, according to which the obstacle to increase German exports (rather, the German *trade surplus*) is that German wages are too high in relation to the victors countries:

“The solution of the Transfer Problem requires a reduction of German gold-costs of production relatively to such costs elsewhere. There are three ways of bringing this about. Either German industrialists must increase their efficiency faster than industrialists elsewhere; or the rate of interest in Germany must be lower than elsewhere; or the gold-rates of efficiency-wages must be reduced compared

with elsewhere.” (Keynes, 1929, 164-5)

The first two options are excluded:

“Since German industrialists are reputed to be already at a fairly high level of efficiency relatively to those of other countries, I do not know why we should assume that they will outstrip us yet further. For it is not enough that they should increase their efficiency (that they will doubtless do); they must increase it faster than others increase their efficiency.” (Keynes, 1929, 165)

This passage is interesting, beyond its direct contribution to the argument, because in it Keynes acknowledges that the victors’ industrial capital is at disadvantage in relation to its German counterpart, and that the solution of the Transfer Problem naturally requires to *enhance this disadvantage*, rather than to *reduce* it, or to put it bluntly, to *cut* the industrial capital of the victor countries and to “transfer” at least some fraction of the victors’ industrial production to Germany.

“Nor is there any prospect of relatively cheap money for Germany; though there may be some future gain from a fall in German interest rates below their present high level.” (Keynes, 1929, 164-5)

Again, this passage is interesting beyond its direct contribution to the argument in that it acknowledges that the transfer of Reparations is being accompanied by dear money in Germany, and that dear money is an obstacle to industrial production.

“It follows that the Transfer Problem requires a reduction in the present gold-rates of efficiency-wages in Germany relatively to efficiency-wages elsewhere. This is the first point to establish.” (Keynes, 1929, 165)

Keynes proceeds here on the implicit premise that *wages determine prices*, which implies that a cut in wages will automatically lead to a fall in prices. In this passage, without any explanation, Keynes obliterates the problems of coupling of preferences and of rearrangement of the structure of German production that were said to pose the Transfer Problem and suddenly turns to prices. His view now is that the solution of the Transfer Problem can come only from a reduction of German wages *below their current market level*. The problems as to whether the profit rate in the export trades is too low or as to whether the domestic wage *structure* of Germany is the one required by the solution of the Transfer Problem are suddenly dropped from the discussion. Keynes might also have looked at the manipulation of the German *structure of relative prices* in order to solve the Transfer Problem, but he does not do so. Instead,

he leaves all these questions unanswered and introduces a view for which he has not laid down any basis, namely, the view that the obstacle to the solution of the Transfer Problem is that labor in Germany is too dear in relation to the victor countries.

His view now is that the Transfer Problem can be solved only if German labor (in *general*, that is, in the export as well as in the domestic sector) is made cheaper than labor in the victor countries. However, as we are about to see, it is not only that German *wages* are too high, but also that German *profits* are too high:

“The expenditure of the German people must be reduced, *not only* by the amount of the reparation taxes which they must pay out of their earnings, but also by a reduction in their gold-rate of earnings below what they would otherwise be.” (Keynes, 1929, 165)

The reduction in the expenditure of the German people by reparation taxes solves the Budgetary Problem; the reduction in the “gold-rate of earnings” of the German people, which is but the reduction in their real *wages and profits* below their market level, provides the key to the solution of the Transfer Problem because, in the end, it is the only way to get a German trade surplus equivalent to the Reparation transfers.

“That is to say, there are two problems, and not -as those maintain who belittle the difficulties of transfer- one problem.” (Keynes, 1929, 165)

Nobody has denied that there were two problems; indeed, as we saw above, the Dawes Committee started from the premise that the Reparations involved a Budgetary and a Transfer Problem. “Those who minimise the Transfer Problem” do not deny its existence; that they “minimize” it means that they admit its existence at the same time that they claim that it can be and that is being solved. To refute them, Keynes should prove that the Transfer Problem cannot be solved, which is what is going to do, but not on a *theoretical*, but on a *practical* basis, claiming that the required reduction in German prices is neither technically nor politically feasible because the price-elasticity of demand for German goods in the victor countries is not high enough to bring about the necessary trade surplus and because a massive cut in wages in Germany would lead to a revolution.

“Indeed, a short way of putting the case is this. The *Transfer* Problem consists in reducing the gold-rate of efficiency earnings of the German factors of production sufficiently to enable them to

increase their exports to an adequate aggregate total; the *Budgetary* Problem consists in extracting out of these reduced money-earnings a sufficient amount of reparation-taxes.” (Keynes, 1929, 165)

The reduction in the “gold-rate of efficiency earnings of the German factors of production” (which, as we just saw, is but the reduction of German real wages and profits by decree) increases German exports because it lowers German prices and demand should increase when price falls. The “adequate aggregate total” of exports is the equivalent of the money transferred. It should be noted again that the Transfer Problem is not solved when Germany reaches a certain level of *exports*, but a certain *trade surplus*; concretely, when the trade surplus is equal to the Reparations. Accordingly, the solution of the Transfer Problem, does not lie in increasing exports, but the trade surplus.

It is also to be noted that there is a conflict between the solutions to the Budgetary and the Transfer Problems in the formulations that Keynes has given us here. On the one hand, the solution to the Transfer Problem requires making Germany *poor*; by contrast, the solution of the Budgetary Problem requires making Germany *rich*. However, and contrary to what one might reasonably expect, Keynes does not dwell on this opposition and does not direct any criticism of inconsistency to the Dawes plan, nor does he attribute the impossibility of solving the Transfer Problem with a conflict with the solution of the Budgetary Problem.

“The *Budgetary* Problem depends on the wealth and prosperity of the German people; the *Transfer* Problem on their competitive position of her industries in the international market.” (Keynes, 1929, 165)

Keynes overlooks that the German people have to be “un-wealthy” and “un-prosperous” to be competitive. By the way, one might object that what depends on the “competitive position of the German industries in the international market” is not the solution to the Transfer, but to the Budgetary Problem. This can be discarded, however, because, in the context of the Reparations, the German favorable balance of trade is paid for with Germany’s own money. By running a trade surplus equal to the Reparations, Germany is only getting back the money that she had already advanced for nothing to the victors; in the end, she is giving goods for nothing to the victors, which, as Keynes sees it, is the whole purpose of the Reparations. Thus, the intended German favorable balance of trade does not provide Germany with any additional funds to solve the

Budgetary Problem, and would simply represent the completion of the transference of German goods to the victors, which, as we have abundantly seen, are actually taken to be the subject of the Transfer Problem. However, it should also be noted that to the extent that the German trade surplus is paid for *not with German but with foreign money*, the German trade surplus would be a source of funds to solve not the Transfer, but the Budgetary Problem, something that in Keynes' article is entirely entrusted to the Reparations taxes.

It should be noted that there is a *third* formulation of the Transfer Problem in this passage: "The *Transfer* Problem consists in reducing the gold-rate of efficiency earnings of the German factors of production sufficiently to enable them to increase their exports to an adequate aggregate total". Again, and in contrast to the opening sentence of the paper in which the Transfer Problem was about the workings of the foreign exchange markets, here the Transfer Problem is, again, a problem about demand. The turn in Keynes' argument is that the source of the demand problem in which the Transfer Problem consists is not the lack of coupling of preferences, but price. Keynes is of course right to hold that demand depends on price; this is standard demand theory, and nobody would dispute it. The point is that he has no basis at all to attribute the lack of demand in the victor countries to too high prices instead of to a lack in preference coupling. By the way, let me note again that he has gone astray since the very beginning when he turned the Transfer Problem into a problem about demand rather than about the foreign exchange market.

Of course, demand depends on price; my point against Keynes is that this obvious truth does not imply that the demand problem that makes the Transfer Problem unsolvable is lack of price. It might be lack of price, sure, but nothing of what Keynes has said shows that this is the case.

To paraphrase Keynes, the transfer of £1 from one party to another cuts *income* in one party as it raises it in the other. As a consequence of these changes in income, *demand* is cut in the transfer-making country and increased in the transfer-receiving country. Obviously, this is not the end of the story, because preference and price still have to be brought into the picture. As we saw, preference was brought into the picture since the very beginning of the discussion, but price has been left outside it until now. So far, Keynes' considerations about the Transfer Problem have been about whether the

preferences of the consumers in the victor countries are such that they demand what the Germans cease to consume and, of course, about whether Germany was releasing or producing enough goods to satisfy the extra demand of the victors. This is why he directed his attention, first, to the German structure of production, to declare it either insufficient or unfit to the preferences of the victors and, secondly, to German wages, to declare its structure inadequate and distorted by the American loans, and its general level too high in relation to foreign wages (without any basis, by the way).

Certainly, price is one of the variables that determine demand, but Keynes does not tell how a general price reduction in Germany can remove all the obstacles that he had previously considered. Indeed, he totally obliterates all the previous difficulties that he had himself posed and focuses on price only without any explanation. We can remake Keynes' example in order to reformulate the Transfer Problem in accordance with this new obstacle of price. I will choose *not* to spend my extra £1 in "precisely the same goods as those of which you are compelled to diminish yours" if you sell those goods to me at a price higher than that at which I can get them someplace else. Despite the increase in my income and despite the fact that my preferences may lead me to purchase the goods that you cease to consume, I will choose *not* to buy from you if the price is not right. In this case, there would be a Transfer Problem because the transfer of the £1 will not be followed by the transfer of the equivalent in goods (which is Keynes' second and improper formulation of the Transfer Problem). The cause of the problem is not that you are not sufficiently abstinent, nor that you are not sufficiently productive, nor that your structure of wages is wrong, nor that the profitability of the export sector is too low in relation to the domestic sector, but that your prices are too high in the international market –and your prices are too high because you earn too much, either as worker or as capitalist.

Keynes is obviously right to claim that German too high prices do not certainly contribute towards a German trade surplus or an increase in German exports, but he does not provide any argument that may establish that the Transfer Problem is a price problem. With the baseless introduction of price Keynes is just adding more confusion to his already confused discussion.

Sure, if Germany offered her goods to the victors for nothing, the Transfer Problem will be automatically solved if the victors wanted exactly the goods that

Germany offers to them. Note, however, that there would be a Transfer Problem, even in the absence of any *transfer of money* or any *conversion of currencies*, if the victors did not want the goods that Germany offered to them. If the subject of the Transfer Problem is the *goods* and not the *money*, as in the end it is in Keynes, money is an optional means for the transfer of the goods. The justification for the requirement of Reparations in money rather than in kind would be that money is a better means to allocate the particular goods to the particular demanders of them.

This also means that a reduction of German prices, however dramatic, will be unable to solve the Transfer Problem if all the obstacles treated before by Keynes are not removed. The Transfer Problem would not be solved even if the German went to the extreme of offering their goods free to the victors if the victors do not have a preference for these goods, or if the Germans do not offer as many goods as the victors want, either because they are not sufficiently abstinent or because their structure of relative wages or prices is at odds with the preferences of the victors.

Having all this in mind, let us return to Keynes' paper, the paper in which his goal is to establish that the Dawes plan posed an insurmountable Transfer Problem. The argument of Keynes I fatally undermined by the baseless premise that the solution of the demand problem underlying the Transfer Problem relies on the reduction of German prices:

“If x is the percentage by which German efficiency-wages in terms of gold have to be reduced in order to develop an excess of exports sufficient to pay for Reparations, x –we may say- is the measure of the gravity of the Transfer Problem.” (Keynes, 1929, 165)

“An excess of exports sufficient to pay for Reparations” means a balance of trade sufficiently favorable to pay for the Reparations that is, a trade surplus equal to the money transferred as Reparations. x is the measure of the extent to which deflation should be forced in order to adjust the trade surplus to the demands of Reparations.

“In the light of these considerations, what reduction in the money-rates of German wages will be required to increase German exports of finished goods by 40 per cent.? I do not venture to guess - except that I should expect it to be substantial. Only those who believe that the foreign demand for German exports is very elastic, so that a trifling reduction in German prices will do what is required, are justified in holding that the Transfer Problem is of no great significance apart from the Budgetary Problem.” (Keynes, 1929, 167)

Keynes' thesis here is that the solution of the Transfer Problem requires an unworkable deflation in Germany. In other words: the obstacle to the solution of the Transfer Problem is purely *practical*, in no way *theoretical*. If elasticity were not that low in the victor countries, the required deflation could be workable and the Transfer Problem could be solved, but, as matter of fact, this is not the case, and the deflation required is so strong that either we provoke a revolution in Germany or kill the value of her currency, none of which options is beneficial for Britain.

“My own view is that at a given time the economic structure of a country, in relation to the economic structures of its neighbours, permits of a certain “natural” level of exports, and that arbitrarily to effect a material alteration of this level by deliberate devices is extremely difficult.”

Against the Dawes Committee, Keynes claims here that the trade surplus should not be forced in accordance with Reparations, but, reversely, that Reparations should be set in function of the state of the German balance of trade.

“The next question is -How does the Dawes scheme propose to bring about this reduction of wages? The answer is that it makes almost no contribution to the solution of this problem. The easiest method would be to allow the exchange value of the German mark to fall by the amount required to give the necessary bounty to exports and then to resist any agitation to raise money-wages. But it is precisely this method which the Dawes scheme's device of “transfer protection” expressly forbids. Nor -as I read the Dawes scheme- is there any compulsory deflation when the “transfer protection” comes into play and the proceeds of the reparation-taxes accumulate within Germany, since these proceeds are to be invested in the short-loan market.” (Keynes, 1929, 167)

The solution of the Transfer Problem would be either massive deflation or massive depreciation of the German currency, or perhaps a mixture of both. However, the fact is that the “transfer protection” envisaged in the Dawes plan rules out devaluation, so the only option left is forced deflation. The “protection” against the devaluation of the German currency (that prevents Germany from boycotting the Reparations by resorting again to hyperinflation) makes Germany unable to lower the prices of her goods for the victors as Keynes (baselessly) takes to be required to solve the Transfer Problem. The only solution would therefore be to engineer a massive deflation within Germany. This maneuver bumps into the fact that the price-elasticity of demand for German goods in the victor countries is quite low. However, the obstacle to the solution of the Transfer Problem is not this low elasticity, as it is sometimes claimed in the literature (see, for instance, Backhouse, 1988, 250 and Eichengreen, 2001, 684)

and as Keynes himself suggests at times, but the social and political upheaval that will more than surely arise from a forced large cut in German wages (and profits).

With this mention of the “transfer protection “clause” of the Dawes plan we find at last something about the foreign exchange market. The “transfer protection” clause sustains the value of the German currency not only against the market, but also against the German government. What would happen if it were abolished? Will the German government resort again to the destruction of the value of the currency? From a theoretical standpoint, however, the main question is: will the market bring down the value of the German currency to such an extent that Germany will become unable to purchase the sums of foreign currency demanded from her? Unfortunately, Keynes says nothing about these questions, which, according to his own initial formulation, are the questions that he should have answered or at least discussed. Once again, the point is missed.

Indeed, Keynes has based all his discussion on the erroneous premise that the only function of money is to be exchanged for goods, which has led him to taking it for granted all along his presentation that the real subject of the Transfer Problem is *goods* and not *money*. This error seriously undermines all the theoretical content of Keynes’ discussion which, in the end, and contrary to what Keynes himself suggests, deals with a practical rather than with a theoretical question. The fact is that there would be no Transfer Problem if Germany was required to pay less as Reparations. At the end of the day, Keynes’ view seems to be that the Dawes plan has set too high a target for Germany. Nothing suggests that Keynes is trying to say that *all transfer poses an insurmountable transfer problem*. His confused paper could be understood to be claiming that the target of the Reparations should be set at a level lower than that at which the Dawes plan set it. The unfeasible deflation that the Dawes plan ultimately requires is the measure of its excessive ambitions.

“If, however, we suppose that, by agreement with the Reichsbank, deflation is enforced, how will this help? Only if, by curtailing the activity of business, it throws men out of work, so that, when a sufficient number of millions are out of work, they will then accept the requisite reduction of their money-wages. Whether this is politically and humanly feasible is another matter. Moreover, an attempt by foreign financiers [KMO: basically American] to withdraw some part of their vast short-term loans to the German Money Market, estimated at £300,000,000, might be a by-product of a violent political and economic struggle aimed at the reduction of wages in the interests of foreign creditors.” (Keynes, 1929,

169)

In this passage, the Transfer Problem cannot be solved because it requires such a strong cut in German wages in order to make German goods sufficiently cheap that there will be a revolution in Germany that, among other things, will run over the Reparations.

An interesting question would be if Keynes was maneuvering to stop the rapid expansion of American banking that took place at the end of the war, the main victim of which was the British banking industry. It is well known that the US lent massively to Germany after the war; that Germany made all her Reparation payments out of US loans and that the US lent to Germany nearly twice as much as Germany needed to meet the Reparation payments. It is also known that France and Britain depended heavily on the German Reparation payments, which suggests that the French and the British were in desperate need of *money* (not of *goods*) after the war, in order, among other things, to repay the loans that the US had granted to them during the war. The plan of the French and the British was to repay their war loans to the Americans out of the German Reparations. But another choice was to cancel the Reparations, because this would provide Britain with an excellent excuse to cancel her debts to the Americans. Unlike Britain, France never opted for this way, and remained stubborn in her demand of Reparations from Germany.

2. Ohlin's 1929 Paper

Ohlin starts by noting that Germany is borrowing from the US twice as much as she is paying out to the Agent General. We saw how Keynes acknowledged that Germany was borrowing from the US in order to “temporarily solve” the Transfer Problem but he did not mention the large scale of the flow of money from the US to Germany. Ohlin agrees with Keynes that the American loans are the cause that explain why the German structure of production has not tilted towards exports at the expense of the domestic market and why Germany is not running a trade surplus. Contrary to Keynes, however, Ohlin claims that Germany has used the American loans not only to expand the domestic production of “capital” goods, something that Keynes acknowledged, but also to increase her *imports*, something that Keynes denied. No wonder that German imports have not fallen and that Germany is running a negative

(instead of a *positive*) trade surplus, as the solution of the Transfer Problem requires. Besides, Ohlin points out that the money lent to Germany by the US involves the corresponding fall in American buying power and, thereby, the corresponding fall in American imports from Germany, which contributes even more to the negative sign of the of the German balance of trade. However, like Keynes, he does not see any “transfer problem” in the massive flow of American loans and, therefore, of *money* to Germany. Indeed, as we are about to see, Ohlin repeats the error of Keynes that the only function of money is to be exchanged for goods and, just like him, makes *goods* and not money the subject of the Transfer Problem.

Ohlin intends to refute the argument of Keynes’ that the solution of the Transfer Problem requires a dramatic fall in German prices. The start of Ohlin’ argument is rather confusing, as he poses the problem in terms of an example of his own that is unrelated to the terms in which Keynes made his case:

“A and B are two countries with normal employment for their factors of production. A borrows a large sum of money from B this year and the same sum during each of the following years. This transfer of buying power directly increases A’s demand for foreign goods while it reduces B’s. Thus, A’s imports grow and its exports fall off. If the sum borrowed is 100 mill. marks a year, the excess of imports in A brought about in this direct manner will be 20 mill. marks. For in large countries only a small part of demand turns directly to foreign goods or to export goods [KMO: is this a fact or a law?]. The rest, 80 mill. marks, increases the demand in A for home market goods.” (Ohlin, 1929, 172)”

Simply to avoid equivocations, it is convenient to note how Ohlin sets at the same level a loan and a payment of an indemnity. To the extent that in both cases money is transferred from some country or party to another he is of course right, but the similarity ends right there, for the indemnity represents money in exchange for which nothing is received, whereas the loan will return together with the corresponding interest. However, let us leave this aside. For simplicity, let us not speak of “millions of marks” as Ohlin does, but of “dollars” and, let us accordingly assume that B makes a transfer of \$100 to A. Like Keynes, Ohlin poses the Transfer Problem in the following terms: Will the \$100 return from the transfer-making country to the transfer-receiving country in exchange for the equivalent in goods? Since his goal is to refute the otherwise baseless view of Keynes that the Dawes plan required massive deflation in Germany in order to make this happen, we can add: Will this happen without deflation in the transfer-making country?

Before proceeding any further, I would like to note that Ohlin's systematic substitution of "money" for "buying power" reveals his underlying view that money is just a means to goods, which is the same insufficient comprehension of money that we found in Keynes. The transfer of \$100 from B to A increases "buying power" in A to the same extent that it decreases it in B, says Ohlin. Thus, *money* and *real income* in A rise together as a consequence of the reception of the new buying power (money) to the same extent that real and money income fall in B as a consequence of the loss of money. Without any explanation, Ohlin proceeds to state that the increase in A's income leads to an increase in *A's demand for B's goods*; more concretely to a rise in A's imports from B by \$20. In B we have the reverse situation. However, the question remains: Why should the transfer have these effects on exports and imports? Why should the transfer increase A's demand for B's goods *instead of for A's own goods*? Symmetrically, why should imports fall in B as a consequence of the contraction of the money supply? Why is it that the loss of money is not accommodated by a contraction of the domestic demand only?

Ohlin points out that Germany, represented by B in the example, is not cutting her imports from A, which represents the victors except the USA, because the USA is transferring to B twice the amount of money that B is transferring to A. He accuses Keynes of having ignored this fact; this ignorance is what has led Keynes to claiming that "the German balance of trade already has most of the benefit of this", where "this" stands for the "German abstention from consuming foreign goods". According to Ohlin, the Germans are not precisely "abstaining" from foreign goods, but increasing their appetite for them with the American loans.

Ohlin introduced the assumption that A increases her imports from B by \$20; the rest, \$80, enhances A's domestic demand for goods produced in A. Ohlin does not mention B, but it is easy to see that B's income should fall by \$100. If we proceed by symmetry, B should cut her imports from A by some portion of the indemnity and her domestic market should shrink by the remaining portion. In more modern terms: the transfer raises real income in A; thus A chooses a new optimal bundle of goods that contains *more* goods than before, whereas utility maximization leads B to choosing a new optimal bundle of consumption goods that includes less goods than before. Note that how, just by assumption, there arises a Transfer Problem in so far as \$80 of the

indemnity of \$100 remain in A. Keynes would say that until those \$80 return to B in exchange for goods, the Transfer Problem has not been solved. The question, then, is: Is there a mechanism that ensures the return of those \$80 from B to A in exchange for B's goods? As we are about to see, Ohlin answers to this question in the affirmative.

Ohlin starts by noting against Keynes that the facts do not show that the Transfer Problem is not being solved because of a lack of price for the German goods, that the income effects of the transfer of money are not powerful enough to solve the Transfer Problem:

“This fact, that the total buying power has been increased, not reduced –and that consequently experience tells nothing concerning the efficiency of a transfer of buying power in creating a German export surplus- is ignored also in the following passage, which forms the starting point for the whole reasoning in the rest of Mr. Keynes' paper: “Now, what prevents Germany from having a greater volume of exports at the present time? (...) The available facts seem to indicate that (...) the solution of the Transfer Problem requires a reduction of German gold-costs relatively to such costs elsewhere.” (p. 164) Nothing is said about the influence of the German borrowings, which (...) largely explain why Germany's productive resources have to such an extent been used for production of capital goods for the home market and have not increased the output and marketing of export goods.” (Ohlin, 1929, 171-2)

Keynes has failed to take all the facts into account and this had led him to the erroneous conclusion that the facts show that the income effects of the transfer of money have not been enough to set in motion the return of the money transferred in exchange for goods. This is why ended up appealing to price. It is to be noted that Ohlin overlooks here the fact that Keynes had taken into account many other obstacles to the solution of the Transfer Problem than income effects, but this has already been made sufficiently clear. As Ohlin sees it, Keynes has arrived at the erroneous conclusion that the income effects of the transfer are not enough to solve the Transfer Problem because he has obliterated the fact that the transfers from Germany to the victors are far more than offset by the large transfers from the USA to Germany. This is why the records do not show a positive trade surplus in Germany, but all the contrary. Income in Germany has been *increased*, not cut, despite the payment of Reparations because the American loans have more than made up for the loss in income consequent upon the loss of the money of the Reparations. The facts show not that the income effects of the Reparations have failed to set in motion the return of the Reparation payments to Germany in exchange for goods, but that, as matter of fact, Germany is not a net transferor, but a net

receiver of transfers (of money), which is why the rest of the world runs a negative trade surplus in relation to her.

This means that the rest of the world (or, rather, the USA) is successfully solving without massive deflation the Transfer Problem that the loans to Germany might pose. According to Ohlin, the money transferred from the USA to Germany is successfully returning to the USA in exchange for goods Ohlin, 1929, 176-7). As Ohlin sees it, the relations between the USA and Germany show that the income effects are enough to solve any eventual Transfer Problem without price adjustments.

Clearly, Ohlin is at odds with the Quantity Theory tradition and its specie flow mechanism. According to this tradition, the \$100 transferred from A to B should inflate the general price level in A at the same time that they should deflate the general price level in B. As a consequence of this change in relative international prices (in the terms of trade) that enhances the demand for the now cheaper goods of B and weakens the demand for the now dearer goods of A, B's exports to A should grow at the same time that A's exports to B should fall. The demand for foreign goods in A rises as prices in A rise as a consequence of the increase in the quantity of money; reversely, B's demand for foreign goods falls as the quantity of money falls in B and with it, the price level. The rise in A's imports from B combined with the fall in B's imports from A brings about a trade surplus in B equal to the money initially transferred. Borrowing from Ohlin's example, we may say that the \$100 first transferred from B to A return to B as the equivalent in goods is sent from B to A because of the increased difference in the level of prices in the two countries caused by the transfer. However, this increased difference tends to disappear as the money transferred returns from A to B and the price levels of the two countries tend to converge to the parity of purchasing power. In modern parlance: the transfer induces such price differentials that the initial transfer of "financial capital" is followed by an equivalent transfer of "real capital".

In this mechanism, the factor that triggers the flow of goods and, thus, the solution of the Transfer Problem, is *price*; income, preference, productive capacity, abstinence, elasticity, relative prices, and relative and absolute wages are implicitly supposed not to pose a problem. Of course, one can bring into the picture all these factors, but this, far from bringing light to the discussion would just bring obscurity and

confusion as long as the severely insufficient view that money is just a means to get goods remains at the center of the discussion.

It is clear that the quantitativist specie-flow mechanism is not the mechanism envisaged by Ohlin. In opposition to Ohlin, I am going to argue that it is not the mechanism envisaged by Keynes either. In Ohlin's story, the indemnity transferred from B to A does not inflate prices in A as it deflates prices in B, but increases *income* and *demand* in A as it cuts them in B. Ohlin takes it for granted that *real* income changes at par with *money* income, something that requires prices to stay constant despite the symmetric changes in the supply of money in A and B. On what ground does Ohlin challenge the Quantity Theory?

To answer this question, let us return to Ohlin's story. B transfers \$100 to A (as A transfers nothing to B, of course: we are not talking about exchanges here). A spends in goods from B only \$20 of those \$100. The rest, that is, \$80, remains within A and raises the overall demand for home market goods in A. As a consequence of the \$20 increase of imports from B, A's balance of trade tilts towards a deficit as B's trade balance tilts towards a surplus. However, there still remains a Transfer Problem because we have \$80 that have not yet returned to B in exchange for goods; moreover: it seems that those \$80 have already find a home in A. The question is: Is there any further effect that should trigger the return of the \$80 to B in exchange for the equivalent in goods and, thus, the complete solution of the Transfer Problem *without any price adjustment*?

"Evidently, Mr. Keynes and the school of economists who share his view think that this is the end of these \$80. As they do not directly increase the excess of imports, they can have no effect whatever on the balance of trade." (Ohlin, 1929, 173)

If the "school of economists who share Mr. Keynes' view" is the school of the Humean Quantity Theory tradition, it is to be noted that this school would not say that the \$80 that remain in A "have no effect whatever on the balance of trade". As far as I know, this school would say all the contrary, namely, that the \$80 that are added to the quantity of money in A will inflate prices in A. As a result, A's exports to B will fall as B's exports to A will rise, which means that the \$80 in question will not remain in A, but will be sent back to B in exchange for goods. This means that the Transfer Problem is solved by the \$20 directly sent back to the transfer-making country and by the \$80

that will follow suit because of the further price adjustments that will necessarily take place as a consequence of the transfer. By the way, if the \$20 returned from B to A it is because those \$20, just like the \$80, inflate prices in A as they deflate them in B. In other words: the price effect that sends back the \$20 is exactly the same as the price effect that sends back the \$80. Both the \$20 and the \$80 will be sent back from A to B because of the symmetric inflation and deflation that they cause. We can see that Ohlin misunderstands the position of the Quantitativists. However, the question remains: Is Keynes another Quantitativist?

We did not see any mention of price adjustments in the transfer-receiving country in Keynes's paper. In addition to this, and more importantly, we did not see any claim in Keynes that the transfer lowers prices in the transfer-making country; all the contrary: according to Keynes, the Reparations posed a Transfer Problem just because the transfers of money were *failing* to lower prices in Germany to the extent required to bring about a trade surplus equal to the money transferred. On this score, Keynes cannot be said to share the Quantity Theory; moreover, his suggestion seems to be that the facts prove the Quantity Theory to be wrong as they are at odds with its predictions. It seems therefore, that Ohlin does not do justice to Keynes' position. By the way, we could say that rather than on a theory, Keynes' final appeal to deflation rests on a *lack of theory*.

However, it is true that Keynes entrusted the return of the \$80 that remain within A to a price adjustment. However, this provides further evidence that Keynes was not thinking according to the Quantity Theory, as he said nothing about any inflation in the transfer-receiving country. In fact, Keynes, like Ohlin, builds his argument on the tacit premise that the transfer of money does not have any price effect in any of the two countries. Hence his appeal to *forced* price changes that he otherwise deems unfeasible. Ohlin does not intend to reply to Keynes that the required price changes are feasible, but that no price changes are required because the income effects are enough:

“I venture to suggest that [KMO: the \$80 that remain within A –without inflating prices] set in motion a mechanism which indirectly calls forth an excess of imports in A of about the same magnitude. Just as the loss of this buying power indirectly creates an export surplus in B; or, rather, these changes in buying power bring about at the same time an excess of imports in A and of exports in B.” (Ohlin, 1929, 173)

Here is how:

“The increased demand for home market goods in A will lead to an increased output of these goods. In a progressive country this means that labour and capital, that would otherwise have passed to export industries and industries that produce goods which compete directly with import goods, now go to the home market industries instead.” (Ohlin, 1929, 173)

The increases in money and real income that the \$80 cause in A lead to an increase in spending in A which in turn leads to the *expansion of production*. More than one economist would reply that this sudden increase in demand will not lead to an expansion of production, but to *inflation* because of excess demand, unless the transfer-receiving country had enough excess capacity in exactly the industries that produce the goods the demand for which has risen. Ohlin does not consider this objection and, without any justification, he claims that the rise in demand caused by the \$80 that are spent within A leads to an equivalent expansion of production in A for the home market. This is important, as he is excluding by hypothesis that the transfers may have any price effect.

The expansion of production for the home market is effected at the expense of the export market; concretely, at the expense of the industries that produce goods for export and goods that compete against imports. Accordingly, the \$80 that remain within A set in motion a process of *reallocation* of A's capital, that is, a change in the structure of production in A. Capital is diverted from external trade and reallocated to domestic trade. It is unclear whether total capital stays the same or increases as a result of the transfer; all we are told is that its allocation is changed.

“Output of these “import-competing” goods and of export goods increases less than it would otherwise have done. Thus, there is a relative decline in exports and increase of imports and an excess of imports is created [KMO: of \$80 in addition to the previous \$20, so we arrive at the total surplus trade of \$100 required]. A corresponding adjustment takes place in B. Home market industries grow less as a result of reduced demand for their products, and the labour and capital turns in greater proportion to export industries and industries manufacturing goods which compete directly with import goods. The outcome is an excess of exports. B finds a widened market for its goods in A as a result of the adaptation of production which takes place in that country. Thus, the readjustment of production is the consequence of the change in buying power in the two countries.” (Ohlin, 1929, 173)

And not of any price change. By the way, would not it be more reasonable to expect a *contraction* of the international sector in A, rather than a slower *expansion*, as Ohlin says here in contrast with what we have just seen in the previous quotation? Indeed, on what ground would A's export sector *expand* its output at all *if B's demand for A goods has fallen* as a consequence of the transfer, as Ohlin himself acknowledges? What basis is there to say that the output of goods for export in A "increases less than it would otherwise have done"? It should *fall*. Besides, the industries that directly produce for export and those that produce import-competing goods are not on the same position, as the former depend on *foreign* income and demand whereas the latter depend on *domestic* income and demand. The market of the industries that produce import-competing goods depends on *price* rather than on *income*, if, as usual, the foreign and the domestic goods are *substitutives*. However, this is a secondary point and we may leave it aside.

The \$20 that were sent back to B in exchange for imports would bring goods from B at B's expense. Ohlin's point is that the \$80 that remain in A also bring goods to A at B's expense, so consumption in A increases by the same amount as the money transferred, in such a way that the Transfer Problem gets solved because B will have a trade surplus equal to the money transferred. The Quantity Theory and Keynes overlooked the effect of those \$80 because their effect, in contrast to the effect of the \$20, is "indirect". Ohlin's point is that consumption increases in A not only by \$20, but also by \$80; the difference between the \$20 and the \$80 is that, in the former case, the new goods are produced in B, whereas, in the latter case, they are produced in A, but at B's expense. On this ground, Ohlin replies to Keynes that B's positive trade surplus increases first by \$20 and then by \$80 up to a total of \$100 without any deflation in B or inflation in A because the transfer ends in a rise in consumption of goods in A equal to the transfer; \$20 fed with goods produced in B and \$80 fed with *goods produced in A*, which is why this latter fraction may go unnoticed, as in Keynes' paper. The \$80 represent a fall in A's exports to B because the final effect is the same as if A had spent the \$80 in goods from B.

To put it otherwise: the transfer pushes B to become an exporting country at the same time that it pushes A to become an importing country without any price effect and just because of the implied changes of the size of the markets. The proportion in

which the transfer is distributed by the receiver, A, among goods produced in A and goods produced in B depends on A's utility function. If, as Ohlin assumed without any basis, the transfer raises production and not price in A (as it cuts production and not price in B) it redirects the *production of B* to A at the expense of B, because A is where the money that buys goods is. Symmetrically, and this is what Keynes has overlooked, the transfer enhances the size of A's domestic market and redirects the *production of A* to A herself, because, again, this is where the money that buys goods is. The combined effect of these two symmetric effects is that B comes to have a positive trade surplus equal to the money transferred, that is, \$100, and the Transfer Problem gets solved without any price effect.

However, as we are about to see, in the course of his argument, Ohlin abandons the refutation of Keynes on the basis of income effects and admits changes in prices after having held that the transfer does not have price effects because the expansion in income is met by an equivalent increase (or decrease) in production. Thus, he distorts his own original refutation based on income effects and incurs in some inconsistencies that I am going to show. It should be pointed out that Ohlin's original refutation is valid as far as it goes, but it is partial, as it leaves aside price and preference:

“The monetary mechanism that brings about the changes varies with the organization of the monetary system. In all cases of fixed foreign exchanges, however, there is an increase in monetary buying power in A and a decrease in B, which may be much larger than the 80 or 100 mill. marks. A secondary “inflation” and “deflation” may be necessary to bring about the adaptation of production and trade quickly enough. The more sudden the readjustment has to be, the greater this inflation in A and deflation in B, and the greater the changes in sectional price levels that are called forth.” (Ohlin, 1929,

Ohlin mixes up here changes in the price level with changes in relative prices as he makes a concession to Keynes and, to that extent, abandons his transfer mechanism. Certainly, demand depends on price (and also on preference), but Ohlin's transfer mechanism excluded price changes because it assumed that the changes in income are followed by equivalent changes in production, which rules out price effects.

“The character of these price changes must be discussed briefly. Home market prices tend to rise in A and fall in B, relative to prices of export and import goods and prices of the goods which compete with import goods.” (Ohlin, 1929, 174)

So the prices of the goods traded in the international markets need not change in order to bring about the trade surplus that solves the Transfer Problem, though the prices of the goods traded in the domestic markets will rise in A and fall in B as a consequence of the transfer, though we are not told why, despite the fact that we were told that there is no reason why the transfer should alter prices. All this implies a change in the structure of relative prices in the two countries, though the price of the internationally traded goods remains the same.

“The readjustment of production is partly, but partly only, the consequence of this change in “sectional price levels”. (Production has a tendency to expand in the same way as demand [KMO: He means: “in the same way as *income*”, in opposition to “in the same way as *price*”. By the way, from where has Ohlin got this law?], i. e. as the development of “markets”, even without the stimulus of considerable price changes.” (Ohlin, 1929, 174)

“*Partly?*”; “*Considerably?*” Ohlin’s vague language is the consequence of his inconsistent concessions to Keynes. If production has indeed a “tendency to expand in the same way as demand”, that is, as *income*, what basis is there to introduce price changes? It should also be noted that in Ohlin’s original mechanism, the change in the “sectional price levels”, that is, in the structure of relative prices, was not the cause of the “readjustment of production”, which was entirely caused by the income effects that the transfer was supposed to bring about.

“It is not necessary that A’s *export* prices should rise and B’s fall [KMO: the Quantity Theory *predicts* these changes; it does not *call for* them]. Thus, B need not offer its goods on cheaper terms of exchange to induce A to take a greater quantity of them.”(Ohlin, 1929, 174)

Here Ohlin returns to his original mechanism and discards price changes. It is to be pointed out that Keynes should not have a problem with an income adjustment unless he had a problem with standard demand theory. Indeed, the problem, as he saw it in an initial stage, was that the income effect can be frustrated by a lack of coupling of preference. Afterwards, he left this aside and claimed instead that the income effect will be frustrated if price is not adequate, something that nobody disputes and that contributes nothing to the solution of the question as to whether the Dawes plan posed an insurmountable Transfer Problem.

Likewise, Ohlin should not have a problem with the view of Keynes, (actually, of standard demand theory) that demand depends on price. It is clear that if the transfer

of money from B to A increases real income in A (at the expense of an equivalent contraction in B), there is no need for B to offer its goods to A at a lower prices in order to justify an increase in B's exports to A. The most likely answer is that a combination of the two effects is required. The standard literature on the Ohlin-Keynes debate has focused on this by analyzing the conditions that the income-elasticity and price-elasticity of demand should meet for the Transfer of goods to be carried out. The debate is further obscured when Ohlin brings into the picture the Quantity Theory to misinterpret it and to misattribute it to Keynes.

“Indirectly, however, it is probable [KMO: again, vague language] that a certain shift of the terms of exchange will take place. The increased buying power in A [KMO: rather than the rise in *buying power*, the rise in *general inflation*] will to some extent affect also the prices of its export goods and its “import-competing” goods in an upward direction, while the corresponding classes of goods tend to become cheaper in B. In that way the readjustment of the balance of trade is made easier.” (Ohlin, 1929, 174)

Again, a baseless concession to Keynes. It is clear that demand depends on price, but this is not what is at issue. Ohlin notes that his mechanism left price aside, and in order to bring it into the picture, he appeals to the Quantity Theory, despite the fact that his mechanism was intended to provide an alternative to it.

“Note that the price changes are quite different from those assumed by the classical barter theory [KMO: actually, by the Quantity Theory, which, by the way, is not a theory about barter, but about the value of money.], which seems to underlie Mr. Keynes' analysis [KMO: “*seems*”? As we saw, Ohlin is wrong on Keynes]. Mill and after him Edgeworth, Taussig and many of their followers would say that *B must offer its goods on cheaper terms of exchange in order to induce A to buy more.*” (Ohlin, 1929, 174)

Mill, Edgeworth, Taussig and “many of their followers” would *not* say that “B *must* offer its goods on cheaper terms of exchange in order to induce A to buy more”; they would rather say that the transfer of money from B to A will lower prices in B and raise them in A in such a way the transfer would bring about an equivalent trade surplus for the transfer-making country. We have already seen that Ohlin misunderstands the position of the Quantitativists.

“If the mechanism I have endeavoured to indicate briefly above corresponds to reality, evidently, a sufficient adjustment of the balance of trade may take place without any considerable reduction in B's export prices or increase in A's [KMO: again, vague language]. It seems, therefore, very

misleading to represent the increase in B's exports as due entirely to a reduction in its export prices." (Ohlin, 1929, 175)

Ohlin need not devise his story with changes in sectional price levels and without any excess demand in order to argue that the \$80 that remain within A would bring about an equivalent fall in A's exports to A that, added to the initial increase of \$20 in A's imports from B, would lead to a trade surplus for B equal to the money transferred. He need not do so because it was enough with looking at the symmetric situation of B. The transfer of \$100 from B to A, on the one hand, leads A to import \$20 more from B. This poses no problem and would not be disputed by anybody. The problem is all about the \$80 that are spent within A. Will they bring about an equivalent fall in exports from A to B that ends in the target trade surplus of \$100 in favor of B? According to Ohlin, they will, because, after paying the indemnity, with what money would B be able to sustain her imports from A? It is only natural that A diverts her production from exports to B, for the very simple reason that B does not have income or money to pay for them because he has paid the indemnity. There is no need to appeal to changes in sectional price levels or to changes in the terms of trade to arrive at this conclusion.

Ohlin unduly complicates his answer with his baseless concessions to the Quantity Theory and to Keynes. When B transfers \$100 to A, A gets the equivalent in goods from B without any price changes as follows: 1) A sends back \$20 to B in exchange for goods just because her new optimal bundle of goods requires the inclusion of those goods that happen to be produced in B; 2) people in A spend the remaining \$80 in A and A's productive capacity can be expanded as required to meet the increased demand (otherwise, some price inflation because of excess demand is unavoidable). This way, A ends up consuming \$80 more in goods *at the expense of B*. A cuts by \$80 her exports to B just because those \$80 are not there any longer; now they are in A. This is why A's capital is reallocated to the increased home market at the expense of the international sector. This is all Ohlin needs to reply to the otherwise baseless claim of Keynes that A can consume \$100 more at the full expense of B only if B cuts prices.

3. An Interesting Conflict Between the Financial and the Industrial Interest

At the end of his paper, Keynes writes:

“But the retention of “transfer protection” may be desirable from other points of view than Germany's. Addressing the shareholders of Barclay's Bank last January, Mr. F. C. Goodenough said: -“It will be of great importance that the amount to be fixed should be not only acceptable to the Allies, but such as will obviate, as far as possible, forcing Germany into excessive industrial competition with the rest of the world through compelling her people to accept too low a standard of living.” If Mr. Goodenough is right, some measure of “transfer protection” should be retained.” (Keynes, 1929, 169)

Some measure of “transfer protection” is to be kept because, otherwise, Germany will become so competitive and, therefore, rich (as the “German people” gets poor), that she will drive the industries of the victors out of business. As we saw, the poverty of the German people is the wealth of Germany. This wealth is what the victors plan to confiscate. But Germany is made rich not only at the expense of her people, but also at the expense of the industries of the victors. If the solution of the Transfer Problem requires Germany to produce much and cheap, Germany will displace the industries of the victors from the market, unless the victors also decide to get rich by impoverishing her peoples. Curiously, the victors have such an appetite for German goods that they are willing to ruin their own national industries.

This sounds strange, even more so in a content in which France and Britain had huge loans to repay to the USA as the USA were extending huge loans to Germany as well. Strangely enough, it does not occur to Keynes that the goal of the Reparations may be to get money, not goods from the victors. In such a case, the Reparations would benefit the banking industries of the victors. Their appetite for money is so strong that they are willing to hurt their own national industries, as they are willing to flood the world with cheap German goods against which they cannot compete. Let us also note that in the Keynes-Ohlin debate there are no references to the price of money or to the levels of banking reserves, at a time when Europe had destroyed itself with money borrowed from America (and out of her own reserves of money –and men, of course).

We can find the same conflict between money and goods, or between banking and industry in Ohlin:

“Whatever the possibilities of automatic transfer, there can be no doubt that deliveries in kind, i.e. an organised shifting of demand, can bring about an export surplus from Germany of the size and value envisaged in the Dawes plan. (...) Such a policy, like one of automatic transfer, assumes a readjustment of production in the countries which are to receive the indemnity payments. As everybody knows, this is not Great Britain or Italy, but partly France, partly and largely the United States

(reparations being used to pay the inter-allied debts). Almost certainly, however, the United States will continue to export huge sums of capital to South America. It may be argued, therefore, that the ultimate recipients of the reparation amounts are France and South America. In principle, the safest and simplest way of organising the reparation payments would be a policy of deliveries in kind from Germany to France and the South American nations, which require imports of many commodities German industry is well able to produce.

Unfortunately, such a policy is outside the range of practical possibilities. The inevitable opposition of powerful American and British export industries to any such plan is one of the real obstacles, perhaps the greatest of them all, which lie in the way of an organised solution of the reparation problem.” (Ohlin, 1929, 179-80)

It is only natural that the industrial interest in the victor countries was an enemy of the reparations.

If one follows Keynes, it seems that the only way to make Germany able to pay for the reparations is to convert her into an economic super-power. Germany has to be made rich if she is to be able to pay a lot of money. A poor cannot pay much. Thus, the only way Germany can get the money is by becoming more competitive than the victors. If Germany outsells the victors, she will displace the capitals of the victors in the international markets. What a victory for the victors! To make Germany rich *in money* the German people have to be made poor.

What kind of Germany did the victors envisage in 1919? What was their “design” for Germany? In the ancient times, the vanquished peoples were employed or sold as slaves; their riches were seized by the victors and distributed among them. In no case was the policy of the victors to raise the vanquished people into a super-power. Certainly, and this was very frequent in Roman occupation, a productive country or city may be a very interesting cow to milk which it would be silly to destroy. The key in such cases is to be able to levy a tax on the production of that city or country.

Reading Keynes and Ohlin, it seems that the plan of the victors for Germany in 1919 was to turn Germany into a slave of the victors. The cheap and very productive class of German laborers should produce a big profit for the German capitalist class, a profit that would be sequestered by the victors under the guise of Reparations taxes. At the same time, German assets were to be confiscated by the victors (though the Germans hid as many assets as they could in Switzerland).

In contrast to ancient times, where the defeated were deprived of what they had, it seems that the purpose of the victors in 1918 was to deprive Germany of what it had *as well as of what she did not yet have*. In the ancient times, when a country won a war over another, the victor seized upon all the goods she could and sold the inhabitants of the vanquished country as slaves. In 1918, the equivalent would be that Germany produces goods for the victors and does not receive any payment from them. This would be a direct expropriation of Germany by the victors.

In contrast to Keynes and Ohlin, and to the standard literature on the Transfer Problem, everything suggests that the victors do not want *goods* from Germany, but *money*. However, Germany does not have money; all the money she had has been seized upon by the victors. Stripped of her money, Germany has still to pay a huge amount of Reparations in money. It seems that Germany gets that money at the expense of the industries of the victors (and, of course, at the expense of her own “people”). Germany has to sell cheaper than the victors, which means that Germany will displace the industries of the victors from the international markets. What a “War Reparation” that ruins the industries of the victor nations!

The demand of the victors suggests that the Reparations maneuver is a contrivance of the moneyed interest as against the industrial interest in the victor countries: the banks of the victor countries get money for nothing, or rather, at the expense of their national industries and, of course, of the German banks, industry and people.

Conclusions

One of the most striking features in the primary as well as in the second literature is the lack of clarity in the formulation of the transfer problem. According to what I have said in the body of this paper, it seems to me that the source of the confusion is a unilateral characterization of money as means of exchange that overlooks that money is the primary form of wealth in a capitalistic economy.

1) There are no references in the primary or the second literature to banking reserves and to interest. The economic systems actually envisaged are barter systems in which money is only a means of exchange. The Transfer Problem, which is announced

to be a problem about money, becomes since minute one a problem about demand. From that moment on, the point is missed and we are led to a misplaced discussion about demand theory in which the contentions of both authors are as undisputed as irrelevant to the problem at hand. Neither of the two authors has all the relevant elements into account, and, therefore, the argument of neither of them is conclusive. Even if they had, it would be no good, because they both miss the point. The ultimate cause of this degradation of the discussion lies in the inability of the two authors to note that, in capitalism, money is more than just a means to goods: it is the subject of wealth, the main form of wealth, and capital.

2) Keynes has no basis to claim that the Transfer Problem will be solved if German prices are forced down. In addition to this, he leaves unanswered the many other obstacles to the solution of the Transfer Problem that he himself considers.

3) Ohlin is pointing in the right way when he undertakes to criticize the Humean theory of money, but his effort falls way short of his aim. Also, Ohlin fails to adequately understand both the Quantity Theory and Keynes. Keynes does not claim that the transfer of Reparations will lower prices in Germany; his position is, rather, that the transfer (or, rather the continuance of the transfers) requires forcing down German prices, precisely because the transfer of Reparations does not lower prices by itself. Thus, Keynes is not Humean, but Ohlin fails to see this, and from Keynes' view that the transfer requires deflation, he mistakenly deduces that Keynes is advocating the Humean specie-flow mechanism.

4) Ohlin's transfer mechanism, misplaced as it is because the Transfer Problem is not a problem about "consumers'" demand for goods, contains a good description of income effects that Keynes does not take into account. However, it is incomplete because it does not take into account price and preference. Ohlin brings price into the picture, but by the hand of the Quantity Theory, which he wants to refute. Also, what he says about sectional price levels is either inconsistent or unnecessary.

5) There is an interesting conflict of interest between the banking and manufacture industries of the victor countries which is only slightly touched upon by Ohlin and which should be explored more in depth.

6) What was the design on the victors for the losers? Was it to convert Germany into a sort of reservoir of cheap and efficient labor for the victors, a sort of modern China or Indonesia?

REFERENCES

Backhouse, Roger (1988): “*Historia del Análisis Económico moderno*”, Alianza Universidad Textos: Madrid.

Chernow, Ron (1990): “*The House of Morgan. An American Banking Dynasty and the Rise of Modern Finance*”, Touchstone: New York.

Eichengreen, Barry (2001): “*Transfer Problem*”, in “*The New Palgrave: A Dictionary of Economics*”, Palgrave MacMillan: London, pp. 684-5.

Evans, Richard (2005): “*La llegada del Tercer Reich*”, Ediciones Península: Barcelona.

Faith, Nicholas (1984): “*Safety in Numbers*”, Hamish Hamilton Ltd: London. New edition.

Keynes, John Maynard (1983): “*The Collected Writings of John Maynard Keynes. Volume XI. Economic Articles and Correspondence*”, Macmillan, Cambridge University Press for the Royal Economic Society: London.

Keynes, John Maynard (1949 [1929a]): “*The German Transfer Problem*”, in “*Readings in the Theory of International Trade*”, the Blakiston Company: Philadelphia and Toronto.

Keynes, John Maynard (1929b): “Mr. Keynes’ Views on the Transfer Problem. III. A Reply”, *The Economic Journal*, vol. XXXIX, no. 155, September 1929, pp. 404-9.

Machlup, Fritz (1966): “*International Monetary Economics*”, George Allen & Unwin: London.

Metzler, Lloyd A. (1942): “The Transfer Problem Reconsidered”, *Journal of Political Economy*, vol. L, June 1942, pp. 497-414.

Ohlin, Bertil (1949 [1929a]): “The Reparation Problem: A Discussion”, in “*Readings in the Theory of International Trade*”, the Blakiston Company: Philadelphia and Toronto.

Ohlin, Bertil (1929b): “Mr. Keynes’ Views on the Transfer Problem. II. A Rejoinder”, *The Economic Journal*, Vol. XXXIX, no. 155, September 1929, pp. 400-4.

Rueff, Jacques (1929): “Mr. Keynes’ Views on the Transfer Problem. I. A Criticism”, *The Economic Journal*, Vol. XXXIX, no. 155, September 1929, pp. 388-99.