

SOME MONETARY LESSONS FROM THE GERMAN ECONOMISTS OF THE PAST: LIGHTS AND SHADOWS IN THE COLLECTIVE MEMORY*

Edoardo Beretta

*Università della Svizzera Italiana (USI),
Via G. Buffi 13, CH-6900 Lugano, Switzerland
E-mail: edoardo.beretta@usi.ch¹*

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Abstract. What is stopping Governments from establishing a new economic order? What are the principal stages on the way to a truly international payment system? Would an international currency unit, to be issued by a “Central Bank of Central Banks”, remove or cure many instances of disorders? Furthermore, what advice have Germanophone economists of the past centuries provided to help us avert a crisis? How can their recommendations be reformulated and/or revived?

The paper deals with these concerns among others and mostly adopts a Quantum theoretical macroeconomic approach to analyze the (forgotten) contribution of the German economists in this respect. In addition, there is enough evidence to claim that ignorance of the findings of economic thought and history has led to unbelievable mistakes in the structure of the modern international payment system.

Keywords: External Debt Sustainability, War Reparations, Economic History, International Payment System.

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1. Introduction: monetary Macroeconomics and the Source of all Crises

Even granting that the science of economics is being more and more ‘financialized’ as financial problems regarding banks, companies and other institutions are cropping up with greater frequency and urgency, a *structural* analysis of crises cannot exclude a macroeconomic-monetary approach.

Thus, side by side with economic agents’ behaviour,

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expectations and fears, there subsist some economic principles, which, if disregarded, will spark systemic crises. If the international payment system fails to comply with macroeconomic laws, then every anti-cyclical measure will fail.

On this basis, there seems to be even more urgent need for an in-depth investigation into the *fundamental* (i.e. *macroeconomic*) nature and causes of financial and economic crises, which we suggest have been only partially caused by the activities of some economic actor (i.e. *microeconomic*). And this is precisely the purpose of this scientific article. Determined to prove its point, our methodological approach is based on the findings of the Quantum School of Economic Thought, which was founded more than four decades ago by two economists: Prof. Bernard Schmitt (French) and Prof. Alvaro Cencini (Swiss). Their analyses show that as long as econom-

ics refuses to see the difference between three main concepts like *money*, *income* and *capital* and their monetary implications, nothing can significantly change. This in turn means that the roots of economic crises fuelled by (undiscovered) fallacies in the design of the current international economic order will sink even further into the ground and become harder to remove.

With specific regard to this paper and this last concern, the purely macroeconomic Quantum theoretical approach to the prescient German economists of the past is an original and innovative way of rediscovering forgotten economic literature and analyzing its elements of truth and fallacy. In addition, the analytical-theoretical methodology adopted combines elements of the history of economic thought (e.g. the debate on the ‘War Reparations Problem’ of the 1930s) with reform plans (now consigned to oblivion) of the international payments system and their findings seen through Quantum economic lenses.

Nonetheless, aware of the fact that decades of innovative macroeconomic analyses cannot be summarised instantly, we want at least to describe the main characteristics of the three above-mentioned concepts in the perspective of Quantum macroeconomics.

In Alvaro Cencini’s words, “**money** has to be seen, first of all, as a *numéraire*, i.e. as a standard of measure required for counting of goods and services currently produced by real economy. The task of banks is that of providing the economy with this unit of account through the emission and the lending of their acknowledgement of debt. For the asset-liability issued by banks to represent real output it is necessary, however, that the emission of money reaches the sector of real production. In other words, money has to be associated to real output if it is to play the role of ‘form’ or ‘numerical container’ of goods.” (Cencini 1995). So, monetary units:

- have no intrinsic worth;
- measure the physical product of human labour;
- are media of exchange and definitely not the payment’s object.

On the other hand, **income** represents the *economic* product, i.e. the economic worth of human *physical* production. The latter becomes income as it is measured by money units through wage and salary payments: it follows that money wages is the measure and goods/services the measured objects, which are thus the very object of money income. Therefore,

monetary units are not assets spontaneously created by banks and/or Government. They only express economic worth of physical goods and services: “In *The Wealth of Nations* Smith speaks of money as ‘the great wheel of circulation’ (1978: 385). Smith is definitively opposed to the addition of money and output: “The revenue of the society consists altogether in those goods, and not in the wheel which circulates them”. Clearly, this means that money is conceived as an empty vehicle whose value is determined by its load (current output) and not by its own physical characteristics.” (Cencini 1988)

Correctly, the Swiss economist adds that “one of the most frequent mistakes in monetary economics is to identify money as such with money income. It is income, and not money, which is deposited with the banking system, and it is money, and not income, which is created as a numerical vehicle of payments.” (Cencini 2001).

The practical/empirical refusal to distinguish between *money* and *income* does not modify the logical distinction between these concepts. Nevertheless, economic systems, which contravene this *status quo*, will suffer from chronic monetary disorders as in-, deflation, exchange rate erratic fluctuations.

We admit that behavioural over-issuing of money is not the worst (structural) source of economic diseases; yet the following prominent quotation clearly exposes a degree of carelessness in the logical distinction between *money* and *income*. Thus, “suppose that despite all precautions, deflation were to take hold in the U.S. economy and, moreover, that the Fed’s policy instrument--the federal funds rate--were to fall to zero. What then? [...] a government (in practice, the central bank in cooperation with other agencies) should always be able to generate increased nominal spending and inflation, even when the short-term nominal interest rate is at zero. But the U.S. government has a technology, called a printing press (or, today, its electronic equivalent), that allows it to produce as many U.S. dollars as it wishes at essentially no cost.” (Bernanke 2002) This way of thinking is not only prejudicial to economic stability, but it also fails to take notice of centuries of economic literature, thinkers and history, which clearly proved the fallacy of such assertions.

Last but not least, **capital** can be divided into:

- *fixed capital*, which consists of profits definitively spent in order to increase physical productivity

through machinery;

- *capital-time*, which can always be reconverted to income.

“Reversible capital-time (that is, a capital that will eventually be reconverted into income and spent on the commodity market) whereas the latter is derived from an irreversible, fixed capital (that is, a capital defining a macroeconomic saving)” (Cencini 2005a).

Summing up, we assume that:

- if *money*, *income* and *capital* are fallaciously used as synonyms and the international payments system disregards the true distinction between them,
- then structural economic crises will become unavoidable.

In other words, any future reform of the world economic system should respect these axioms. For instance, would an international currency unit, to be issued by a “Central Bank of Central Banks”, remove or cure many instances of disorder? No doubt it would, if the reform proposals were coherent with the modern essence of bank money and double-entry bookkeeping principles.

In the next pages, we want to apply precisely this analytical-theoretical approach, developed by the leading representatives of and contributors to the Quantum School of economic thought to exploring the ideas of forgotten but still innovative Germanophone economists of the past. Undoubtedly, even today their articulated and manifold plans represent an innovative stage on the way to a truly international payments system.

2. Buried German Economic Thought, International Payments System and Crises

Not surprisingly, the history of economic thought abounds with examples of early plans for reform by enlightened economists who recognized the elements of fallacy in the entire system, but who have been literally removed from collective memory. If we look at the German authors, the latter conclusion rings sadly true. Their writings, where theoretical analysis blends economics with a philosophical and historical approach, unlike their Anglo-Saxon counterpart, have been largely disregarded:

- EMANUEL HUGO VOGEL (* 1875 - † 1946) and his developments in gold-core-currency standard;
- ECONOMICUS alias GUSTAV LILIENTHAL (* 1849 - † 1933) and his concept of global money unit;

- FELIX HECHT (* 1847 - † 1909) and his (at the time revolutionary) giro system;
- HANS HEYMANN (* 1885 - † 1949) and his global plan to establish a worldwide credit and financial system;
- HUBERT LADENBURG (* 1909 - † ?) and his *Plan for a Postwar World Clearing Bank* (1942);
- ERNST FRIEDRICH SCHUMACHER (* 1911 - † 1977) and his idea of multilateral clearing between credits and debits of Central Banks;
- JULIUS WOLF (* 1862 - † 1937) and his manifold proposals to internationalize the payments system;

are only some Germanophone economists, who outlined extended reforms to ensure lasting monetary stability.

Although their ideas were not set to establish a complete macroeconomic order, as Quantum economics shows, they would have paved the way for successive reform projects at least. Strange enough, the questions they analysed at the time are barely different from today's. Indeed, not only the same monetary problems have remained unsolved over the past decades, but they have also become more severe: issues, such as growing volumes of transactions, closer financial/economic interconnectedness, and simply the fact that structural disorder has become chronic over time.

Let us briefly and critically analyse the economic thought of the above mentioned German or German-speaking authors.

For instance, EMANUEL HUGO VOGEL (* 1875 - † 1946) was an early promoter of logical and factual segmentation between national and international payments (system). He also recognized that the new international monetary unit should not be subject to fluctuations and currency trading: in his words, “the internal and external payment function can be successfully segmented only if the external currency unit does not originate from a single national issuing operation. Coherent with its international function, this type of money unit should have supranational characteristics and also be free from being influenced by national assessment” (Vogel 1933 [own translation]).

Correctly, one of the most relevant principles underpinning the new currency unit refers to its stability, which cannot be assured if currencies become an object of trade.

ECONOMICUS alias GUSTAV LILIENTHAL (* 1849 - † 1933) recognizes some key principles of a sound eco-

conomic system, which was not obvious at the time. For example, he affirms that money units cannot have any intrinsic value, but also that in modern banking they should not be linked to any precious metal (Economicus 1923). Furthermore, the German author identifies in human work only - astonishingly correct! - the source of economic worth and he also realizes what some Governments still fail to do, namely that the economic wealth of Nations consists of income out of human work (and not of seigniorage or money over-issue) (Economicus 1923). Although Gustav Lilienthal contradicts himself a few pages later, his intuition continues to be 'foreign' to many economists.

The same is true of FELIX HECHT (* 1847 - † 1909), who advocated the introduction of giro systems at the international level in order to establish a true international payment system (which is still absent). More precisely, he suggested the establishment of clearing houses in some European cities - Vienna, Budapest, Berlin, Frankfurt am Main and Hamburg - so that the Austrian-Hungarian and German clearing system could soon become the first step towards an integrated world economy (Hecht 1906). What is it that prevented his proposal from being fully 'right' and establishing a proper international payment systems? Of course, the answer is in the fact that Felix Hecht was not aware of the vehicular essence of money, *conditio sine qua non* for economic order.

These authors were conscious of the difficulty of reforming the entire international payment system. For this very reason, economists like HANS HEYMANN (* 1885 - † 1949) developed a 'step-by-step'-approach, which he explained in *Die Welt-Kredit- und Finanzreform - Ein Aufruf zum Solidarismus* (1921) and *Die Völkerbank* (1922) while summing up and further investigating his findings in the more recent *Plan for Permanent Peace* (1941). Thus, creating a worldwide accepted "Central Bank of Central Banks", which issues an international currency unit, is a delicate matter. In order to overcome resistance, some economists recommend establishing "several «continental banks» for Europe, the Western Hemisphere and Asia, all to be topped by a «Bank of Nations»". (Heilperin 1941). More precisely, Hans Heymann imagines the creation of:

- a Bank of Nations, whose membership depends on buying its shares;
- a Hemisphere Bank, Europa Bank, Oriental Bank

as a sort of 'Continental Central Banks';

- and the Bank for International Settlements (BIS) as a world money-clearing department.

Each of these institutions would also be characterized by a 'credit department' and an 'issue department', which is still a long way away from reality today.

As Alvaro Cencini (2005a) adds, "the new central bank will also have to act as a clearing house in connection with the central banks of three areas. What is needed for the whole system to work is therefore that (a) within each currency area payments among countries are carried out through the intermediation of their central banks and of a central bank of central banks, and that (b) between currency areas an international central bank acts as the central bank of their central banks. The International Central Bank (ICB) brings the European Central Bank (ECB), the American Central Bank (AMCB) and the Asian Central Bank (ASCB) together into a system of international clearing based, like the national clearings, on the principles of real-time gross settlement transfers. Finally, DM stands for the domestic money used by each country; the euro, the dollar, and the yen are the currencies used within each currency area when payments between member countries are involved; and the international money (IM) is the new means of payment used to 'vehiculate' transactions among the three currency areas members and between them and the rest of the world." (Cencini 2005a) Cencini's analysis clearly reflects the correct scenario, while Hans Heymann (1941) had done little more than foreshadowing it. And yet, the latter's assertions are surprisingly innovative and unusual in economic literature. For instance, he argues that "price, which mediated the exchange, merely represents the value of the labour hours expended by both parties in the manufacture of the products, and expressed in money units as a standard of measurement. [...] in the not too distant future, the world will recognize that the true purchasing power of a medium of exchange is not dependent upon the extent of gold coverage. Such purchasing power in a medium of exchange is dependent upon the cost of production, which are to be calculated according to the average work cost of production, wages, and other cost factor." (Heymann 1941).

Not uncommonly, modern economists still think of money as an object of payments entailing a positive intrinsic worth (perhaps even distributed through Friedman's famous "helicopter drop"), while only

human work should explain the so-called ‘purchasing power’. There is no doubt that such mindset is at the origin of crises since the present ‘non-system’ rests on it.

On the one hand, Heymann’s reform proposal (1941) is very similar to a reformed International Monetary Fund (IMF), which itself is the result of the International Monetary Conference in Bretton Woods (1-22 July 1944); on the other hand, his project cannot be assimilated to modern economic world institutions, which lack strong monetary interconnectedness precisely because they have not established a real, proper, functioning payments system. Thus, Hans Heymann’s concept is based:

- not only on issuing respective (national and continental) currency units respectively on behalf of National Central Banks and Hemisphere Central Banks topped by a ‘Central Bank of Central Banks’,
- but also on granting credits to member countries (Heymann 1941).

The latter characteristic recalls the role of Harry Dexter White’s ‘International Stabilization Fund’ (ISF) and ‘International Bank for Reconstruction and Development’ (IBRD), which are the forerunners of the modern International Monetary Fund (IMF) and the World Bank Group.

Now, we wonder what drawbacks there might have been in adopting Heymann’s proposal? Although the German economist had an extraordinarily valid intuition, he was unfortunately not aware of the distinction between ‘money creating’ and ‘money issuing’. And so, while the second concept is coherent with the essence of modern bank money (i.e. devoid of inherent economic value), the first conception presents inflationary features, since it suggests the contradictory issue of positive worth by a banker’s stroke of the pen.

Kenneth E. Boulding claims in his *The Economics of Peace* (1948) that although these authors often contradict themselves, they were nonetheless able to reveal aspects of the truth which were not recognized by orthodox economists (Boulding 1948).

For example, HUBERT LADENBURG (* 1909 - † ?) and ERNST FRIEDRICH SCHUMACHER (* 1911 - † 1977) pointed out the relevance of assuring an international clearing between debits and credits. What stands out in Ladenburg’s work (1942) is the establishment of a World Clearing Bank, which issues an international currency unit. Furthermore, he knows the

role of double-entry bookkeeping in economics, but unfortunately he misunderstands some of its main principles. In fact, his reform scheme is based on the achievement (and maintenance) of commercial equilibrium between Nations, which is manifestly unnecessary and also damages economic growth: most probably, he wanders off course because he does not perceive the logical distinction between:

- ‘commercial equilibrium’, which is a halfway stage of the balance of trade other than commercial surplus/deficit;
- and ‘monetary equilibrium’, which is always assured by double-entry bookkeeping and the circular nature of vehicular money.

ERNST FRIEDRICH SCHUMACHER (* 1911 - † 1977) proposes an innovative multilateral clearing system, which is a *conditio sine qua non* for orderly economic working, but he fails to realize that his plan would not work in the absence of a well-conceived world monetary unit. Furthermore, he shares with Hubert Ladenburg (1942) a misunderstanding of commercial/monetary equilibrium (Schumacher 1943). This notwithstanding, he analyzes the matter of international payments from the standpoint of view not only of residents but also their Nations, which implies a macroeconomic conception: in addition, Swiss economist Alvaro Cencini (2008) notices that Ernst Friedrich Schumacher (1943) links net commercial imports of deficit countries with their financial claims (Cencini 2008).

In the end, JULIUS WOLF (* 1862 - † 1937) formulates manifold proposals to internationalize the payment system. As many of his German colleagues, he suggests the establishment of an international giro system topped by a World Clearing Bank (*internationale Giro-Stelle*), where all world payments would go through. Besides pleading for more bancarization on the basis of accounting principles, he sometimes adopts an inconsistent approach: in his opinion, precious metals are sometimes a barbarous relic (Wolf 1892) while sometimes the basis for creating special gold certificates (Mitteleuropäischer Wirtschaftsverein in Deutschland, 1909).

So what have the above-mentioned Germanophone authors in common? Certainly, their prescience but also the fact that they have been removed from collective memory, although their ideas are pervaded by concepts, such as ‘internationalization’, ‘multilateralism’, ‘world currency unit’. Hence, their writings

have been discriminated by mainstream economists from the Anglo-Saxon world. This last remark would be serious enough, but reality is even more alarming: modern economists tend to be analysts of statistical data seemingly with little time for findings handed down through past economic literature.

Now, is it possible to understand trends, numbers, and graphics correctly if economists are no longer aware of economic thought and history? Hardly so! Consequently, economic policies (obviously) become incomprehensibly ineffective based as they are on superficial analyses. World and economic history show plenty of reasonable leading lights that have been literally ignored. Therefore, quite probably, even admitting that knowing the theories of the German economists would not necessarily have prevented a vexatious series of global economic crises that would at least have raised unanimous strong doubts on the economic system and its 'goodness'.

The war reparations problem, which is the old version of modern external (over)indebtedness, is one of the most famous examples of how, if neglected, pathologies can degenerate. In this case, too, there have been several economists who warned against the economic consequences of war indemnities and were fatally dismissed as Cassandras.

3. Reparation Payments Then, External Over-indebtedness Now

The most recent and discussed case of war indemnities pertains to Germany after World War I (1925-1933). Although it was not serviced "[...] the total amount which was set by the London conference of 1921 at the astronomical figure of 132,000,000,000 gold Marks - nearly \$32,000,000,000" (Staley 1935), the affordability of reparation payments gained relevance at least in 1929, as John Maynard Keynes, Jacques Rueff and Bertil Ohlin began debating about its consequences. In the words of the British economist, "so much nonsense has been written lately (and even more, I suspect, spoken) about the theory of the transfer problem that I felt I ought to try and write down what seems to me to be the truth." (Keynes 1978)

As he pointed out, "the Dawes Committee divided the problem of the payment of the German reparations into two parts - into the Budgetary Problem of extracting the necessary sums of money 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." (Keynes 1929) In other words, the emphasis is on the "distinction between ability to pay and ability to transfer the payment. The latter is a question of foreign trade: the former is primarily a question of national resources and income, when viewed from the standpoint of their government. That these and the foreign trade are but different aspects of the same problem, and closely interrelated, is of course obvious" (Williams 1922). The emphasis is also on the fact that: "the German Government will have to find corresponding fiscal resources through taxes and the like compulsory charges [→ Budgetary Problem]. This is a heavy burden, but not necessarily an impossible one. At all events, whatever the internal burden and the ways of carrying it, the problem is how a sum of this kind, secured by the German Government from its own citizens, can be remitted outside Germany, and what will be the consequences of the operations [→ Transfer Problem]" (Taussig 1920).

Generally speaking, economic literature regarding the German Reparations Problem can be divided into three different currents of thought. To begin with, there are those who deny the existence of any secondary burden, while, secondly there are scientists who claim that war indemnity payments will cause terms-of-trade- and/or currency-depreciation. Thirdly, and equally importantly, a few economists try to explain why reparation service is subject to a pathology, which unaccountably duplicates the total amount of repayment due by the debtor country.

As reported above, some audacious economists hazard the claim that countries servicing war reparations will have to bear a 'secondary burden' due to the fact that:

- retrieving sufficient income and transferring it outside by handing over a corresponding sum of foreign (accepted) currencies is not the same [→ **Transfer Problem**];
- nor is the 'Government', which collects the internal resources [→ **Budgetary Problem**], coterminous with the 'Nation as a whole', which comprises the set of economic residents as well as the 'State'.

"Keynes' criticism of the German international obligations after World War I stressed that the macroeconomic costs of any given amount of war reparations - the 'primary burden' of a transfer - were bound to be magnified by the adverse effects of deteriorating terms of trade and real exchange rates - the 'second-

ary burden' or 'double punishment'" (Corsetti, Martin and Pesenti 2008)

Now, sceptical readers will claim that reparation payments belong to the economic history of some countries (for example, France between 1870 and 1873) and, more generally, to the past. Actually, such an assertion would be true, if the *nature* of today's economic problems were not the same as sixty years ago.

No matter how sophisticated crises are today, derivatives, credit-default swaps (CDS) and other financial instruments did not exist: their roots go back to the pathological international payment system, which has never been duly reformed. For example, no economist would dare deny that America's external debt does go back to the Bretton Woods Conference of July, 1944.

Not surprisingly, reparation payments or, more generally, war debts are a previous incarnation of modern sovereign external debt and its interest payments. The only remarkable difference is that war indemnities originate *ex nihilo*, i.e. they are imposed *ex abrupto* without the debtor country having benefited from capital inflows (i.e. a corresponding or matching credit) in the past, while increasing external debt is the consequence of growing net current account deficits. In fact, both servicing operations are pathologically unilateral; hence the monetary necessary equivalence between receipts and expenditures becomes an inequation:

$$IM + x (\text{total expenditures}) > EX (\text{total receipts}),$$

where IM and EX represent respectively the commercial/financial imports/exports of each economic subject.

Thus, double-entry bookkeeping teaches us that every economic agent - firms, private consumers/investors but also the State or the Nation itself - while selling (buying) buys (sells) a corresponding amount. And this is tantamount to saying that everyone is credited (debited) and debited (credited) in every transaction.

For example, when an economic agent A in Nation N(A) sells goods/services to a subject B in country N(B) who pays with an equivalent sum of goods/services/financial claims:

- A is credited and debited,
- while B is debited and credited simultaneously.

Hence, economic agent A *sells* goods/services [→

credit] and contemporarily *buys* goods/services/financial claims [→ debit], while resident B *buys* the above mentioned goods/services [→ debit] but also *sells* goods/services/financial claims [→ credit]. Since it is an international economic transaction:

- not only A and B,
- but also both Nations N(A) and N(B) involved should be respectively credited-debited and debited-credited.

Nowadays as in the past, such *modus operandi* applies to every economic operation except the reparations payments and their modern version, i.e. sovereign external debt. Referring to the latter concept, "the correct meaning of «sovereign debt» refers to the external debt incurred by the Nation as a whole. Manifestly, the public debt financed by the rest of the world is a part of it, but it does not represent its total amount. Thus, it is necessary to add the private indebtedness, which also involves the country's intervention" (Schmitt and Cencini 2011 [own translation]).

"After all, a country considered in itself, *per se*, is akin to a mere abstraction, while its residents are alive and kicking. So long as no residents of the debtor country are being victimized or defrauded, the disorder seems to be inconsequential. In reality, however, it exerts all its weight upon the undivided welfare of the national economy in its entire extension, by significantly and often even decisively thwarting its development" (Schmitt 2009). We obviously cannot claim, here, to accurately demonstrate all facets of the monetary pathology as studied by the economist Bernard Schmitt (Dijon) for decades. We can nonetheless identify the *crux* of the matter in the fact that by servicing A's external debt:

- A and B are respectively debited-credited and credited-debited [→ Budgetary Problem],
- while country N(A) is only (net) debited by the foreign currency amount [→ Transfer Problem] needed to transfer A's income.

In sum, Nation N(A) shows a net debit (debiting without crediting), without Nation N(B) recording a net credit (crediting without debiting). Since the monetary equivalence between receipts and expenditures must be restored, country N(A) has to fill up the monetary pathological gap by reducing its official reserves, which also leads to over-indebtedness.

Let us do some numerical examples belonging as to Germany's past as to its present time.

If it is correct that Nation N(A) registers a net debit, this discrepancy will result from observation of the balances of payments of both countries involved. In other words, assuming only these two countries in the world, the monetary pathology of the secondary burden lasting of N(A) will result in a net deficit in the global current account, while the global financial and capital account will show a net surplus. Apart from net errors and omission in balance of payments, which tend to zero in the medium/long time, the global current account (GCA), which consists of the sum of N(A)'s and N(B)'s current account (CA) but also the global capital and financial account (GCFA), which is the aggregation of N(A)'s and N(B)'s capital and financial account (CFA), should be equal to zero (Table 1).

Table 1. The Global Current (GCA) and Capital/Financial Account (GCFA)

N(A): CA = $-x_1$	N(A): CFA = $+x_1$	Balance: BOP = 0
N(B): CA = $+x_1$	N(B): CFA = $-x_1$	Balance: BOP = 0
Balance: GCA = 0	Balance: GCFA = 0	

Source: author

Since the service of external debts belongs to international transactions, both Nations N(A) and N(B) are involved. If the reader continues reasoning in terms of net debits regarding N(A), the pathological disequilibrium between monetary in- and outflows ($|x_2|$) in the global current (GCA) and the global capital and financial account (GCFA) is evident (Table 2).

Table 2. The ‘missing surplus’ of the Global Current (GCA) and the ‘missing capital outflow’ of the Capital/Financial Account (GCFA)

N(A): CA = $-x_1 - x_2$	N(A): CFA = $+x_1 + x_2$	Balance: BOP = 0
N(B): CA = $+x_1$	N(B): CFA = $-x_1$	Balance: BOP = 0
Balance: GCA = $-x_2$ (missing surplus)	Balance: GCFA = $+x_2$ (missing capital outflow)	

Source: author

As the International Monetary Fund (1987) has pointed out, the result of aggregating world balances of payments is far from equal to zero, as it should

be. Since the world monetary institutions are aware of the fact that errors and omissions cannot explain the monstrous gap, the IMF economists coined the concepts of:

- missing surplus of the global current account (GCA)
- and missing capital outflow from the global capital and financial account (GCFA).

In other words, the GCA is extremely negative ($-x_2$), which means that it misses a positive entry to restore the equilibrium (missing surplus), while the GCFA is in absolute terms similar but positive. More generally, the global capital and financial account (GCFA) misses an outflow ($-x_2$), which would bring it to zero. As Alvaro Cencini (2005b) explains, “irrespective of individuals or governments’ behaviour, the present system of international payments is so structured as to impose on indebted countries a double payment of interests. Two equivalent flows are required to convey the real payment of net interests between countries. In conformity with the IMF experts’ intuition, the payment of net interests gives thus rise to an unreported capital outflow defining a net loss for the indebted countries’ official reserves. It is this unaccounted loss that explains the mystery of the ‘missing surplus’”. (Cencini 2005b)

Even though ‘Quantum macroeconomics’ only suggests the correct interpretation, other economists acknowledge that “the inconsistency between flow and stock data [...] relates in a fairly systematic way to FDI flows, risk characteristics of local output and debt relief.” (Hausmann and Sturzenegger 2006)

If interest payments on external debt and reparation payments are truly twin transactions from a monetary point of view, then the GCA and GCFA at the time of the German indemnity payments should show the same discrepancy. In effect, between 1927 and 1933 Germany paid 8,914 million Reichsmark (Deutsche Bundesbank 1976), while the missing surplus of the GCA corresponds to -8,227.9 million Reichsmark and the missing outflow of the GCFA reaches +6,388.8 million Reichsmark (League of Nations (1934a and 1934b) and United Nations (1949)). To rephrase it, German war debt payments cover 92.3 per cent and 71.7 per cent, respectively, of the discrepancy in the global current account (GCA) and the global capital and financial account (GCFA). Given that the latter measure is subject to cross currency valuations and other debt flows during the

same period were negligible, the statistical evidence is powerful. As Alvaro Cencini (2005a) adds, “the second payment of interest [and reparations] is an over-expenditure carried out by the indebted countries and unrecorded by creditor countries.” (Cencini, 2005a) and: “debtor countries pay what they have to pay as interest [and reparations] and creditor countries are paid their due, yet the amount paid gets unrecorded in the current account of creditor countries.” (Cencini, 2005a)

Another astonishing example of anomaly in the international payments system is related to modern over-indebtedness, not only of Less and Least Developed Countries but also of industrialized nations, whose economies are often described as models of integrity. Germany is no doubt the best example.

If economists agree that the balance of payments (BOP) is the account that should register every (commercial and financial) transaction between residents of two different countries. The balance of payments (BOP) is a statistical statement that systematically summarises, for a specific time period, the economic transactions of an economy with the rest of the world. Transactions, for the most part between residents and nonresidents, consist of those involving goods, services, and income, those involving financial claims on, and liabilities to, the rest of the world; and those (such as gifts) classified as transfers, which involve offsetting entries to balance - in an accounting sense - one sided transactions. (International Monetary Fund 1996), it logically follows that there should be no (relevant) discrepancy between:

- expected increase of the external debt on the basis of BOP-transactions
- and the effective growth of the external debt as reported by the International Monetary Fund (IMF) or the World Bank (WB).

In other words, “it is clear that the increase in indebtedness should be equal to the sum of the current account deficits and the increase in international reserves. Nonetheless, official statistical data show that Nations’ external debt is much higher than logic would imply” (Schmitt and Cencini 2011 [own translation]).

Between 2002 and 2009, Germany’s cumulative current account surplus reached the (impressive) amount of 1,213.82 billion U.S. Dollars, while German official reserves increased by 89.9 billion U.S. Dollars (International Monetary Fund 2010). It

should be *expected* that German external debt stock would have been reduced by 1,123.92 billion U.S. Dollars (= 1,213.82 billion U.S. - 89,9 billion U.S. Dollars). Instead, Germany’s gross external debt position worsened by approximately 2,944.53 billion U.S. Dollars (World Bank Database [online] 2011), which is unexplainable on the basis of BOP’s registrations. More precisely, since the gross external debt position should have shrunk by the above mentioned 1,123.92 billion U.S. Dollars, but it grew to 2,944.53 billion U.S. Dollars, there is statistical evidence that the pathological mechanism, which leads to Germany’s over-indebtedness, ballooned to 4,068.67 billion U.S. Dollars (= 1,123.92 billion U.S. Dollars + 2,944.53 billion U.S. Dollars)!

Quantum macroeconomics explains this unbelievable gap affecting interest payments on external debt, but also - which is a new discovery - external borrowing. Accounting unilateralism characterizing:

- war reparations;
- interest payments on external debt;
- foreign debt

combined with a misconception of money and (monetary) macroeconomics explains this anomaly, which is becoming more and more serious.

Bernard Schmitt and Alvaro Cencini explain in their new joint (unpublished) paper, *Les emprunts extérieurs comme cause du surendettement des pays et de l’expansion de la bulle financière* (2011) the reasons for the literal duplication of the external debt burden: “in the same way as the increase in the external indebtedness of the Nation as a whole exceeds its current account deficit - the additional boost is equal to the newly issued IOUs of the internal economy, which have been handed over to the foreign economic agents - the country itself becomes indebted to the «financial bubble». On the one hand, the sovereign debt with the rest of the world corresponds to the current account deficit; on the other hand, the complementary indebtedness due to the monetary deficit originated by the unordered international payments system is incurred with the stateless «financial bubble». With specific regard to the over-increase in sovereign indebtedness as compared to the new current account deficit, the concept of «rest of the world» assumes a different meaning; this time it is synonymic with «financial bubble». In the same way as the external debt position of the Nation as a whole worsens by the net value of the IOUs, which have been

issued by the internal economy to the benefit of the foreign lender, [the country itself] incurs a debt with the financial bubble.” (Schmitt and Cencini 2011). Conscious that summing up or compressing their findings covering decades of research is an impossible mission, what should economists do in order to solve the charge of over-indebtedness or, more precisely, avoid stubborn pragmatism belonging to blaming (and fruitless) economic policies? Doubtless, knowledge of history of economic thought and economic history would have contributed to eliminate many collective mistakes or misinterpretations of economic happenings, whose origins go back to (less sophisticated) concerns of economists of the past.

Since Germany has faced the economic consequences of World Wars, German scientists of past centuries have been remarkably active in looking for *structural* remedies. If modern economists do not realise soon that their predecessors and their intellectual work still have much to teach the new generations of economic thinkers, it is only a matter of time before external debt crises hit leading countries, too (as they have already started to do in Greece, Ireland, Portugal, Spain and Italy).

4. Conclusions

Quantum Macroeconomics, whose findings characterize the approach adopted, focuses purely on macroeconomic analysis starting from profound knowledge of economic thought. How could it be otherwise? Thus, “theories are facts. This remark is very true, and the history of those facts is the foundation of a theory about them, that is, a theory about theories”. (Pareto 1980) Furthermore, “it is possible to view the development of economic thought as progressive in the sense that each generation learns something and absorbs something from the thought of preceding generations - thus, as the saying credited to Newton has it, we all stand on the shoulders of giants.” (Spiegel 1991)

Now, if such a mechanism of knowledge loses its vitality, the consequences will not be affordable in the long run: more precisely, modern economics shows a pronounced quantitative-econometric approach without demonstrating interest in economic thought and history, i.e. the memory and findings of economists of the past. Hence, a growing reliance on econometric and sophisticated quantitative tools in the absence of economic-philosophical knowledge

cannot compensate for any underlying shortcomings or flaws. Mere data analysis unsupported by solid economic thought leads to blunders and, consequently, to distrust of economics (and economists). Crises are bound to occur if central bankers, economists, and analysts stubbornly overlook some fundamental milestones and achievements in economic thought.

Manifestly inflationary policies as Government’s over-issuing combined with the refusal of a new Bretton Woods Conference are some true samples of the modern economic approach. No wonder that today’s world economy is more troubled than yesterday’s! For instance, over-indebtedness in some Southern European countries is frequently blamed on inefficiency, fiscal evasion, corruption and high spending: obviously, such *modus cogitandi* is not only prejudicial to the countries involved but it is also due to an intrinsically *microeconomic* approach, which looks for the source of economic diseases in (human) behaviour, expectations and contingent factors. What if financial, employment and debt crises were the result of *macroeconomic* - i.e. structural, not man-made - fallacies in the international system of payments? Why is it so difficult to hold this opinion and advocate reform accordingly? First of all, because of human tendency to impute only to people’s conducts the origin of crises (*microeconomic approach*). In addition, a systematic course of action requires deep understanding of previous scientific findings so that new conclusions can be drawn from them.

Furthermore, countries’ over-indebtedness has pathological roots, which do not depend on economic agents’ handling. Of course, exaggerated and irresponsible economic practices, like bull operators’ speculation, have repercussions on global wealth, but their essence is *micro-*, not *macroeconomic*, namely *structural*.

For instance, the current crisis is the outcome of huge and deep fallacies in the modern international payments system, which Quantum Macroeconomics deals with. We wouldn’t call it the root of all evil, but depriving European countries of monetary sovereignty and associated policies has, if nothing else, reduced the acting power of Central Banks by trying to contrast economic crises. Furthermore, many Southern European countries need to regain monetary independence. “Loss of monetary sovereignty resulting from the adoption of the Euro as a unique currency has had a negative impact on capital move-

ments, which has arguably been underestimated. Given the past and present economic situation of the EU member countries, monetary unification is a great threat to employment in the South and a cause of increasing social turmoil in the North.” (Cencini 2005a) In addition, let us look at how exchange rates are set in the Eurozone: since there is a nominal one-to-one correspondence between richer and poorer countries’ Euros, it will be predictably more convenient to invest in/buy from the first group of nations. More precisely, since goods and services of both richer and poorer Eurozone-countries are available to foreigners at the same exchange rate, buyers will prefer consuming or investing in wealthier countries. Hence, if both country groups had maintained their original national currencies, it is quite sure that exchange rates:

- of richer nations would have grown cutting down on commercial exports,
- while that of countries in economic need had fallen, contributing to more competitiveness.

Ceteris paribus, since nominal exchange rates are artificially equivalent both for more as less prosperous European countries, the latter cannot compete with wealthier nations, which in turn means that:

- commercial imports will grow more rapidly than exports
- causing a current account deficit
- and increasing external indebtedness.

As the renowned German economist Wilhelm Hankel et al. (2010) points out, according to our own translation, that “the reason for the financial difficulties experienced by some EMU-Member-States is their fairly limited competitiveness, which is in turn due to the exchange rate of the Euro. As economic forecasts show, the Greek currency unit should be depreciated to a value of US\$0.34 so that companies would become more competitive in the international arena. Furthermore, the Euro also dampens the competitive potential of these comparatively under-performing States belonging to the European Union (or, at least, the European Monetary Union), because the value of the European single currency does not reflect their economic performance. With regard to Germany, the value of the currencies of these States should be drastically reduced, but it is also conceivable that this would spark a corresponding rise in the value of the German money unit. This economic principle remains uncompromising.” (Hankel et al. 2010 [own translation])

Furthermore, Quantum economics claims that (growing) external debts are subject to the outlined pathological duplication mechanism, which leads to over-indebtedness as German reparations’ analysis shows. In the end, who would buy overpriced goods/services - i.e. the products of poorer countries - if nominal exchange rates (between other factors) enable to obtain comparatively cheaper merchandises from richer nations? Not surprisingly, economists like Emanuel Hugo Vogel amongst others excluded *a priori* the creation of a monetary union, although they pleaded for the introduction of an international/a continental money unit.

At the risk of exaggerating its bearing, “everything has been said, and we are more than seven thousand years of human thought too late” (De la Bruyère 1688). Ultimately, while this paper aimed to show the *structural* (i.e. *macroeconomic*) nature of economic crises – these days misunderstood to the advantage of more *contingent* and *behavioural* (i.e. *microeconomic*) sources -- it also sought to draw attention to the fact that there have been several (not only Germanophone) economists in the past centuries who proposed particularly innovative and interconnected reform plans of the world monetary architecture. True, they were inexplicably and unjustifiably removed from collective memory. Yet – and this is precisely the paper’s golden thread - their proposals are even more suited to establishing a new global monetary system than the contemporary international economic and financial institutions (at least, as they are currently designed).

Indeed, unless economists open their eyes to the relevance of economic thought and history for structurally eradicating crises, sustainable economic growth will stand little or no chance: it is in our power to make it happen.

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