

[Taken from Peace Plans #11, compiled by John Zube. Editorial comments by John Zube]

# COMPENSATION MONEY AND PUBLIC INSURANCE

THE POSSIBILITY OF DEVELOPING INSURANCE FACILITIES IN ASIA, IN COLONIES, AND NEW COUNTRIES, THROUGH APPLYING THE MILHAUD SYSTEM: TOGETHER WITH SOME REFLECTIONS ON THIS SYSTEM.

BY: ULRICH VON BECKERATH, BERLIN, 1938

Prof. Heinrich Rittershausen noted on the cover of this book: "Tarn-Titel! Behandelt in Wirklichkeit die Grundfragen der Wirtschaft und Waehrungs-Politik." ("Camouflage Title! It deals in reality with the fundamental questions of economics and currency policy.")"

"Government meddling with money has not only brought untold tyranny into the world; it has also brought chaos and not order. It has fragmented the peaceful, productive world market and shattered it into a thousand pieces, with trade and investment hobbled and hampered by myriad restrictions, controls, artificial rates, currency breakdowns, etc. It has helped bring about wars by transforming a world of peaceful intercourse into a jungle of warring currency blocks. In short, we find that coercion, in money as in other matters, brings, not order, but conflict and chaos," - Prof. Murray N, Rothbard in: "What has Government done to our Money?"(Ed.)

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## PUBLIC INSURANCE AND COMPENSATION MONEY

The Possibility of Developing Insurance Facilities in Asia, in Colonies, and New Countries, through applying the Milhaud System; together with some Reflections on this System.

By Ulrich von Beckerath, Berlin, 1938

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(\*) This omission might go back to the first German edition, in *ANNALEN DER GEMEINWIRTSCHAFT*, 12, Jahrgang, Heft 1, January-April 1936, where the contents is listed in one block of text, without clear breaks and page indications and there section H. is followed by subsections 1 & 2, of which the "1" in this print almost looks like an "I" and so has been, possibly, misread as such both for the German and the English edition. - I must admit that I noticed this omission only now and can only hope that the complete manuscript was published, for, to my knowledge, it is no longer in existence. Note that when there is any doubt on any passage in this translation then the German original should be consulted, which has been microfiched in PEACE PLANS 665. I do intend to scan it as well. J.Z., 30.11.01.

"Universal politics as I perceive it is nothing but universal insurance."

Emile de GIRARDIN, 1852

## I. THE PROBLEM

Asia, which is most probably the part of the globe where men first passed from hunting to stock-breeding and thence to agriculture; where first certain individuals who had become dissatisfied with the old tribal communism and its patriarchal customs, met and asserted their right to enter into contractual relations and chose their rulers and even new gods in order to safeguard their rights; Asia whose languages were apparently the first to draw a clear distinction between "robbers" and "heroes" and thus introduced the era of a bourgeois civilization - this Asia is still without a proper system of insurance.

To those who are not economists this deficiency may seem of no great account. They may object that the lack of a system of insurance did not prevent Confucius writing his Yun Lu ("The human factor in government"), nor the Brahmins their Veda ("The true source of the animating forces in animals") nor the inhabitants of the region between the Euphrates and the Tigris building their Babylon, a city not less spacious than New York and having also regularly laid out roads. (Babylon had a square city wall almost a hundred kilometers in circumference over 100 meters high, and over 30 meters thick. Its observatory, the "Tower of Babel", was over 200 meters high. We possess no information concerning its suburbs which no doubt were numerous and, densely populated.)

However, Asiatic communities lacked something that European communities gradually secured for themselves, namely stability.

A community can only possess stability if therein the number of those who have "no visible means of support" and who are thereby tempted to favor every political upheaval, does not exceed a certain proportion. These should not be confounded with the beggars and tramps of a country, for the latter have either become reconciled to their lot or their nature inclines them to a life of vagabondage. They may be a menace to individual citizens, but are not dangerous to Governments. However, those "Catiline existences" who have been by some mischance thrust out of their original paths but who, before want has broken their will power, still enjoy all the intellectual and moral powers of which officials, wholesale merchants, officers, even scholars are proud, menace both Governments and individual citizens who have anything to lose. We need only turn to any page of the history of an Asiatic country, to find this ancient truth abundantly confirmed. Already 2,500 years ago Lao Tse said that an orderly Government is impossible where "people do not take death seriously." (Tao-teh-king)

"Catiline existences" are brought into being by two kinds of influences: by social evils, more especially by a bad monetary and payment system, such as that of ancient Rome, or by mishaps, such as conflagrations and hail storms, floods and disease, deaths in the family and theft, all of which may be at least partly retrieved by a good insurance system. For every million inhabitants in probably every country there are approximately 40.000 private catastrophes annually, producing "Catiline existences" where there is no system of insurance. These existences are therefore created freely in Asia, for the scattered insurance found there is of little general importance economically.

The relation subsisting between public security in the widest sense and the necessity to insure against fire theft; illness, and death, is so evident that it has long been recognized. When the first insurance societies were founded - e.g., in Prussia and in Switzerland compulsory membership was justified by referring to that relation and the principles laid down two centuries ago by the ruling authorities concerned have lost nothing of their validity or importance.

The problem then arises how Asia may be endowed with a system of insurance appropriate for its circumstances. (The difference, say, between an Indian, a Chinese, and an Iranian average town is much smaller than it would be in Europe or America. A fruitful discussion of the problem embracing the whole of Asia is therefore feasible, despite any differences in the circumstances of particular Asiatic countries, and

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hence successes achieved by a given ruler may have a valuable lesson to teach to Asiatic countries generally.)

In the development of an Asiatic insurance system the biogenetic law cannot be set aside. The new organism, that is, must pass through the same stages of development as the "species" has passed through before it. These fundamental stages were:

a) Small associations of persons, governed by mutuality whose members know one another and have often the same occupation. As statesman of the caliber of a Frederick the Great, a Hammurabi, or a Nizam al Mulk, the great vizier, will promote the formation of such societies wherever he can.

b) Since such associations are commonly inadequate, they must be followed by societies established by the Government first with compulsory membership. To that we shall return in the sequel. Concerning this, one remark: public insurance against acts of nature, as it exists, for instance, in the Prussian societies and the Swiss cantonal institutions, is sometimes mistaken by Asiatic economists for "social insurance" which relates exclusively to insurance of the person.

c) Insurance companies on the European and American mode model, after the insurance idea has become familiar to the masses through the public insurance societies. In the building up of such companies, considerable technical progress is still possible, but this is obstructed by hundreds of obsolete Acts in Europe and America, as well as by excessive State supervision (in some countries no "innovation" may be introduced without the consent of the supervising authority!), and also the notorious inflexibility and unprogressive ness of many of the companies, more particularly the large scale ones.

(Of this a practical instance: My eldest, a medical practitioner, had to give up obstetrics, which he liked and had somewhat specialized on, because of the high and inflexible medical malpractice insurance rates. They can now come to A \$ 70,000 p.a. for any doctor assisting in child births, regardless of how many or few such cases he has each year. Where my son works now he has many more old age pensioners than young couples. Only a few doctors have such a large "turnover" of births that they can afford such insurance rate. The others simply do no longer engage in such practices. As a result, a medium sized N.S.W. town like Armidale has recently lost its last doctor ready to offer such help. The common sense approach would permit doctors and patients to sign a contract accepting the risks involved in any medical aid and agreeing not to sue. Alternatively, the insurance rates should be set in accordance with the

numbers of births assisted by a doctor. Neither the authorities nor the medical practitioners nor the mothers are so far open-minded toward such alternatives. Thus pregnant women may have to travel a long distance to give birth in a few centers and would there be assisted only by a few over-worked specialists, who, when overworked, might make more mistakes than would their less skilled colleagues, who tend to work fewer hours. - J.Z., 30.11.01.)

None of these three types of organization is ever likely to prove superfluous. They should supplement one another, and a statesman will only watch that none of them should seek to suppress the others. Here are some proposals relating to the technical side:

## **II. THE POPULARIZATION OF THE INSURANCE IDEA IN ASIA THROUGH PUBLIC INSURANCE**

Small associations based on mutuality, corresponding to the mutual aid funds of the guilds and corporations in mediaeval Europe, and even in ancient Rome, are no doubt also to be found in Asia. For instance as regards diverse regions, travelers report that camel drivers replace one another's collapsed or stolen camels precisely as formerly the German "cow guilds" came to the assistance of the peasantry. These associations, it seems, have not even always written rules. It may be reasonably supposed that the highly developed guilds of China include mutual aid funds, but even Chinese authors reporting on the associational life of their country, confess that it is difficult to obtain information on the subject. This may be possibly due to the fact that formerly the imperial Chinese Government mistrusted associations generally with the result that in some provinces even the most useful societies had to adopt the form of secret leagues. Then, too, it was necessary to keep secret the funds of the societies from rapacious officials. The attitude of the Manchu Emperors calls to mind that of Trajan, otherwise a great ruler, who prohibited all societies, to the point that, as transpires from his correspondence with Pliny, he would not even allow the formation of voluntary fire brigades.

The responsible statesmen, of Asiatic countries should in any case collect and publish the available information about mutual aid groups. It might very well be that important discoveries would thus be made regarding the technique of insurance. This supposition will not be lightly dismissed on a priori grounds if we remember that, for example, the merchant guilds of China conducted their operations in various spheres in a manner that would have done honor to the best theorists. Here is an illustration: They invented for themselves the tael system, which is theoretically very remarkable, operates excellently in practice, and is above all, safe against inflation. It is true that an Act of the Nanking Government of 1934 abolished it officially, but unofficially it is still widely used. Indeed, when the Giro Bank of Hamburg was reconstructed at the time of the Seven Years' War, it served as a model after Sonnin had called attention to it. The merchants of Ning-po developed a banking system with effective safeguards

against a "run", a system that also automatically assured that Ning-po's balance of payments would not be thrown into confusion by external trading. And here is another example. The credit insurance system of the Hong merchants of Canton, which was based on mutuality, served as a model for the New York Act of 1829 relating to the protection of bank deposits. In

explaining the bill, Governor van Buren specifically referred to that system. One thing is certain, the system of mutual aid funds in countries like China, India, or Iran would be greatly furthered if the respective Governments instituted inquiries on the subject and published the results. (This opportunity could be utilized for making a collection of all local and provincial regulations relating to fire protection, which undoubtedly would yield valuable data.) The extensive inquiry conducted in 1893 by the American Labor Bureau into Building and Loan Associations might be taken as a model here, inasmuch as it effectively stimulated both building and saving in America and also led to these associations learning of one another's existence and benefiting by their mutual experience. It would be frequently practicable to utilize the arrangements of local mutual aid funds in the formation of public insurance societies. Of course, if a statesman desired to furnish his country with an efficiently operating insurance system without undue delay, he would not be satisfied with developing the existing popular mutual aid groups. He would, on the contrary, proceed as, for instance the Prussian kings proceeded before him, He would establish public insurance societies with compulsory membership, base them on mutuality, and arrange for the fullest self-government.

It readily suggests itself that in order to achieve something as rapidly as possible, it might be best to start with establishing a private insurance office operating on the model of a European or American company that is, finding its clients through commission agents, covering its administrative expenses during the first few years by means of an organization fund and having recourse to reinsurance where its financial strength proved inadequate. There can be no objection to establishing such private offices, say joint stock companies, the shares of which are held by the State. Such companies would, in any event, gather experiences; and if skillfully conducted they might prove profitable, extending also their activities to domains not at first open to public insurance. However, the goal within about two decades or less, really to insure the greater part of the objects that need insuring in the country is not to be attained in any Asiatic country by private companies. Even the largest insurance company anywhere would lack the capital required for paying commissions and could not secure the number of agents needed. Difficulties too, would be experienced in reinsuring on a sufficiently broad scale. The goal might, however, be attained by public insurance.

If necessary, public insurance may get along without reinsurance and without initial capital. The experience of two centuries has demonstrated that. This circumstance is important for Asia where capital is scarce and where reinsurance for at least nine-tenths of the objects insured will, in the absence of pertinent statistics, be out of the question for a long time yet. (This does not mean, naturally, that reinsurance might not be feasible for one-tenth of the objects, provided this one-tenth is successfully insured.)

The methods of public insurance companies differ from those of private insurance. There is, however a consensus of opinion in Europe that in the present circumstances of this continent such a difference does not tell in favor of one or the other method. According to circumstances, both methods may be justified. For the time being, in the greater part of Asia, the application of the tested, special methods of the public insurance societies would be alone practicable if a comparatively large proportion of the possessions requiring to be insured, are to be really insured within a few years. In this connection statesmen should pay special attention to the considerations advanced by Paul Alglave, who in 1901 published (through Chevalier-Maresq) a work of nearly a thousand pages on the German public insurance societies. In his final comments this author expresses a preference for public societies, but he admits that these societies would not have introduced the necessary technical improvements had it not been for the competition of private offices. On the other side, it might well be contended that this argument is weakened by the fact that in countries like England and America insurance has developed mainly along private enterprise lines. But this may be

countered by the consideration that during recent years in these countries, too, some economists and even some political parties have asked that private insurance should be supplemented by public insurance, on the ground that the former does not meet all justifiable demands. The most serious criticism of private companies and one hard to refute, is that they must either forgo insuring all sections of society or even the greater part, or spend economically excessive sums on canvassing. The private companies operating in Asia have not as yet insured as much as 1 % of the population. The cost of securing a new client is about equal to the amount of the first year's premium; often it greatly exceeds this. The second, and not less weighty, criticism directed against private offices, is that where the premium is not promptly paid, the insured is deprived wholly or partly of protection by insurance. Morally, this criticism is, of course, wholly unwarranted, for private companies are not charitable institutions. On the other hand, public societies collecting their premiums as taxes are collected, frequently even through the tax collector, can afford to be more generous to those in arrears with their premiums because they are certain later, when the insured are again solvent, to recover what is owing them, even with an additional percentage. (Private companies could do the same. Comp. 269-276. The Ed.)

(I worked for 7 1/2 years in compulsory public insurance in Germany, which covered health, accidents, invalidity, old age and death. What happened in practice with arrears was that huge sums owed by large firms were simply cancelled, because massive dismissals by such firms, would be politically harmful. At the same time, small firms owing such compulsory insurance contributions were driven into bankruptcy. The German law did not even allowed them to clear their debts to the public insurance companies against claims they had for the supply of goods and services to public authorities, which these were rather slow in paying them - and thus brought small firms into financial difficulties. These public bodies are as a rule oversized and wasteful and have not yet managed, even after experiencing several inflations, to achieve a stable value investment for their reserves. Moreover, they tend to operate, even for old age insurance, on the levy principle, rather than greatly reducing the premium costs or greatly increasing the pay-outs by long-term, credit-insured and stable value productive investment of old age premiums. Beckerath later delivered an astounding proof for that, which indicated that during a normal working life of 40 years almost anybody could become a multi-millionaire in his old age via a modest annual contribution - invested at high interest rates. Beckerath also pointed out that small health insurance funds, for as few as 200 members, set up for employees of one firm, could operate much more economical than could country-wide health insurance schemes. Naturally, they would require some re-insurance. - J.Z., 30.11.01.

### **III. TRAITS DIFFERENTIATING PUBLIC FROM PRIVATE INSURANCE**

The characteristic features of the first public insurance societies were the following:

a) Compulsory membership for all inhabitants of a certain category or a given administrative district, for example for all house owners of a province. (The claims of private insurance offices may at the same time be fairly met, more especially by freeing the larger objects factories, bazaars, caravansaries, bonded warehouses, etc. from compulsory membership.) (See pp. 269ff The Ed.)



b) Collection of outstanding insurance contributions with the aid of the authorities by means of a curtailed procedure namely by legally classing outstanding insurance contributions with outstanding taxes. (In the case of certain societies in Prussia all contributions due and not only outstanding ones, are collected by the fiscal authorities.) (See the comment on p. 272, The Ed.)

c) Exemption of societies from all taxes and from charges for all business transactions, if possible also exemption from paying postage. (The author assumes here the existence of a postal monopoly, a monopoly which he attacks e.g. on p. 24 and 119. Regarding tax exemption see the comment on page 275. The Ed.) Such a society could naturally not be established by private contract. It presupposes legislative action or decrees.

#### **IV. ORGANIZATION OF A SYSTEM OF PUBLIC INSURANCE ON THE ASSUMPTION THAT IN THE NEAR FUTURE NO SPECIFIC GUARANTEED CAPITAL WILL BE AVAILABLE, NOR REINSURANCE WITH PRIVATE COMPANIES**

##### ***A. INITIAL STAGE***

To begin with, a small model society should be established in a district where the influence of the government is sufficiently strong. Following this example, similar societies would be gradually established more especially in neighboring districts, allowing fully for local peculiarities. The sphere of activity of the first model society should be a district containing not more than 100,000 inhabitants. This was the method followed in Prussia and in Switzerland, countries whose insurance arrangements have been exemplary for

many decades. Prussian experience more especially might be here very largely, utilized. It would be advisable that a work highly esteemed among German speaking peoples, that by the present Managing Director of the Pomeranian Feuersocietaet, Landesrat a. D. Dr. Eric Brunn, "Die Geschichte der Pommerschen Feuersocietaet" (History of the Pomeranian Fire Insurance Society), Stettin, 1935, should be translated into French and into the language of any country in question. The interested parties would thus learn that almost the same insurance problems requiring solution in Asia, had presented themselves in Prussia and how they were grappled with successfully.

## **B. THE GOAL TO AIM AT**

The goal ought to be that all insurable possessions should really be insured. If, for instance, insurance in Iran is operated by societies restricted to districts having approximately 100.000 inhabitants, then about 120 such societies would be required. Once the first model society has been established, and operates successfully, enabling all interested parties to study it, it would become feasible to establish other societies in ten such districts in one year, with the result that in about twelve years every district in Iran would have its public insurance society. In India and China such a rapid pace could naturally be only imagined on the supposition that the provincial Governments should have obtained the necessary authorization for action. Such a society could not possibly be established "centrally", that is, by one man and for a territory containing, say, about 100 million inhabitants.

However, let us confine ourselves to Iran which during the last decade that is, since the accession of the present Shah has developed with amazing rapidity and which therefore enters first into account for insurance arrangements. (The author had for some time seriously considered migration to Persia in an advisory capacity to the then existing Persian government. The Ed.) Estimating the number of Iran's inhabitants as roughly 12 million (some two million families) and apart from the possessions which are at present insurable by private offices on the European model - the average insurable property per family at 10.000 rials (1 rial equals 4,50 grams fine silver, the total sum insurable by the newly established societies would be 20.000 million rials.

Assuming for the first few years an average annual damage quotient of roughly 10 per mil far too low an estimate, this quotient would represent the necessity of collecting for administrative and valuation expenses, fire fighting arrangements, etc., altogether about 20 per mil, which would be equal to roughly one-fiftieth of 20.000 millions, or 400 million rials, per annum. Here it may be noted that according to the pre-War statistics of the Russian Semstvo Offices (See Sergowsky, *Theorie der Feuerversicherung*, Prag, 1931, published by the Erste Boehmische Rueckversicherungsbank), which would be fairly applicable to present condition in Iran, a damage rate exceeding 10 per mil would have to be anticipated. Of the estimated revenue of the insurance societies of at least 400 million rials, given the methods of payment proposed in the sequel, at least 40 million rials could be diverted to the Central Government, which amount it could devote to the furtherance of every sort of insurance facilities. The necessary fire protection expenses could also be allocated out of the 400 million rials. The Prussian public insurance societies calculate that about one-fourteenth of the receipts have to be devoted to fire protection. For Iran the percentage proportion would probably be somewhat higher. The following estimate is relevant in the above connection. Assuming 1.200.000 insurable buildings in Iran, a fire frequency of 1 per 100 buildings annually would be equivalent to 1.000 fire damages or 1.000 monthly. On a moderate estimate, this is equal to 30 fire damages a day. It would be scarcely an exaggeration to suppose that today one-third of these damages mean economic ruin for the parties affected, reducing them indeed to beggary. The introduction of the type of insurance here proposed would prevent accordingly, on a conservative calculation, the creation of ten beggars daily.

### **C. NATURE OF OBJECTS TO BE INSURED AND EXTENT OF INSURANCE PROTECTION**

Actually all kinds of objects enter into consideration, buildings as well as tools and products of labor. Those to be insured in Iran include about 1.100.000 small scale proprietors, primarily therefore peasants. But owners of landed estates and their objects would not be excluded from the category of the insured. However, the large objects of these owners, objects such as castles, big warehouses, and the like, should be and could be left to private insurance offices; but their small objects, such as flour mills, barns, etc., might very well be insured in the same society as the objects of peasants.

It would have to be settled whether the reinstatement price, the sales value, or any other kind of value, would be paid in case of loss. It may be noted in passing that insurance only properly fulfils its social purpose when the indemnity paid enables the insured to replace the damage object by a new object of good quality, e.g., a house burnt down and perhaps 30 years old, to be replaced by a new house, not worse than the old house was immediately after being built. This appears to contradict the fundamental insurance principle, according to which an indemnity should never lead to the enrichment of the insured. Yet it is a feasible proposition, and experts have long since pondered over it, namely that enrichment may be excluded by treating as a loan the difference between the reinstatement value and the sales value at the time the loss occurred. This loan might be repayable within 12 to 15 years, or more or fewer, the amount unredeemed at any time paying about 1/2% monthly interest. (This would mean say, in the case of a loan of 1000 rials, repayable within 12 years, a payment of 10 rials a month for interest and amortization.) In this way the insured could not enrich himself by the added value. Incidentally, indemnification on the basis of the original value would have a result not contemplated by European insurance experts in this connection: it would materially reduce arsons committed out of revenge. If the enemy of the insured knows that the latter would really suffer little or not at all through fire damage he will not have recourse to arson. In this connection it may perhaps not be amiss to refer to a film that was for a time very popular in Germany. That film was based on Gerhart Hauptmann's "The Weavers". There we find described how in a Silesian village, mutinous weavers are on the point of setting on fire a large spinning mill, but desist when one of them calls attention to the fact that the mill is insured against fire. Those competent estimate the risk in Asia of buildings being set alight through revenge as decidedly considerable.

(A much larger factor inducing arson is that insured, who, in financial difficulties, would to get the cash of an insurance settlement. This kind of risk can be reduced by not granting the insured a cash settlement but by paying their replacement bills. B. discusses that later. - B.'s system of financing insurance companies would tend to reduce financial difficulties in the country. - J.Z., 1.12.01.)

As has been hitherto the case in all countries, the authorities should begin with fire insurance. Later, perhaps already after a few months, other risks, e.g., storms, floods, hail robbery) even war, among others, might be dealt with. Insurance of persons (against death, illness, invalidity, and accidents) would readily follow once insurance of objects is established. That is, the idea of insurance as such must be impressed on the masses by a striking exemplification, such as that of insurance against fire.

#### ***D.DEPENDENCE OF THE UNIFORM MAGNITUDE OF CONTRIBUTIONS ON THE SIZE OF A SOCIETY***

Of course, if the insurance principle is to be realized by a society, it must be of a certain minimum size, In general, modern insurance technicians demand a fairly large size, i.e., a fairly large number of risks, in order to permit the operation of the insurance principle and of the law of large numbers. In practice this means that the contributions should not seriously fluctuate from one due date to another and that there should be no need to establish exceedingly large reserve funds, say, larger than would correspond to the average of the annual levies. No insurance scientist is likely to be satisfied with an office that insures objects and operates on modern principles which has insured fewer than 1.000 objects. This minimum would be in fact reached if one society were established for about every 100.000 inhabitants. Most modern insurance offices have insured considerably more objects and many specialists consider that a stable insurance company, operating without reinsurance and reserves, requires that at least 20,000 separate objects should

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be insured, the largest of which should not exceed five times the value of an average object. But even where the number of insurances is relatively small, decidedly satisfactory insurance protection is attainable, if we remember that the method of collecting the contributions is of great importance, although this importance cannot be easily demonstrated mathematically. To illustrate, Managing Dir. Dr. Brunn reports in chapter 5 of his above mentioned work concerning a small fire fund which, in the eighteenth century, peasants of the cathedral lands of Cammin in Pomerania, had established on a basis of mutuality. The fund was already long established and had 154 members when in 1782 the authorities examined its soundness. It had always given satisfaction to its members. That was because the peasants paid their contributions in kind and received their indemnities also in kind. The contributions consisted in transporting house timber to the site of the burnt down building (the timber came from the Royal Forests and was mostly obtained gratis) and in the delivery of corn, straw, etc., when fire destroyed the harvest of one of the members. It is thus evident that many a peasant who might find it difficult to pay a cash premium of as little as 1 thaler, might nevertheless easily contribute material values or labor worth 20 thalers, especially if he is not being pressed for time. For instance, we may readily imagine that, where a house has been destroyed by fire, the neighbors might, for some months, devote a few hours daily to the work of rebuilding, by transporting, by deliveries in kind, and by personal labor. In this way a small insurance society, such as that of our Pomeranian peasants, comes to be as effective as a group ten or twenty times larger, but collecting its premiums in cash. Facilities should be created to enable the peasants of almost all Asiatic countries, who are short of cash but possess material values and labor power, to contribute in goods and services. In other words, the efficient functioning of an insurance system in countries with an economic system such as that prevailing in Asia, should not be made to depend on favorable economic conditions providing sufficient ready money.

## ***E. ADVANTAGES OF A MODERATE SIZED SOCIETY***

There is an "optimum" for the size of an insurance institution that is, deviations from this optimum in an upward or downward direction are prejudicial of course only to a slight extent where the deviation is within moderate limits. The size of insurance undertakings has a similar economic effect as the size of factories, whose profitability is greatest where the size is within certain moderate limits. (According to pre-War statistics, daily papers, for example, with an edition of 80.000 copies, yield the relatively highest surplus.) Leaving aside however, that from a purely rely business point of view, the size of every enterprise has a maximum beyond which it ceases to be as advantageous as a smaller firm, there is the fact that in insurance matters an extension beyond a certain limit is technically undesirable. It is true that, according to the laws of probability, an insurance office should yield the more uniform results the larger its size. But experience shows that this is by no means the case and that, on the contrary, a moderate sized society is more advantageously placed than a very large one, this because the homogeneity of the business done, almost necessarily decreases with increase in size. In this connection the investigations of the Swiss Supervisory Authority for insurance companies, about the stability of the insurance offices operating in Switzerland, have yielded valuable conclusions. And there is also the psychological aspect. In the case of the insurance societies to be established in Asiatic countries, the size of the societies, at least to begin with, should not prevent the insured from feeling that they are bound together as neighbors. In the case of fires, for instance, every member should be able to reach the scene of the fire within a day's journey in order to be able to convince himself personally how the insurance office deals with fire damages. The experience of small insurance companies in Germany, and probably in the whole world, has shown that even high premiums are willingly paid if the members, have seen the place of the fire themselves, have received a direct impression of the extent of the fire, and can personally assure themselves how the insurance society's

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management deals with fire losses. The moderate size of an insurance society whose contributors feel as neighbors possesses a further advantage. Arsons on the part of the insured in order to draw the fire indemnity, are frequently discovered where the neighbors take a personal interest in the fire. Similarly, the deliberate ignoring of precautionary measures, with the same object in view, which plays an even more important part than direct arson by proprietors, is almost always soon revealed, if the neighbors participate in settling the loss incurred or where, at least, the settlement takes place in their presence. The determination not to pay an incendiary a considerable indemnity out of their own pockets creates in the contributors a great and strong interest to ascertain the cause of the fire, and what the shrewdest settlement official of a large scale private insurance company might very likely not discover, will be exposed by his neighbor.

In the case of medium-sized or small insurance societies, where the members feel they are neighbors, and where heavy contributions are imposed when heavy losses are incurred and light ones in the opposite instances, the members keep an eye on the fire protection arrangements of their neighbors and those of the other insured, e.g., whether water buckets are available, whether the wells are in a proper state, etc. In the case of those insured in a large private company, where fixed premiums are paid, the personal interest is absent. This remark suggests the desirability of weighing the moral risk as it affects insurance societies, namely, the risk inherent in the person insured, which is large with careless, negligent, or criminally

disposed persons and small otherwise. In general, the "moral risk" should not be neglected. It amounts probably to half the total risk, perhaps even more that is, fire indemnities might be broadly half what they are, if so many fires were not occasioned maliciously or through the negligence of the insured parties. We shall return to this aspect in the section dealing with indemnification.

It would be advisable to organize a meeting of the members after every considerable fire loss, where they might, on the one hand, express their opinion on the fire and the lessons to be learnt from it and, on the other, where the office manager might furnish information on the nature of insurance protection, e.g. the danger of underinsuring, the need for protective arrangements etc. Such explanations presented immediately after a fire, and if possible near the scene of the disaster, would always make a profound impression. Meetings of this kind would be less practicable to arrange in the case of large-scale offices. In districts of about 100,000 inhabitants, one fire damage a day might be expected, That is about as much as the manager of the district society can, at the beginning, personally examine and supervise in its settlement. Accordingly, the optimum for an insurance society at the initial stage is about 100.00 inhabitants.

## ***F. COMPULSORY MEMBERSHIP***

In his "Rechtslehre", especially in par. 8, Kant stated that everybody is entitled to compel another to form part of a "juridical community" that would permit both to possess property by right and to protect this property against depredations. Kant's principles could be easily extended to justify to the same degree compulsory membership in a juridical community which, in the case of fire, indemnified the affected party and membership in a juridical community for protection against theft and murder. But apart from this, the experience of two centuries has taught us that the initiation of a system of insurance protection, embracing a sufficient number of persons, can seldom be accomplished without resorting to compulsory membership. However, experience also shows that, particularly at the commencement, compulsory membership is frequently regarded by the individuals concerned as an abuse of State authority. The insurance contributions, that is, are considered as a new and unjustifiable tax. Should it also happen that at its inception there are really some abuses, then not even absolute rulers would be powerful enough to force insurance through. Such was the case over two centuries ago in Prussia, where the grandfather of Frederick the Great was

unable to overcome the opposition of the population against a compulsory insurance system.

The weightiest argument of the population against obligatory insurance was at that time the difficulty of paying the contributions in cash. It was urged that a house owner could not possibly find the money for all the payments due from him and was therefore constantly obliged to beg for a respite, today of the tax collector, tomorrow of the mortgage creditor, and the day after of some purveyor. Even quite insignificant additions to the expenses payable in ready money, it was said, could ruin those house owners who had reached the limit of solvency, and among these would have to be counted, it was then contended, the large majority. Of course, those who argued thus did not know that a good insurance arrangement

reduces regularly the interest burden on house property and this by a far larger amount than is involved in the insurance premium, It is however, a fact that this favorable influence does not affect all house-owners forthwith and that during the first few years some of them may actually experience difficulties in making payments because of the system of insurance protection. But all these arguments are satisfactorily disposed of by a system of paying contributions based on Milhaud's principles. With this system the lack of ready money in the national economy or among individuals, ceases to form an obstacle to the smooth working of an insurance system. In the succeeding chapter we shall examine this subject more closely.

But even with our present imperfect payment system there is a great and manifest advantage in obligatory fire insurance. This should enable a tactful statesman to overcome any initial resistance. He must follow the example of the Prussian rulers and introduce the first insurance societies with compulsory membership immediately after great conflagrations, in the districts where they had occurred. Experience shows that the population of those districts does not in such circumstances regard compulsory membership a burden, but a benefit, certainly not an abuse of State authority. Add to which that immediately after the establishment of a public insurance society the credit conditions of the particular district, due to the increased security of the creditors, markedly improve, bringing down the interest rate. The principle of compulsory participation should not, of course, be exaggerated. Let us suppose that in a country district of 100.000 inhabitants there are 10.000 buildings belonging to poor peasants as well as perhaps 10 large factories and a large bonded warehouse. Should the factory owners and also the customs be compelled to participate in the insurance scheme, then it might well happen that if a factory or, what would be worse, the bonded warehouse burnt down, the levy imposed might considerably exceed the paying capacity of the 10.000 peasants. The factory owner or the customs authorities would accordingly not receive the full indemnity they were entitled to. Hence all objects should be exempt from compulsory participation which in the case of fire damage, would impose excessive contributions on the members. Naturally, the society would not receive the contributions for those large objects, but this disadvantage leaving aside that it is balanced by the reduction of the risk incurred is not too great, for it is just such objects which are preferred by private insurance companies, more particularly by the foreign companies operating in Asia. Accordingly, large objects need not forgo the protection of insurance because they are exempted from compulsory participation. Such exemption offers, on the contrary the condition of a peaceable coexistence of public and private insurance, creating thereby the possibility of protecting by insurance all property in need of being insured (precisely as at present in Germany).

Model texts in French, for the required laws on compulsory membership, might be found in the legislation of the Swiss cantons, to which we refer here for the information of the reader.

The laws of Asiatic countries might be more liberal in one point than most Swiss laws are at present; namely by waiving compulsory membership in all instances where a proprietor establishes that he is already adequately insured, privately. The State should never force its services on the people or the individual, if these have already helped themselves or are able and willing to help themselves. This principle of the Prussian statesmen of the memorable period between 1807 and 1813, which, by the way, already Confucius and Lao Tse constantly

reiterated, should guide the rulers of Asia. A true statesman takes pride in bringing his people a step nearer to responsible manhood.

### ***G. GRANT OF AN INSURANCE DEPENDENT ON VOLUNTARY MEMBERSHIP FOR OBJECTS NOT SUBJECT TO COMPULSORY INSURANCE***

In many cases there will be a doubt whether a given object should or should not be subject to compulsory insurance. In order to allow of an amicable settlement of such cases, there should be a provision that the society may insure certain objects even if their owners are not obliged to insure them in the society. Here is an example. It is doubtful whether a given mosque of the value of 1 million rials is subject to compulsory participation. The peasants in the village concerned would probably strongly desire that their mosque should be insured in their society. There need not be any objection to this. However, some limit to voluntary insurance must naturally be fixed. It might be, for instance, provided that no object would be insured which, in the case of a total loss would impose on the members a greater monthly contribution than the equivalent of the wages of an adult for one day. (Objects of more than five fold the value of the average insurance amount no society should insure at its own risk.) Whence it follows that fairly large objects might be insured by relatively small societies if the indemnity may be paid in installments and if, in addition, there is a provision in the insurance conditions that when there is an unusual multiplication of fire losses the society's payments to the individual sufferers from damage may be deferred until the statutory maximum contributions in the succeeding year, or even in succeeding years, suffice to pay for the fire losses. These restrictions would, of course, not apply to the degree that the several societies reciprocally granted a reinsurance to one another. We shall return to this aspect, (A maximum levy, say triple the annual "normal levy", should be fixed for the paying members.)

Considerable latitude in the matter of voluntary participation would have to be allowed as regards insuring objects that are not buildings Harvests tools, furniture and the like and much else which may come to light after the establishment of a society, are probably not compulsorily insurable, but would be easily dealt with by voluntary insurance.

It is also feasible that the society should later undertake kinds of insurance dependent wholly on voluntary membership, a g., insurance against storm damage and burglary. We cannot enter into details here.

### ***H. MODE OF PAYING CONTRIBUTIONS***

#### **1. Due Dates**

Societies will not be able to begin with fixed contributions payable at regular intervals. They would have unavoidably to commence with periodically collected levies. It might be provided for instance that whenever the accumulated fire losses reach a certain figure in Iran perhaps 50.000 rials a levy would be announced. However, in order that the insured sufferers from



damage should not have to wait too long, they must, as was also the case formerly in various Prussian provinces, receive a written statement from the insurance management that they will be entitled to such and such an amount out of the next levy. On the basis of such a certificate, the claimant could easily obtain a loan, either from his neighbors or from merchants, particularly a loan in material values, that is, one not in ready money. After the society has existed for some time, it will, instead of collecting levies at irregular intervals and according to need, attempt to collect as far as possible regular contributions of an equal amount and also to create reserve funds, on the one hand and, on the other, to raise, occasionally, small loans (loans in money or in material values). Heavy levies it will impose only in case of heavy fire losses. By regularly collaborating with a bank or with a group of

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merchants, more especially with shopkeepers, the society would be in a position to proceed in this way. However, should such collaboration not be practicable, then, at least at the beginning, nothing would remain but to impose heavier or lighter levies, according to need.

## **2. Means of Payment**

The insurance system must be constructed in such a way that if, for some reason, the customary means of payment become suddenly scarce, then the system would still operate. The disappearance of coins from a district or from a given economic domain (as from agriculture), or the disappearance of banknotes generally, should not prevent an insurance society from indemnifying losses. Since, however, a society can evidently only indemnify with what it has received as insurance contributions, it becomes necessary to organize a system of paying indemnities and arranging for contributions, which in the event of a failure of the current system of payments, may be forthwith applicable. Indeed, particularly in Asia, a part of the transactions of the society would have to be thus permanently dealt with, inasmuch as at present there is not only frequently, but perpetually, a deficiency or means of payment in most regions of Asia,

Hence arises the problem whether simple payments in kind may not possibly come to replace money payments. He who has examined an inventory of objects destroyed by fire, one drawn up on the occasion of a conflagration in a rural district, the sufferer from damage living in humble circumstances, being perhaps a peasant, is aware that even such an inventory contains items which could not possibly be replaced by the contributions in kind of the members, not even if the society had many thousand members and these members belonged to every class of society.

That which any one in some existing community has to offer or has in store at a given moment, is never exactly covered by what another belonging to the same community needs at the same moment. This holds true even if we forget that some sort of transport has always to take place before the offer can satisfy the demand and that, on its part, the transport labor, too, is subject to the law of supply and demand. But ignoring this, the disparity relates also to the point of time at which the offer is first made, and to the quantity as well as to the quality, using the term in its general sense) offered.

A carpet or a clock is never wanted at precisely the moment it was first offered. And that which the owner of the carpet or of the clock would desire to have in return for it is never available at just such time and in just such quantity and quality from the parties requiring the carpet and the clock as would satisfy the need (demand would not be the right term here) of

the two proprietors. This statement holds even if we regard the whole earth as an economic unit and if we suppose that the economic bond between the Tabriz carpet weaver or the London clock proprietor on the one side, and, on the other, those who could contribute something to the support of these two and are at the same time "interested" in their goods, would be as easy and convenient as possible, a supposition that is far from completely justified.

All the more is there a disparity in demand and supply between persons belonging to relatively small communities. Indeed, in comparison with the population of the whole earth, the population of any country or of any city, and of course the number of the members of even the largest insurance society, is very small. If therefore all payments in an insurance society were to be made in kind, these would have to be confined to objects where the above-mentioned disparity would be or could be overcome with relative ease. Thus, peasants could help their neighbors to rebuild a burnt down barn and to replenish it with cereals, or owners of herds could replace their neighbor's stolen cattle. But if the insured is to have replaced in kind his tobacco pipe, his clock, his carpet, and his kitchen utensils, from the belongings of the society's members, it would be found that no rules could be formulated concerning such replacements, at least no rules properly adjusting services and counter services. Adjustment is however, easy if trading is included and also at the same time a category that enables us to free ourselves from the disparity between supply and need. This category is a means of payment relatively

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constant in value, standardized, and subdivided in appropriate denominations.

With its stable value, this means of payment overcomes the difference in time between the first offer, on the one hand, and the springing-up of a corresponding need, on the other. In other words, it bridges the difference in the quality of that which an individual at a given moment is ready to exchange and that which another individual needs at the same moment, this by allowing for the fact that after a certain time the qualities of the supply by the one and those of the needs of the other, are covered. By its convenient transferability it overcomes, moreover, the disparity between the quantity of the goods held ready for exchange by certain individuals and the always different quantity of goods that other individuals are in need of. And the transferability, in turn, is ensured by the appropriate subdivision and standardization of the means of payment.

Money is naturally the most convenient means of payment, be it in the form of coins or in that of paper money. But the statement that no country can possess sufficient money, to mediate its whole turnover, has been confirmed in practice in Asia from the earliest times, and more particularly has agriculture in Asia suffered for ages from a serious shortage of money, a shortage that is not likely to be removed in the near future,

Payment in kind is here also out of the question. Hence there remains only one possible means of payment, the goods warrant.

Goods warrants represent a means of payment of which there never need be any shortage. They are not money, nor are they orders to pay, although their value is conveniently expressed in money. They are a means of payment *sui generis*, the full theory of which has yet to be elaborated. But what is most important in this theory will be found explained in Milhaud's diverse writings (*Annals of Collective Economy* for the years 1932 to 1936), in any event sufficiently to prove that the practical utilization of goods warrants in any economic domain where a shortage of money is felt or feared, need no longer cause anxiety. What Milhaud has

said about the form of the goods warrant, which alone is of importance for the national economy, namely, the purchasing certificate, is enough to base thereon the system of payment of an insurance society determined to continue its operations even when the last coin or the last banknote has, for whatever reason, disappeared from its domain, returning, however, at once to money payments when, and to the extent that, money is available. lake.

We shall presuppose as known the theories propounded and exhaustively proved by Milhaud as well as his numberless convincing illustrations. (For his theories, see ANNALS OF COLLECTIVE ECONOMY for 1932 to 1936 or his works published by Williams & Norgate, London.) Here we shall confine ourselves to showing the possibility of their application to a definite economic branch.

For an insurance society two kinds of goods warrants enter into account:

a) Goods warrants issued by the society in connection with its payments for fire-losses and for administrative expenses; b) Goods warrants issued by the members of the insurance society.

In practice that is, in at least 90 % of all payments made by and to the society - the goods warrants issued by the society will be used. The wording of such might read:

- GOODS WARRANT for 10 Rials

Issued by the public insurance society ..... of .....

In the case of all payments due to it, the society shall accept this warrant in lieu of cash. Similarly, the members of the society shall accept the warrant in all payments due to them, as cash, in accordance with the provisions on the payment of contributions printed below. The holder of warrants can lay no claim to receiving cash or other means of payment of any kind. The validity of this warrant expires on ..... after which the society shall decide at its discretion whether and on what terms it will accept this goods warrant or whether it will regard it as having lapsed.

NUMBER ..... DATE ..... SIGNATURE .....

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To pay with such warrants, the society must naturally covenant with its members that in fire losses, and also so long as they have not paid their contributions, they must accept such warrants in lieu of money in their commercial transactions. The society must also arrange with its staff to accept its warrants in lieu of money payments. It will proceed similarly with the suppliers from whom it orders stationary, equipment, etc.

Let us now suppose that the society has to indemnify several members who have suffered fire losses amounting altogether to 50.000 rials. An inquiry among the members has elicited that the required levy could only be paid by few of them in cash. In that case the society will pay the indemnity in goods warrants and notify this to all members. Furthermore, the society will in the customary way announce the levy, i.e., inform member A that he has to pay 10 rials in money or goods warrants; member B 25 rials; and member C 15 rials. The society will also inform all members that every one who has not within a stated time, say 2 days, paid his contribution in ready money, must exhibit a poster stating: "Warrants of the Insurance Society are accepted here in lieu of cash payments due to this member (here insert name)."

The first text of such a public notice was indicated by Milhaud in a discourse delivered in December 1931 and printed in the ANNALS of the following year. Superficially, it seems to

be a question here of a simple, so to speak of a technical, arrangement; but in reality, the import of the basis of the Milhaud goods warrants is very far reaching .

The first direct conclusion that follows is of considerable importance from the standpoint of monetary theory. The value of a goods warrant thus based is not only determined by supply and demand, but by a third factor which the theory of value has apparently not sufficiently taken note of, namely just this readiness of certain individuals to accept the warrant in lieu of money when somebody buys from them something or makes payments. This readiness is manifestly not a demand, It is even less an offer, nor is it quite identical with cover. In the case of cover the holder of the warrant would have claim to a certain quantity of goods. The goods warrants of warehouses are e.g., covered by the warehouse goods. In exchange

for the goods warrant he can obtain quantity of goods at the warehouse. In the case of the purchasing certificate, however, the holder is entitled to no more goods than corresponds to the market price, precisely as with the holder of a piece of money.

The third element revealed itself very distinctly and was clearly recognized by the more reflective among the economists at the time when bimetallism existed. For example, in France a debtor could for several decades discharge his debt at discretion either in gold or, in 15 1/2 times its weight, in silver. As long as this was so, especially with such an important creditor as the Exchequer, which accepted both modes of payment, the ratio between gold and silver could not in any country deviate far from 1 : 15 1/2, whatever the productive relations of the two metals and whatever the supply and the demand. The readiness of French creditors, although enforceable by the Courts, to consider 15 1/2 kg. silver as of the same value as 1 kg. gold, almost completely outweighed the influence of supply and demand.

An appropriate name for that third element has not yet become current. We might, perhaps, call it "readiness to accept" or "readiness to sell". Incidentally remarked, the value of coins resides also in the main on readiness to accept, principally by shops. As frequently contended here, the value of gold and silver is not immanent in these. Nor is it based, except minimally, on the owner of the coin being able, if he cares to, to have it worked up for his own use, e.g., as an ornament, as happens frequently in Asia.

(Some of the terms used in this connection have been: "shop foundation", "service foundation", "tax foundation", "service foundation", "readiness to accept foundation", "debt foundation" and "clearing foundation". More suitable terms will sooner or later be found or coined. - J.Z., 1.12.01.)

Arising out of the recognition that the value of every kind of money is in the first instance circulatory in nature and also out of the legitimate demand that the value of money should be made as plain to the public as technical reasons permit, follows the moral justification of the rule, which in some places is actually realized, that shops must have fixed prices (\*) and must charge these prices to everybody alike. In countries where only gold coins are legal tender (but thus far such countries do not exist), the regulation would have to be amended to the effect that the shopkeeper must post up a notice in his establishment stating at what (\*) (I presume he meant: Clearly expressed prices rather than unmarked ones, to be negotiated in every case. Prices, to function as prices, must remain flexible according to market conditions. - J.Z., 1.12.01.)

exchange rate he accepts locally current means of payment other than gold coins.

If no such notice were posted up, it would be presumed that he accepted them at par.

Without such a regulation even a gold currency is defective because without it the value of gold is not quite accurately determined. Indeed, just because of this dubiousness, it fluctuates more than it would otherwise do in any case more than the popular conception of a gold price presupposes.

The recognition of the importance of fixed shop prices and an obligation to charge these prices to everybody alike is by no means a purely theoretical matter. During inflationary periods governments bethink themselves of this, because they then clearly perceive that those two obligations enhance the stability of a currency. Accordingly, during the post war period; such regulations were probably issued in all countries having an inflated currency.

(I think that here he wrongly mixed up prices temporarily set and publicized by individual sellers, according to market conditions, with prices controlled by governments. The latter do never indicate a stable currency but, rather the opposite. B. has often expressed himself as an opponent of any price-, rent-, wage-, interest-rate and foreign exchange control by any government. - However, criticizing governmental price control during the Nazi regime was dangerous - and thus just not done in public. - J.Z., 1.12.01.)

The conception of readiness to accept, as an element in the value of means of payment, which was introduced into economics through a practical illustration furnished by Milhaud, makes it at once clear that the hitherto existing requirements for covering and guaranteeing (or founding) a paper money not convertible into currency goods (e.g., gold or silver), have not been strict enough.

Cover might be considered to be that into which a holder of money is entitled to convert his money, e.g., State loan certificates in the case of the German Rentenbanknotes of 1923 or greenbacks during the American Civil War.

A money basis, or foundation, might be considered to be that which tends value to money in transactions generally, e.g., the readiness of the State to accept it at par in tax payments.

If such an expression could be brought into general use, the man in the street would refuse to accept as cover for paper money land and buildings or "the wealth of the country", just as the scientific view has long rejected such kinds of "cover". If an attempt were made to introduce such paper money compulsorily, the man in the street would ask: "And where is my right to exchange, at my discretion, paper money for the stated cover?"

Such a question would kill at its inception every inflation. Even where, as in Russia during recent years, it is introduced by compulsion and deceit, such an expression, if in common use, would render it futile.

According to the expression suggested here, Milhaud's purchasing certificates would be both well covered and well guaranteed well covered by the goods ready for removal, by every warrant holder, from the debtors of the issuing centre or from the issuing centre itself; well guaranteed, by the legally enforceable obligation to supply goods for the notes.

Although it was known before Milhaud that "real values", and even newly created real values, did not suffice to cover paper money; it is now coming to be recognized that not even a cover with "liquid values" suffices to guarantee the stable value of paper money. The newly created quantity of paper money must have for its known complementary basis a readiness to accept, at least corresponding to the nominal value of the quantity of paper money issued. This may even be, if necessary, associated with an enforceable demand for the goods waiting to be bought. Sums due to creditors are naturally to be regarded as a basis not worse than goods sold and waiting to be fetched.

(REFLUX currency vs. ASSET currency. Consumer goods and services in daily demand, ready for sale, vs. "covers" by capital goods - Oscillating vs. permanently circulating money. Ticket money vs. exclusive and forced currency. Not all capital values are monetizable. The

issue principle applicable to capital "values" does warrants only the issue of capital securities, not currency notes. Not everything that is valuable is good enough to base a sound currency on. Your house is valuable, but can you circulate its value in form of currency - and redeem your currency upon demand, brick by brick? Or your land, square foot by square foot? - J.Z., 1.12.01.)

By properly applying the category "readiness to accept", Milhaud's system obviates the danger of the purchasing certificates losing their value. (The danger of inflation, i.e., the danger of a general rise in prices by creating additional purchasing power, which is not the same as the danger of depreciation, is obviated by the certificates having no fixed exchange value).

(They are not legal tender, that is, they have no "forced acceptance" and "forced value", except towards the issuer and his debtors, who, under contract to the issuer and in their own interest, will be prepared to accept them at any time at par. In general circulation the goods warrants etc. are "optional money". This means that they do have a free market rate, reckoned against their own - and other value standards. They are not only refusable but also discountable - and in rare cases could get a premium value or "agio", instead of a more frequent discount or "disagio". Usually they will circulate, in their normal local circulation sphere, among the members of a "payment community", at par. In them their function as exchange media is not coercively and inseparably combined with their stated value standard, as it is with the governments' forced and exclusive paper currencies. - I am more and more convinced that all the relevant terms and conditions should be collected and alphabetized and explained in a handbook - but have not yet got around, either, to compile it. The index to these three classical works on monetary freedom will be helpful towards such an encyclopedia. - J. Z., 1.12.01.)

This is not achieved in an abstract manner, one only apprehended by the trained expert, but in a concrete way, one easily understood by every certificate holder, namely through notices posted up by those ready to accept. (Any doubter has only to visit a shop where the notice is posted up, buy there something with his certificate and thus rid himself both of his doubts and of his certificate - even in times of panic.)

Roscher came near to this viewpoint, and even cited, in his par. 67 of his "National Oekonomie des Handels und Gewerbfleisses", several examples where depreciation was avoided by readiness to accept; but he could not divest himself of his prejudice in favor of convertibility. He mentions three cases where the Bank of England was threatened by a "run" once in 1707; then during the rebellion of 1745, where the declaration of 1.140 merchants, that they would accept the notes at par, removed all danger - within three hours; and once again during the Seven Years' War when Choiseuil's

agents vainly attempted to sow suspicion among the population, notwithstanding the declaration of the London merchants. (The Annals - 1935, p. 150 - 139 of peace plan 194), mentions a case that occurred in Berlin in July 1870.

Since the Milhaud system creates, alongside the fresh purchasing power a corresponding proportion of fresh readiness to sell, it avoids the creation of additional purchasing power in the current sense of the expression; for the nature of this latter power consists precisely in the fact that it is not accompanied by a simultaneously created new readiness to sell in the circulating sphere of the new money.

(The term "ticket money", if not "goods warrant" or "purchasing certificate" or "service warrant", describes this situation best. The issuer obliges himself to deliver. That is not a threat or a confiscatory act but the offer of a service that has an exchange value. His optional money is no "requisitioning certificate", like legal tender paper money, against the values supplied by others or by all people in a country. - J.Z., 1.12.01.)

Similarly, by properly applying the category of readiness to sell, a deflation becomes impossible where, on a dearth of means of payment setting in, the authorities and a sufficiently large number of citizens remember at once to apply the principles of the Milhaud system. Why this? Because within any economic domain where Milhaud's principles are applied, it is possible to create, for labor power engaged in a commercially useful manner, the corresponding amount of means of exchange. For every transaction that has become necessary, new payment facilities are simultaneously created (in essence they are clearing possibilities), and everybody may be therefore so placed as if he had coins instead of goods awaiting purchasers or bills that have fallen due.

(His own readiness to deliver goods or services, preferably associated with other such local suppliers, can be thus be turned into convenient enough local purchasing power to pay his bills and this purchasing power, by its very nature, will return to him - and his local associates, to be redeemed in the goods and services which he and they do thereby offer. - J.Z., 1.12.01.)

No transaction, as happens so often under the system of an "exclusive currency", need be suppressed in order that another may take place, e.g., the supplying of the population with every means of consumption, even with articles of luxury, including foreign ones. They need not be delayed because there are at the same time important public works to be executed roads and houses to be built, etc.

In the case of collecting public or private dues from persons who can offer goods or services - but not money, the difference between the system of "exclusive currency", where simply purchasing power expresses compulsory requisitioning (of goods and services supplied by others! - J.Z., 1.12.01) and the Milhaud system, where the economy is governed by the sales aspect, becomes clearly apparent.

This difference may be observed in a special instance, such as the one examined in this paper, namely that of the payment of insurance premiums. But the difference becomes most especially obvious in the illustration given by Milhaud of the payment of taxes with purchasing certificates, and this in both cases when in the payment of taxes purchasing certificates issued by the tax payers are used and when the taxes are paid with purchasing certificates issued by the State on the basis of the goods it offers (namely tax receipts) i.e., when the tax payments are made with inconvertible State paper money not having a forced rate of exchange.

(The Milhaud system would make the ruler of a medium sized State richer and more powerful than any of his neighbors, who perhaps rule over much larger, more populous, and more fertile lands, but who do not apply this system.)

In the collection of dues in conformity with the Milhaud system, the receiver of the dues, e.g., the tax authority, the insurance society, or the landlord, does not reduce that quantity of purchasing power among the category of purchasers which that category would dispose of if the dues had not been collected. (It is understood that the two social classes of purchasers and vendors are only conceptually differentiated and do not represent different sections of society.) Hence under the Milhaud system of settlement, the category of purchasers does not buy less than it would have bought without the due collected. What happens is, on the contrary, as follows. The category of vendors, inclusive of the vendors of labor power, must supply more than it would have had to without the due. Otherwise expressed, with the due this

category must labor more than it would have had to. The additional output will then be additionally sold by the class of vendors. But the category of vendors does not earn thereby more than it would have earned, with lighter sales without the due.

(At least in English his explanation sounds too abstract to me. I can only hope that the German original, as well as the French & Italian translations of the Annals made these points more clear. Perhaps he should have added to such passages: Read them more than once, if they are not clear enough upon first perusal - Taxes and voluntary contributions leave you less of your earnings - or make you work harder or longer. See the following paragraph. - J.Z., 1.12.01.)

In the payment of public and private dues according to the Milhaud system, the total number of hours worked by the nation is therefore increased. This may be because idle labor power is now set to work (which is a pure advantage) ( Except to the intentionally idle! - J.Z.) or because the labor power engaged works longer hours or more intensively than before. (This is commonly regarded as a disadvantage and therefore stimulates the introduction of machinery where none had been used.) Indeed, James Steuart, whose principal work appeared 10 years before that of Adam Smith, remarked that with a good paper money system, public dues, even if high, do not impoverish the population, but only raise the degree of employment, maybe excessively, i.e., crushing it with work when the dues claimed are too high.

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That the Milhaud certificates, on their way from the issuing centre through the national economy and back again to the issuing centre (where they are then destroyed), frequently change their owners and thereby transfer purchasing power, does not invalidate the above contention. Such a transfer of purchasing power takes also place, for instance, when mortgage bonds are used in land purchases a very frequent occurrence and yet no one would argue that the issuing of mortgage bonds creates additional purchasing power. It is conclusive here that the fresh purchasing power is compensated at the very moment of its creation by the simultaneously created fresh readiness to sell.

(This "readiness to sell" does not have to be "fresh". It could include older stocks of consumer goods, which under an exclusive and forced currency, could not be sold to consumers who were, under the prevailing "monetary despotism", insufficiently supplied with sound purchasing power. The main thing is that the "readiness to sell" is balancing or covering the issues and that only as much in ticket money can be issued, i.e., will be readily accepted, as the consumers of the offered goods and services do want more of the goods and services offered in them, and are thus willing to give their goods, services and labor for this "ticket-money" or goods- and service vouchers, in monetary denominations and freely transferable certificates - which oblige only the issuers - namely, to deliver what they are willing and ready to deliver for them and promised to deliver for them: Usually a wide-enough and at least local range of consumer goods and services or other payment and clearing options. With the reflux of the certificates the certificates will be gone from circulation and so will the goods and services have disappeared from the market, in which they have been redeemed. The goods and the money side remain balanced, or, more accurately, become properly balanced for the first time and can remain balanced from then on! - J.Z., 1.12.01.)

This becomes manifest by the second fact, namely that the purchasing certificate, the instrument of the freshly created purchasing power, is physically destroyed, immediately after its return to the issuing centre that is, within a short time, Expressed differently, the



purchasing certificate must reach a certain quarter where it can no longer exercise or transfer purchasing power.

Some will be tempted to suspect inflationary intentions behind this. They will argue that if the purchasing power is really compensated the moment it is created, the whole process might as well not have taken place.

A mathematical analogy may furnish the answer to this. The quadratic equation,  $x \cdot x + a \cdot x = b$ , does not, notoriously, enable us to determine the unknown  $x$  by the ordinary arithmetical rules. If, however we add the quantity  $a/2 \cdot a/2$  to both sides of the equation, which, of course, cannot affect its value, we obtain a term on the left side which is equal to  $(x + a/2) \cdot (x + a/2)$ . This allows us to extract the square root on both sides of the equation, which of course does not change the value of the equation, and which yields on the left side:  $x + a/2$ . If we then subtract the quantity  $a/2$  on both sides of the equation, which again cannot affect its value, there is left on the left side  $x$  only, and the equation is solved by means of seemingly indifferent, but in reality, indispensable operations. The quantity  $x$  represents, in a sense the quantify of material values which the receiver of dues (say the State, the municipality, etc.) claims. The quantities  $a$  and  $b$  represent the quantity of the material values and the circulating means of payment which he does not claim, but which are seemingly bound, in an indissoluble unity in the general circulatory process, with other material values and with other means of payment. By using the wholly indifferent quantity  $a/2$ , which symbolizes the purchasing certificates and the associated readiness to so sell, the  $x$  may be separated and then acquired by the receiver of dues. A chemical analogy would equally serve our purpose. What catalysts are in chemistry, purchasing certificates are in the national economy. They act by their mere presence, but take no part in the chemical changes ensuing.

The creation (\*) of purchasing power and of an at least equally great additional readiness to sell created at the same time and place (e.g., by means of the certificates issued by an insurance company, certificates which the management and the members accept in payment as ready money and for which the sufferers from damage purchase something) is a different thing from the anticipation of payments and is not therefore a "pre-financing" either. In a free society, this creation (\*) constitutes the only available method of mobilizing labor power, whether idle or active, but which is to yield greater output.

All other types of mobilizing labor power amount in the last resort to forced labor and infringe the freedom of a society, easily annihilating it, as happened in the great French Revolution. At the conclusion of this study something will be said concerning monetary phenomena and their political aspect, with special reference to that historic event. To mobilize labor power is not the same as occupying it permanently after its mobilization. In the Milhaud system the first issue only mobilizes labor power; but only through the regular continuation of issues is labor power permanently employed. Should the issue be stopped, the employment of the mobilized labor power would also stop (or become dependent on the money available) the reflux would soon withdraw the certificates from circulation, and everything would be as before the issue. This may be even desirable, as when a government, for defense purposes, wishes to mobilize 100 million hours of labor, perhaps for budding a fortress, but can only pay for it with its own certificates and not with coins. Accordingly, it issues certificates for 100 million labor hours, imposes a tax of an equivalent amount on the country, but has no

intention of employing this supplementary labor power after the fortress is built.

(\*) (I dislike the use of "creation" in this connection, seeing how confused, generally, the notions are on the "creation" of money or the "creation of credit" and even on "fiat money", with the latter term so misunderstood, especially by metallic redemption fanatics, that they consider ALL currencies not redeemable in specie to be mere "fiat money". What the process really does is not so much a "creation" out of nothing, of purchasing power, or of "money out of thin air", as has been so often asserted, but, rather, the transformation of an already existing purchasing power, namely that of goods, services and labor ready for sale, but in their illiquid form, into a temporary and equivalent liquid form, which facilitates their turnover. It makes the suppliers of goods and services able to pay and likewise their potential customers. The "ability to pay" and the "ability to clear ones debts" is increased, thereby, but is done not out of proportion with the ability to deliver goods, services and labor but, rather, in exact proportion to these factors. The liquidity thus achieved is in exact proportion to the liquidity needed. The certificates - or corresponding electronic credits - become something like a super-efficient oil that eliminates friction between all possible and desired exchanges. The "quantity theory of money" applies only to the inherently unlimited multiplication of legal tender money, i.e., money that cannot be refused or discounted and that has no free competition and can thus drive up all prices. Under full monetary freedom and sufficient comprehension and practice of it, the only price rises, from the monetary side, that will follow the free emission of goods-, service- and labor warrants, will be those which do away with the emergency sales prices - for goods, services and labor - and restore untrammelled free market conditions - i. e., prices for goods, services and labor, reckoned in sound and competing exchange media and value standards. On the contrary, this change will also reduce sales costs, like advertising, and it will increase turnovers and, to that extent, it will lead to a reduction of goods prices, while at the same time it will release an enormous amount of liquid demand for labor and services, in form of all the ready for sale and mostly mass-produced goods in the stores - they come to millions to billions in every large shopping centre, so far not fully expressed as purchasing power for labor and services, thereby increasing the value of labor and services offered in the market, realizing for them the full potential of mass production for the market, under conditions where sales become as easy and automatic as production has become, assuming, naturally, that production has been sufficiently informed, as it can be with modern means of communication, about all of its potential market. - J.Z., 1.12.01.)

If we are clear as to these concatenations, we shall be convinced that the idea cherished by many economists of the possibility of an "initial sparking", i.e., of the surmounting of the depression by a single impulse is mistaken. (Only the Milhaud system can rescue us!) The suggestion amounts to this, that through a single issue of supplementary legal tender a "dosed" inflation may be produced and that by this means the "stuck vehicle" of the economy may be restarted. That is, we picture to ourselves an economy like a motor car stuck in the mud, a car which is otherwise in perfect condition, and need only be extracted once from the mud e.g., through an exceptional pull of its engine. The "initial sparking" is to achieve that.

The above picture is true to this extent that under the present system of "exclusive currency" every cause of the depression acts "progressively". For instance, the unsaleability of a tenth part of the annual output of a country may very easily throw out of work for the year not a tenth but perhaps a third of all workers. Measures for combating (\*) the depression have a corresponding progressive effect and for every workless re-engaged another is indirectly in demand without our being able to say why.

(\*) (I dislike the terms "fight" or "combat" in this connection when all that is needed is to "end" monetary despotism, either by the repeal of the relevant laws or by systematically and widely ignoring them, based, naturally, upon sufficient knowledge of and appreciation of the monetary freedom alternatives. Should warlike terms should be used when merely ideas,

techniques, more suitable terminology, enlightenment, publicity and experimental freedom are required and not a single shot or other violent act - J.Z., 1.12.01.)

But, to return to our simile, the car is not in good condition; that is, it is not lubricated; it needs oil, a substance that has to be renewed like petrol. However in the darkness (felt by minds not yet illuminated by Milhaud's writings ) we suspect mud-stuck tires when it is really a question of resistance at the axles.

The idea that a "dosed inflation" is needed, is due to a decided servility towards the State a servility which, moreover, as experience teaches, is rarely associated with the honest desire to serve the people - the people, this child not yet of age, although destined to great things in the future.

The "étatist" naively ascribes to the State the right to inflate. (And when the State enacts laws, they contain provisions, such as par. 1895 of the Code Napoleon, which practically calls on the class of debtors to constantly further new inflations. In strong contrast, the old Prussian legislation endeavored, primarily, to render creditors independent of all monetary changes. See "Kommentar zum Allgemeinen Preussischen Landrecht", by Koch, vol. 1, pp. 783-784, Berlin 1853, concerning the interpretation of par. 787 to 789 of part I, eleventh title. The German Civil Code is also conceived in that spirit and it required the appreciation laws - more correctly, depreciation laws - of 1925, in order, to popularize, at least partly, the opposite conception.)

If, according to widely current views, existing Governments possess eo ipso the right to inflate, they would be justified in applying it to the advantage of their favorites for the time being, without consulting the people, i.e., to the advantage of those who call for an inflation. But current opinion goes even much further, not only in this or that country, but in every land. Everybody engaged in molding public opinion hopes at some time or other to become one of the ruler's favorites and, in this hope, he confers on him also the right to impose taxation, as a sovereign, i.e., to employ it to the advantage of his favorites for the time being.

Both conceptions, that of the right to inflate and of the right to tax, correspond exactly to the conceptions ruling for many centuries, e.g., throughout the Middle Ages, when they were even carefully defined. They are presumably inherited from that period, in the physiological sense of this word, like so many other superficially very modern mentalities. (See Annals, 1935, p. 176 ff PEACE PLANS 10 p. 154ff.)

But even boundless respect for the State cannot cancel the fact that in our society the collection of taxes is nothing but the sale of tax receipts by the exchequer (its goods!) of course, a compulsory sale, but for that reason, assured. (Louis XIV. would have deemed such a contention a degradation of God's grace; Napoleon, on the other hand, an offence against the deference due to the supreme military commander. Even Stalin would sharply censure, in appropriate soviet terminology, the implied offence against the sovereignty of the proletariat. But Frederick the Great would have appreciated this standpoint and probably also Louis XVIII., who was shot at by ultra-royalists because he was a Voltairean and in no way a 100% old style royalist.

And what is State paper money if tax collection is a sale of tax receipts? Even if, in order to awaken in the

population the necessary awe for it, State paper money were printed from silver plates, as it is said to have been anciently in Spain; even if its acceptance were represented in solemn

proclamations as an irremissible patriotic act, as during the American War of Independence, at Washington's instance, who could not buy hay or cloth for "Continental" (Bullock "Monetary History of the United States", p. 66). The same George Washington who talked another language when his own tenants offered him in payment Continentals at par (And who had got his troops, in the end and intentionally marched into the wilderness, in order to be "paid off" there - with inflated paper money. Thus he made himself and his cohorts safe from their justified anger! See P. Webster on this! - J.Z., 1.12.01.); even if the refusal to accept assignats at par is punishable with 20 years' penal servitude French Act of 1 August, 1793; Jastrow's "Textbuecher", vol. 4, p. 61); even so, State paper money is and always has been a prosaic purchasing certificate for tax receipts, and nothing else. (The instances where considerable quantities of material values could be bought for State paper money, have almost always been of little importance economically, even during the assignat period, when the cover of assignats by real estate was simply a self deception, although many confiscated plots of land were sold for assignats.) Before purchasing certificates were invented, or rather, before the idea underlying them was clearly elaborated, the mistake was pardonable, but not so do day.

If we take State paper money to be what it really is, namely, purchasing certificates wherewith to buy tax receipts, an economically correct standpoint towards the demand of an "initial sparking", by means of a "dosed inflation", at once presents itself. This is irrespective of the fact that in the light of such clear knowledge the old servile feeling complexes can no longer continue and that such knowledge suggests of itself the demand for a just price for tax receipts as well - thereby supplanting the old concepts. (A great transformation. Dissatisfied subjects are easily disposed of but the dissatisfied purchaser has always had his way and eventually goes where he is honestly treated.)

The right attitude towards the demand for a "dosed inflation" is naturally that an inflation, whether dosed or not, is to be rejected, but that an issue of State paper money, greater than are the current tax receipts, may be considered, and even must be, if a shortage of money exists and tax payers are at the same time in arrears. In such case a supplementary issue of State paper money may very well aid in collecting the outstanding taxes, and this by overcoming the shortage of means of payment. It could not achieve this, however, if, e.g., there is a deficiency of means of payment in Amoy and the paper money is issued in Shanghai for the payment of the salaries of officials.

But for the purpose of collecting tax arrears it is not necessary to issue forced currency. Ordinary, unforced "treasury notes" (this was a very good name for the first Prussian State paper money), would suffice. Indeed, they would serve even much better. As the treasury notes stream back constantly and are then destroyed, whilst new notes are issued in those localities where a deficiency of means of payment is felt to exist, Milhaud's principle is being realized in the sphere of public administration.

Since considerable tax arrears are always associated with other deflationary phenomena (e.g., increase in unemployment and in forced auction sales) which vanish with the possibility of paying the arrears, the supplementary issue has "set the car going", has, one may say, "supplied it with oil". Thus, superficially, the inflation economist seems to be justified. He misses, however, the raising of prices, which, in his opinion, is the main point. But an inflationary increase in prices does not set in, rendering it therefore impossible to buy (say) a farm in Hu-pei for the price of a silver cigarette case (the peasant was unable to pay his taxes), or acquire a horse owned by this peasant for the price of a few hob nails in Shanghai. A forced rate for the newly issued state paper money would mask the actual processes accompanying the issue and the subsequent reflux. It would also conceal the limits to inflation, which readily become manifest when there is a free market rate for means of payment. Also, given a forced rate, the general public, out of "fear of inflation", would cease to become creditor in any form.

If we consider how easily all the favorable effects that may rightly be anticipated from paper money, may be obtained from an unforced paper money; furthermore, the destructive effects regularly ensuing from a forced currency, even under a well-intentioned Government, one would be inclined to compare the economists who insist on a forced currency, with the master builders of the imposing and now excavated

castles of Mycene and elsewhere, who, as we know, also substituted compulsion for the use of mortar and sentenced every building operative to death in whose piece of work a knife could be inserted between the piled up stones. The suggestion that there were other ways would naturally have been stigmatized by the ancient "practical men" as "abstract" and "sentimental".

When tax payments are not in arrears, an additional readiness to buy tax receipts does not exist. In this case unforced additional paper money cannot be issued without depreciating it from the beginning, rendering thus impracticable further issues. It would be similar if there were tax arrears but more paper money were issued than corresponds to the value of the arrears. If then, in order to remove certain deflationary tendencies in an economic domain, additional State paper money is issued and, to render this possible, a forced rate is decreed, inflation becomes inevitable. Such an inflation therefore could not put an end, permanently, to the prevailing unemployment. Even if, for the moment, the inflation diminished unemployment, it would soon become evident that purchasing power and unemployment have only been transposed in time. (Similar to where they have been transposed in space through taxation for the purpose of increasing employment.) The purchasing power of many who receive this money is raised a little, for the moment, only to be correspondingly, mostly more than "correspondingly" diminished on the next general occasion when payments fall due. Hence, in the middle of an inflation, there occur outbursts of unemployment that surprise all concerned.

(One factor contributing to this effect is that prices being temporarily set in the expectation of continuing further inflation, race ahead of the current over issue of legal tender money. - The Ed.)

For example, this happened frequently enough in Germany during 1921 and 1923 and most especially after the cessation of the inflation in 1924, when from 7 April onwards Germany experienced one of the worst depressions in recent history. The inevitable aggravation of unemployment through inflation is so well known among real students of national economies that Talleyrand was able to predict, down to the very details, the sharp French deflation that followed the assignats period. (See his speech on September 170 before the National Assembly, reproduced in the work "L'inflation", published by Laville, Paris, 1926.)

(How to avoid this supposedly inevitable "hard option", of a temporary sharp unemployment, following the cessation of inflation, has been described in my small pamphlet: "The Soft Option," in PEACE PLANS 19. It is available on my website: [www.acenet.com.au/~jzube](http://www.acenet.com.au/~jzube). - J.Z., 2.12.01.)

The statement that the issue of unforced purchasing certificates creates additional purchasing power neither in the public nor in the private economy (in the sense hitherto attached to the expression), but that such an issue, by increasing labor output, creates a temporarily increased readiness to sell, will be found described concretely on one of the later pages of this chapter (p. 229) by means of the example of a saddler who is insured in a public society operating on the principles here expounded but who cannot pay his premium with money.

This example may serve as an analogy for the collection of taxes from persons who notwithstanding that the issue of State paper money has been correctly made, can yet neither procure this nor any other means of payment, although anxious to do so.

Such persons, if they possess useful material values intended for sale, or can offer useful services, might be permitted to pay their taxes with purchasing certificates made out by themselves, but with a surcharge. This should correspond to the amount of inconvenience occasioned to the Exchequer in negotiating such certificates. The surcharge might be less, if at least a few friends of the taxpayer were ready to accept these certificates in lieu of ready money. It might be dispensed with altogether when a whole village (for instance) declares itself ready to accept at par the certificates of their fellow citizen, or if a group of at least 100 persons is ready to act thus for at least six months.

By issuing such edicts, a statesman would promote the organization of persons into mutual payment associations (an idea first pronounced by Knapp, but rediscovered by Rittershausen in our day), which could only be advantageous for his work and his country. What a difference between this statesman and another who - for instance, in order to buy uniforms of the value of 1.000 gold coins believes that he must compel the country's tailors to regard his paper money as of the same value as his gold coins; who is thereby brought to the issue of a forced currency; and who stands thus always with one foot in the inflation stream. The statesman who teaches his people to provide itself

with its own means of payment, should there be a shortage of these for any reason, does for it almost as much as did that leader in primitive times who first taught his people to provide themselves with their own fire when that bestowed by heaven (i.e., that lit by an accidental lightning strike) had become extinguished. As late as the last century, the Pesherahs of South America lacked a leader of this sort. (The memory of such individuals, who were regarded by the fire priests of their time as very inconvenient "heretics", is kept alive in the Prometheus legend.)

Since every possibility of applying the principles of the Milhaud system throws light on all other possibilities of its application, as well as on the principles of the system itself, the foregoing generalization of the payment of insurance premiums, in conformity with the Milhaud system of settlement, to the payment of dues generally, was perhaps not superfluous. Let us now return to the goods warrants of the insurance societies.

The value of the goods warrant of an insurance society is therefore primarily maintained at par by reason of the readiness to accept them on the part of the policy holders and of the society itself. Nor may we estimate at nil the demand of those insured in the society, who possess ready money and who, at the least fall in the discount rate of the warrants, buy them up so as to dispose of them at par to the society. In fact, when, for whatever reason, the discount rate is high enough, say reaching 10 %, members possessing ready money would find it advantageous to buy up the warrants and pay them in to the society, stating that they were for meeting future levies. Here the problem arises how such reserves might be invested. One way would be to grant loans to members who desire to provide themselves with fire fighting equipment, e.g., fire ladders, manual extinguishers, and the like. The loans could be granted as amortization loans, the society's goods warrants being used both for the loan itself and for repayments. Loans to communities for acquiring fire engines and other fire fighting appliances would also enter into consideration. Moreover, Governments could do much for fire protection, if they exempted from taxation every capital investment intended to produce

fire fighting equipment. In this way Asiatic towns could in 30 years possess as efficient fire protection arrangements as do European towns.

To return, however, to the exchange rate of the goods warrants. Undoubtedly, as long as ready money exists among those who owe the society contributions, the rate of the goods warrants cannot drop much below par. A discount can, of course, only arise, if either some holders of goods warrants form a wrong opinion about the value of the warrants and therefore dispose of them at a price below their real value, or if the society pays out more in goods warrants than is justified by the contributions falling due fairly soon. As soon as the discount on the goods warrants exceeds 1%, it becomes advisable to examine at once the books of the society, to ascertain the amount of outstanding levies, and to inquire into the sum involved in the outstanding goods warrants and the manner of their issuance, and, finally, to make public, without delay, the result of the investigation. Besides, those persons who disposed of their goods warrants at a discount, should be asked why they chose to lose and why they did not prefer to pass on the goods warrants to parties who would have accepted them at par.

A discount probably always arises owing to individuals who are not members of the society or to members who have paid their contributions and are therefore not bound to accept the goods warrants, drawing a distinction in sales between goods warrants and ready money. Where the issue is properly organized by the society, no one in the society's district will tend to decline to accept the goods warrants at par. On the contrary, normally many persons who are not members will also post up notices declaring themselves ready to accept the warrants in lieu of ready money (see Milhaud), and this simply in order to increase their turnover.

For the sake of clarity, let us examine the case of the insured A, B, and C in the above illustration, who respectively owe contributions of 10, 25, and 15 rials. If, for instance, A is the owner of a flock of sheep, he will be in a position, when selling wool, hides, or live sheep, to accept a society's goods warrant for say 10 rials, as he would accept 10 rials in silver. He can then take the goods warrant received in payment for his goods and remit it to the society as his contribution. B is perhaps a peasant. In that case when selling corn

or vegetables, he can accept goods warrants to the value of 25 rials as ready money and pay these in at the society. C is perhaps a shopkeeper. He can accept goods warrants to the value of 15 rials when selling his wares, and may, in his turn, pay in goods warrants the contributions he owes to the society.

Purely theoretically considered, it would suffice that every insured in arrears with his contribution, need only accept such a number of goods warrants in payment as would correspond to the amount of his contribution. In practice, however, friction might ensue thereby. Hence in order to augment the possibility of utilizing the society's goods warrants, each insured in arrears with his contribution, must be required, if necessary, to accept in payment goods warrants to at least double the amount of the contribution. (W. B. Greene, in his "Mutual Banking, which was rescued from oblivion by Henry Meulen, reaches a very similar conclusion, namely that a member of a mutual bank has, if necessary, to accept the goods warrants of his bank up to double the amount he owes it. In developing his exchange bank, Proudhon equally considered that the members must accept the warrants at their nominal value, but demanded, going in this far too far, that every member must accept every amount.)

Without a doubt, the total amount of goods warrants issued by an insurance society, assuming a conscientious and capable management, would be always covered by the obligation to

accept them of numerous persons, all of whom can offer effective values. It may, of course, happen that an insured possesses or produces material values for which there is no regular demand: The ivory carvers of China, who carve those ivory balls, twenty of which are sometimes worked into one another, each moving freely, and of which, even the smallest & innermost, displays carved figures, these ivory carvers are sometimes obliged to wait for years for a purchaser. (These art products can be admired in European museums. In Buddhist temples they are shown to the faithful in order to impress on them what human patience and care can accomplish when they have a definite goal in view.) Would such a craftsman's obligation to accept serve as well for cover as that of a baker or of a rickshaw owner? To judge such a case fairly, it should be remembered that the ivory carver would not present an essentially different risk if he undertook to pay, not with goods warrants but with money. If he lived in London and was insured there, his position and that of his insurance office would not be different. If he did not tender payment within the period fixed by the insurance conditions, his insurance protection would come to an end, whether he lived in London or in Tabriz, whether he paid in goods warrants or in gold coins.

But would not the cover of the goods warrants suffer if some insured did not pay, or if they carried on a business which only allowed them to make payments at long intervals? This is so, and if there were many such serious cases, the society would be obliged to impose an additional contribution on those insured who, technically and economically, do not represent such an abnormal risk as an ivory carver does precisely as an European mutual insurance office that has indemnified losses out of a raised loan, but half whose members, for some reason, suddenly cease paying. Dangers to which any mutual insurance office in any country is exposed, although it does not issue goods warrants, cannot be fairly regarded as special dangers arising out of the goods warrants system, when it concerns a society operating with such warrants.

It remains now to be seen what should be the attitude of the society to members who can pay their contributions neither in money nor in the society's goods warrants. In the sequel we shall find that, in the last resort, the principles of the Milhaud system of settlement suggest in such instances the acceptance of the debtor's own purchasing certificate, as well as an attempt to negotiate it, before the creditor proceeds to his "ultimo ratio", i. e., a forced auction sale. Such a debtor's purchasing certificate might be made out almost exactly as would the goods warrant issued by a society, only that the debtor would be described therein as obligee and the text would be phrased somewhat less technically. For the sake of greater clarity, here is such a text: (See overleaf after the next paragraph. - The Ed.)

The document made out by the debtor should be called purchasing certificate, whilst the documents made out by the society, since nothing concrete is to be bought with them, might preferably be called goods warrants, although the financial principle remains the same in the two cases. Accordingly, the debtor is obliged to accept his own purchasing certificate in lieu of ready money when somebody buys something

of him or tenders payment on any legal ground. It would also conflict with the principles of good faith if the debtor refused to name the persons who are likely to make payments to him shortly or are responsible for making payments to him. The society or the holder of the certificates may then endeavor dispose of them to those persons.



### PURCHASING CERTIFICATE

This certificate will be accepted by ( name and address ) in lieu of ready money to the amount of

10 RIALS

in all payments due to him. The above named will make no distinction between legal tender and this certificate, nor inquire before accepting payment whether settlement is to be in legal tender or in this certificate. The above named is ready to inform the holder of those persons from whom he expects payments within the following two weeks. The validity of the certificate expires on ..... x After that date the above named will decide at his discretion about the acceptance of this certificate, reserving to himself the right of repudiation.

No. .... Date ..... Signature .....

Certified by creditors: ..... Date ..... Signature .....

The inconvenience occasioned by the debtor, transforming into a purchasing certificate made out by himself the demand for payment made on him by the society, should be fairly compensated. The amount need not be smaller than the inconvenience and expense the debtor would have incurred in selling his goods, for this has not to be incurred by the creditor.

In highly commercialized countries such as the United States, it is calculated that sale costs amount to approximately half the amount paid by the consumer. In Asia sale costs must be far higher. Moreover, the society for which this is an additional kind of activity, has to go to relatively greater trouble to negotiate the purchasing certificate of say the owner of a flock of sheep, than the latter would have to take, seeing that it is his avocation. to sell sheep. Also, according to universal usage, accrued interest is to be added where the debtor delays payment. However since these surcharges only mean that the debtor who offers his own purchasing certificates is, notwithstanding the increase in the amount, not worse off than if he had paid in current means of payment, there should be added another surcharge high enough to induce him to do his utmost to procure the necessary current means of payment for settling with his creditors before offering his own purchasing certificates. These various considerations suggest that it would not be unfair if a society's debtor who perhaps owes it contributions to the amount of 50 rials, should be obliged to make out a purchasing certificate for about 150 rials (or 3 certificates of 50 rials each), if he leaves its negotiation to the society. Should, however, an insured show ill will and reject every offer by the society or leaves it unanswered, there would only be left the alternative, at least under the present legal system even with a society applying the Milhaud system to proceed, as is the rule all the world over, to a forced auction sale.

For the payment of indemnities, the society will not always be able to utilize purchasing certificates issued for single debtors. It will, however, frequently be possible for it to pay its suppliers with them. Here is an illustration. Suppose a saddler owes the society 100 rials, but is unable to pay because it is winter time and few saddles are bought then. In that case the society may perhaps accept a purchasing certificate in payment, the saddler undertaking to accept it in lieu of 300 rials in cash when he next sells a saddle. The society would perhaps be able to utilize such a certificate when it buys, e.g., a cabinet or a typewriter. Allowing for a discount of 50%, the supplier will readily accept the certificate in payment and would probably find somebody who will, in turn, accept it at a discount and thus secure for himself a very cheap saddle. To prevent misunderstandings, it may be stated that in his writings Milhaud does not propose such

a surcharge. But Milhaud has shown how, in the cases he describes, namely those relating to external trading and wage payments, a purchasing certificate can be converted into a general means of payment, so that the creditor requires no surcharges to be fully satisfied. Here, however, we are discussing cases where the tyro (novice or beginner The Ed.) might think that the Milhaud system is inapplicable. Actually, this is a mistake.

Similar reflections to those relating to contributions in arrears are applicable to payments to the society in discharge of loans it grants, loans granted in cases where the damage done is greater than those the society, according to its conditions, was bound to meet or even justified in meeting; also loans serving as an investment for its reserves. Suppose the society has granted a farmer a loan to enable him to purchase a fire appliance and the time has come for him to tender the society 500 rials in part payment. Suppose, moreover, that there is in this region a great shortage of ready money. Assume also that this region has been free for some time from fires, so that the society had no occasion to set in circulation its own goods warrants. Then it may very well happen that a farmer, who is quite willing to pay and who has much produce to dispose of, is yet not in a position to pay the 500 rials, because of the aforementioned money shortage. In such a case the society, if for special reasons it does not grant a respite, will, to the farmer's advantage as well as its own, accept his purchasing certificates in convenient denominations.

By revealing entirely new payment facilities, the preceding examples make it clear that the principles of the Milhaud system of payment, if the system has operated long enough in any country, would finally transform the debt legislation to the advantage of creditor and debtor alike. This transformation will be accomplished through the debtor, before he is threatened with a forced sale, being permitted to issue purchasing certificates which the creditor then utilizes. Similarly, the courts would condemn the debtor to issue purchasing certificates, if in their judgment the country suffered from a general shortage of means of payment or if, for other reasons, the debtor could not procure sufficient means of payment, at least not without sacrifices that could not fairly be demanded of him. Even should the debtor refuse to issue purchasing certificates or leave unanswered a demand to do this, a court pronouncing judgment in conformity with the principles of the Milhaud system, would, if, existing legislation permitted it, not proceed at once to decreeing a forced sale. The court would issue purchasing certificates for the debtor, i.e., in his name, which the debtor would then be obliged to accept in payments in lieu of money.

Only if this procedure proved impracticable, or if it appeared disadvantageous for the creditor (which would rarely be the case), would the court refrain from providing the creditor with purchasing certificates. If the creditor on the other hand, should be unable, despite his endeavors, to utilize the certificates within a certain time, he would have to bear the loss. The surcharges represent the insurance premium for this contingency.

The increase in the amount owed, if the creditor accepts the debtor's own purchasing certificates, would differ according to whether the system is generally applied in a country or not. That is, if the system is generally applied, there would be no lack of merchants or banks which would deal specifically in utilizing the certificates of debtors unknown to the general public and whose purchasing certificates could therefore not be utilized for general payments. Correspondingly, the creditor's difficulties in utilizing the debtor's purchasing certificates would diminish or even disappear. The banks or merchants concerned would perhaps take over the creditor's purchasing certificates at a discount of 5% and still earn a net 30%, rendering it hence unnecessary to more than double the original sum owed, i. e., to raise the

amount higher than would correspond to the middleman's 15% of the amount of the purchasing certificate.

After the introduction of such a system, cases such as occurred in Germany before the War and no doubt in all other countries, would become practically impossible. Thus a house of the value of 100.000 marks, realized 1,000 marks at a forced sale. Of course, possibly both debtor and creditor were ruined thereby, As already pointed out in No. 1 of the Annals of 1934 (p. 22f of PEACE PLANS 9), this suggests the need of far reaching Legislative reforms. The International Law Association should consider this matter at one of its coming conferences.

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After suitable legislation had been passed and trade had adjusted itself thereto within a few years, perhaps ten or twenty, a surcharge of about one-third of the original debt would suffice to indemnify the creditor and the middlemen dealing in purchasing certificates of a debtor unknown to the public, instead of currently negotiable means of payment. It is certain that legislation indemnifying a creditor in this way, instead of immediately ordering, as is now the custom in almost all countries, a distraint, would introduce a quite different and more far reaching protection of property, both that residing in claims and any other, than has hitherto been attained by debt legislation. The latter has thus far set itself the impossible goal of always securing for the creditor "exclusive currency" and yet not to destroy the productive energies of the country. Hence one day it one-sidedly favored the creditor and the next the debtor.

The mistaken principle, of the hitherto prevailing legislation concerning the repayment of loans, may be expressed as follows. This legislation has misapprehended the fundamental difference between the repayment of a loan and the returning of a depositum irregular, i.e., of a deposit where the recipient is not required to return the objects deposited, but objects of the same kind, as is the case, say, when cereals are stored in grain elevators. Legislatures then began to distinguish the two kinds of repayment. This was the case in German legislation, more particularly in the "Allgemeines Landrecht fuer die Preussischen Staaten", which appeared in 1794, but was already drawn up under Frederick the Great. (This was superseded in 1900 by the German Code of Civil Law.) In part I eleventh title, par, 793, we read regarding Loans: "If the value of a loan has been tendered in shares, mortgage bonds, or in other documents payable to bearer, the repayment must take place in documents of the same kind"? also par. 715: "When a loan is granted, goods must not be tendered instead of money."

The difference between a depositum irregular and a loan is of the utmost importance from the economic viewpoint. To consider only one aspect: In the case of a depositum irregular the uprightness of the debtor demands that the recipient of the depositum should not put it to use but preserve it properly e. g., as in the case of cereals stored in a grain elevator. With a loan, on the contrary, the uprightness of the debtor demands that the loan should be put to use, in order that it might "earn" the amount to be repaid together with the interest. (Christ, who showed himself a well informed and wise economist in many of his pronouncements, stressed this in his "parable of the ten talents", L u k e, chapt. 19.)

The debt documents appropriate to a depositum irregular are deposit certificates (e. g., warrants), to which, accordingly, the principle of convertibility unreservedly applies. For money loans, however, there is only one appropriate form of settlement that a creditor may claim: the purchasing certificate, not money, least of all gold coins. The principle of convertibility should be entirely excluded from legislation dealing with the repayment of

money loans. Prior to the discovery of the purchasing certificate, these two juridical principles were necessarily shrouded in obscurity.

After well informed merchants and jurists had for centuries collaborated at determining the special nature of a warehouse warrant, the nineteenth century saw at last the development of special deposit legislation, independent of general debt legislation. One day the purchasing certificate will similarly be recognized by jurists as a legal instrument *sui generis* and become then also a subject of special legislation.

It would fall outside the scope of this study to submit detailed proposals on future legislation regarding payments. We may say this, however, once it is recognized that the purchasing certificate issued by the debtor represents the sole means of payment which is always and with certainty available, and that all other means of payment are only available by a happy chance (even if the probability should amount to 99% ), legislation will have to take account of this new conception. Every contract relating to the tendering of a particular means of payment, apart from the purchasing certificates issued by the debtor, will be considered in the future as an uncovered sale of this means of payment by the debtor. (Annals, 1934 p 76, index: futures)

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Even according to current views, short sales are contracts that the law should recognize when a premium (forfeit money) is agreed upon payment of which the vendor can free himself from his obligation to deliver. The law should therefore provide premiums for all cases where the contracting parties have not themselves stipulated them. If, for example, gold coins have been agreed on as the means of payment, this should be regarded as a short sale of gold coins by the debtor and the debtor should be entitled to supply on pay day his own purchasing certificates in lieu of gold coins, but with an extra that would satisfy the creditor. Should the creditor refuse to accept current but unforced means of payment such as State paper money, of which he must give proper notice, the debtor should also be entitled to provide purchasing certificates issued by him, but this time with a decidedly diminished extra or with none. Compare plan 110, page 37. The Ed.)

The existing law of exchange will inevitably undergo considerable modification as the result of the invention of the purchasing certificate. In almost all countries, particularly in the United States and in Germany, the use of bills of exchange is gradually growing rarer, owing to the increasing resistance of the debtor class. Underlying this resistance is the quite justifiable feeling that bills of exchange are "dangerous". The possibility of converting value into money proves less easy than was formerly assumed, when there was an even a stronger inclination than today to confound economic difficulties with personal culpability.

The idea that the conversion of value into money is always easy for the debtor and at all events entails no expenditure of time, effort and money of any economic importance, nor involves special risks in other words, the idea that the rapidity of the monetary circulation affects only the national, and in no way the private, economy this idea dominates not only our jurisprudence but our financial mathematics. (These two are in many ways related. When the mathematical correlate of the speed of the monetary circulation i.e., the price index number, had been clearly established, learned jurists in Germany today Reichsgerichtsrat Zeiler attempted successfully to introduce this conception into legal findings & in this way prevented much injustice during the inflation period.

Financial mathematics has hitherto completely ignored the concept of "liquidity". Its formulas have so far not gone further than to represent value; for example, to compare future with

present values or to compare two values of services or claims appearing in different forms, as, e.g., in calculating the real interest of loans not issued at par or standing at par. The formulae, however, do not allow for the probable availability of ready money to the debtor at a given point of time. The author has published in the "Blaetter fuer Versicherungs Mathematik", an initial discussion of the subject and this for the concrete case of institutions financing building operations. Arising out of this there has sprung up in Germany an extensive mathematical literature on liquidity, produced by financial institutions desirous of offering their members opportunities, through thrift and the taking up of loans, to acquire their own house. By extending the mathematical results obtained by these institutions, it will become possible to reach gradually a general mathematics of liquidity, i.e., a mathematical theory concerned with: a) the existing relation between the length of notice in sums accepted and lent by financial institutions;

b) the probable influence of time within which monetary investments at par may be converted into means of payment, on the market value (e.g., stock exchange value) of these investments; c) the probable influence of time within which monetary investments at par may be converted into means of payment on the accumulation of capital generally.

Such a mathematics theory of liquidity need not be inferior in exactitude to the mathematics of value (Calculation of compound interest and of index numbers). Nor should it be considered as a kind of intellectual gymnastics, as the following evidences. The inspectorate for the life assurance companies of a large country ordered them, a few years ago, not to invest their funds in mortgages repayable in regular installments but in such a way that the debtor undertakes to repay the received capital in lump sum and at a fixed date. Such an order was only possible because liquidity had not been recognized as an element of

insurance mathematics. Leaving aside that in the contracts required by this authority the debtor promises more than, apart from good fortune, he can keep, such a provision conflicts with the interests of the national economy as well as of the insurance companies. The latter, as need not be shown here, expose themselves to the danger of ill-liquidity if the influx of insurance premiums slackens, which may very well occur. The companies could then only meet their insurance commitments, without affecting their capital investments, on the presupposition that they can dispose of these investments at the purchase price. As the unfortunate history of the last few years shows, this presupposition is by no means always realized. The mathematician Furlan appears to have been the first to emphasize the necessity of introducing the concept of liquidity into insurance mathematics. He pointed to the serious disturbances of the capital market after the San Francisco earthquake, when the insurance companies sold securities of the value of several hundred million dollars in order to meet their obligations; also, to similar phenomena after the sinking of the "Titanic". ("Zeitschrift fuer die gesamte VersicherungsWissenschaft", 1912, p. 1072, "Insurance Affairs and the Money Market".)

(After he had finished this study, the present author discovered that the celebrated mathematician Christian Kramp had already in 1788 solved a liquidity problem in the "Leipziger Magazin fuer reine and angewandte Mathematik" and this in a very neat way, applying to human mortality the "double geometric law" rediscovered a century after him.)

The feeble economic grasp evinced in the compilation of the older legislation relating to loan repayments, has led in all countries to distraints being many times more numerous than they need be.

The purpose of the received legislation on distraints in all countries was to let the market yield what the debtor would not or could not. But, in fact this legislation delivered both debtor and creditor to the vicissitudes of a very tiny portion of the general market namely, the money market. It presupposed as self-evident that this market is practically undisturbed and is in any case well enough provided with money, And yet the under provision of this market was perhaps the very cause of the forced sales. It may be contended, without exaggeration, that it depended only on the accidental state of the money market whether the courts did not endanger rather than protect property, both that invested in the claims of creditors and the encumbered property of the debtor. Under the system of purchasing certificates on the contrary, the property of the individual is no longer jeopardized by monetary crises. (Only then, in reality, will a true credit insurance system become possible.) Whence follows the exceedingly great social significance of the Milhaud purchasing certificate, a significance which most of his critics have missed.

In the last chapter will be found further remarks on the social significance of the introduction of purchasing certificates and this in relation to insurance matters.

We may add here that the legal possibility of converting a debt payable in general means of payment, by way of an appropriate surcharge, into a purchasing certificate not entering into the general circulation, but negotiable on the market, must influence the current economic interest theory. Interest, as compensation for a creditor so-to-speak taking over the sales costs of a debtor, has probably not been treated at least not clearly enough, by the theory. Thus far it tacks a chapter entitled "The Means of Payment as a Determinant for the Rate of Interest". One may allow, however, that in certain cases jurists have taken into consideration the means of payment, e.g., Justinian in his "Corpus Juris", when dealing with "agricultural interest", i.e., with interest relating to a loan granted and repaid in cereals, where the interest may rise to as much as 30% per annum.

Before the establishment of the Reichsbank, it was customary in Germany for the small private banks of issue to charge 2% interest per annum when they granted a loan in their own notes, but 4% when the loan was in notes of the Bank of Prussia.

But let us return to our insurance society and examine what its purchasing certificates can do for its insured if, for any reason, ready money has ceased to be available within the society's range of activities.

The theoretically weak point of the whole goods warrants system is that the acceptance of the warrants is

voluntary in our present payment arrangements. But that this weakness exists only in theory, follows from the consideration that legislation has never found it necessary to compel general acceptance of the paper money of an economically appropriately organized institution but that on the contrary, it has frequently intervened to prevent individuals accepting such paper money and also to prevent any institution, except that holding the monopoly, to issue its own means of payment. (The most remarkable example of such tyrannical legislation is the United States Act of 1863 on the National Banks (which continues to be the basis of the United States monetary constitution.) This abolished the private banks of issue because their means of payment, compared with the greenbacks, were too good. (Consult the numerous publications of the American periodical "Sound Currency".)

The following instance has therefore also only theoretical importance, but we shall discuss it here for the sake of completeness. Suppose that the owner of a flock of sheep has lost by a fire 100 sheep of the value of 20 rials each. The society is prepared to pay him 2,000 rials in goods warrants to enable him to replace his sheep. But no owner of flocks in the vicinity or in the region will accept the warrants in exchange for sheep. What then? Such an unusual case, conceivable only where religious feuds or similar causes are at work, can only be met by the insurance conditions providing that the society is not responsible for any loss arising from its goods warrants being refused in general trading. Normally the owners of flocks will not decline to accept the warrants; On the contrary, the insured sufferer from damage is likely to receive offers from all sides and there may even be underbidding. This will happen because the warrants must be accepted in lieu of money by several thousand persons, namely, those insured in the society and having in store objects in daily demand.

The steps to be taken in order that the insured sufferer from fire should buy sheep with the goods warrants and not anything else, or that he should not spend them on wholly purposeless objects, cannot be discussed here. In a succeeding chapter will be shown that the society does not directly hand over the goods warrants to the insured, whose property is damaged, but to a supplier, perhaps through an agent, who subsequently undertakes the purchase, preferably together with the insured.

Suppose it is a question of a small society having roughly 2,000 members, each of whom owes on the average a contribution of 25 rials. This implies that the society's goods warrants have altogether a purchasing power of roughly 50,000 rials among about 2,000 persons. In the society's district and certainly also in the neighboring districts, a goods warrant having such a purchasing power and bound to be accepted as ready money by several thousand persons, would be valued as ready money by everybody. Purchases with these goods warrants, just as with silver coins of the same amount, could accordingly be made also in the neighboring districts. Of course, in more distant regions, where the inhabitants do not know the society, it is improbable that the warrant will be accepted at par. Bankers, merchants, and others, would, however, accept them with a discount. This means that the warrants are not so readily utilizable as the national currency. One must make the best of this. But the restriction to the society's district has one advantage. The warrants will return to the society after a few days. This reflux indicates that contributions and indemnity are adjusted. A rapid reflux signifies that everything has proceeded quickly.

The goods warrants having returned, the society must destroy them. The destruction is then duly advertised, just as happened previously in the case of many European and American private banks of issue. (Down to today the Bank of England destroys every note returned.)

Here, where it is only a question of presenting outlines, we shall refrain from entering into minutiae.

It might be an advantage if a larger bank in Iran for instance, the Banque Agricole et Industrielle collaborated in the issue of the goods warrants. These would then be issued in the form of standardized clearing checks for the bank branch of a given district and not as the society's goods warrants. However, in this instance also the checks would be only subject to compulsory acceptance by the insured of the district and by the district branch bank, this to ensure a relatively rapid reflux and also to impress on the

population the difference between a bank check and a bank note. (Should the Banque Agricole et Industrielle be willing to collaborate, it would lend in clearing checks the amount the society needs for expenses and have pledged for that amount the outstanding contributions.)

Bank certificates only negotiable at the bank's branches, would be no novelty for Asia. Hartner, in his work evincing much insight, "Währung und Notenbankwesen Persiens unter Berücksichtigung der neuesten Zeit (Currency and Banks of Issue Problems in Persia, allowing for most recent times), (Leipzig, 1932), states that the notes of the Imperial Bank of Persia, founded in 1889, were only convertible by the branches responsible for their issue. Any one desiring to dispose at Shiraz of a note marked, say, "Payable at Bushire only", had to reckon with a discount of 1 to 1-1/2 %. (However, the distance between these towns was 10 caravan days and 5 post days, transport being so difficult (Rabino, "Banking in Persia", p. 34) that technically the distance exceeded that between London and Chicago. And yet the discount was kept within 1- 1/2 %! We are unfortunately not informed of the charge on small and large amounts respectively. But the experience of two centuries suggests that while, for example, a 1,000 kran note had a discount of 1-1/2%, one for 10 kran was accepted at par. Nor do we learn whether the notes were discounted only by the money changers or also at the bazaars. The discount was in any event trifling and shows that the value of the notes was certainly not determined by their metallic cover. This is confirmed by the great run on the Imperial Bank in 1897, but which Hartner, in agreement with the modern monetary theory, cites as proof of the desirability of the notes in Iran being convertible. The case, however, proves the contrary. The bankers of Persia had learnt that the silver reserves of the Bank were running very low and collected a large number of notes, mostly by borrowing them from the public. They then presented the notes of the Bank for redemption. The Bank was unable to keep its promise to redeem and the exchange value of the notes fell. For a 100 toman note only 95 toman were paid in silver at Teheran. (See Hartner.) But such a discount for denominations as high as 100 toman may be regarded as very modest, more particularly if we consider that the bankers used every means to depress the exchange in order to buy the notes cheaply. And we should have to discover whether the discount was also 5% at the bazaars. Rabino, the very able director of the Bank, met the situation eventually by appealing to the Shiitic law, which does not recognize the notion of legal tender (Hartner, p. 28) and offered the bankers English pound notes and French gold pieces. Pursuant to the Shiitic rules regarding "good faith" in trading, he had thus done his duty, although he could not fulfil the letter of the obligation to redeem, according to which he would have had to pay in silver coins. In similar instances, the Bank would have become inevitably bankrupt in Europe or the States, or would have had to accept any conditions imposed on it by the note creditors. Moreover, Rabino's work reveals why during recent decades Iran has had to be satisfied with a silver currency even though the presumption was entirely in favor of a gold one. Since the competent authorities, like the world generally, considered the convertibility of banknotes indispensable but recognized that unconditional convertibility is impracticable, they concentrated on making conversion as difficult as possible. Conversion into silver suited this plan. On p. 39 of his above cited work, Rabino remarks that a man could at most carry away 300 pound sterling (pre-War value), a donkey 600 a mule 800, and a camel 900. Hence a comparatively small sum for a bank, such as L 25,000, required as many as 83 fully loaded "redeemers" and the counting, by skilful reckoners, would occupy 16 days. Rabino had published this calculation prior to the great run of 1897, and as the run showed, the calculation was arithmetically accurate, but erroneous economically. The silver standard was nevertheless maintained because, on the one side, no one knew before Milhaud, in Teheran or elsewhere, of any means of equalizing the value of paper money, and of preventing, on the other, the danger of a run on a bank.



That the value of notes made out in money depends not on their convertibility into metal, but on their commercial utilizability (or, as Knapp pertinently remarks, on the circulatory, and not on the actual, satisfaction of their possessor) (\*) appears to have been known centuries ago in Iran. Nizam al Mulk, one of the greatest statesmen of all times (who lived at the time of the Crusades, reports in the penultimate

chapter of his work "Siasset Nahmeh" translated by Schefer into French a work still highly esteemed in the East), on orders to pay, made out in money but redeemable also in goods. Such orders must have also played a part in the collection of taxes, inasmuch as the vizier mentions a case where particular taxes were raised in precious metals with a view to replenishing the Shahs war chest and where neither clearing nor any other form of payment was admissible. Nizam himself paid with orders. These were accepted by particular taxation offices at their face value, a system the importance of which for the Exchequer as well as for the taxpayer was as little understood by the average folk of that day as of this. It is stated that the ferrymen, when Matek Shah crossed the Oxus, were paid by Nizam al Mulk in orders on Antioch and that they complained to the Shah that the place of payment was many days distant. Nizam, called to account by Malek, spent little time on theoretical monetary explanations, which moreover his imperial master would have hardly understood, but simply answered that to heighten Malek's fame, he had made out orders which mentioned simultaneously two far removed places, both subject to the Shah. Matek was satisfied, and so were the ferrymen, when they found out that the orders were negotiable without discount. (Malcom, History of Persia, & Gibbon's Decline and Fall of the Roman Empire, vol. 6.)

In this connection we may add a few words about the meaning of a monetary standard for insurance matters in Asia and more particularly in Iran.

(\*) (Oh, how flawed is the language in describing such realities! Not the "circulatory" satisfaction, gives value to the notes but their rapid reflux, or return to the issuer, due to the readiness to accept them by the issuer. And this reflux does give an actual satisfaction - by paying off debts or acquiring wanted goods or services with them. While, what is here called "actual satisfaction" does only support a delusion, namely, that the value of notes depends on their convertibility into metal, metal, which only a few could and would use, e.g. for jewelry, while most would not ask for redemption in metal but would spend it again for real satisfactions in consumer goods and services. Only if "circulatory" satisfaction is described as a short term local circulation, within a limited payment circle, before the notes return to the issuer, should the term be used. The main feature of these notes is precisely that they do not remain in circulation for long but only as long as is necessary and justified by their issue and reflux conditions. The notes act like short-term clearing certificates: issued, changing hands at most only a few times, then returning, to be then cancelled or destroyed, as opposed to coins or gold certificates, which are intended to remain in circulation as long as possible. - J.Z., 3.12.01.)

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***NOTE: In both, my German and my English edition, there is no chapter "I"!  
- J.Z. (\*)***

(\*) This omission might go back to the first German edition, in ANNALEN DER GEMEINWIRTSCHAFT, 12, Jahrgang, Heft 1, January-April 1936, where the contents is listed in one block of text, without clear breaks and page indications and there section H. is

followed by subsections 1 & 2, of which the "1" in this print almost looks like an "I" and so has been, possibly, misread as such both for the German and the English edition. - I must admit that I noticed this omission only now and can only hope that the complete manuscript was published, for, to my knowledge, it is no longer in existence. Note that when there is any doubt on any passage in this translation then the German original should be consulted, which has been microfiched in PEACE PLANS 665. I do intend to scan it as well. J.Z., 30.11.01.

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## ***J. THE STANDARD OF VALUE IN RELATION TO INSURANCE IN ASIA, MORE ESPECIALLY IRAN***

Most contemporary economists are partisans of the modern monetary theory. The essence of this theory is the viewpoint which already the Finance Minister of Louis XIV, Chamillard, vainly endeavored to impose on the French people, namely, that the ruler should possess the right: a) to fix the value of paper money at his own discretion, and b) to demand that the population should make extensive use of this paper money. (Camillard required that a quarter of all sales should be mediated by the "royal", i.e., his paper money. (See Roscher, "National Oekonomie des Handels and Gewerbefleisses" chapter 7.)

The hereby imposed restriction of clearing is noteworthy. Clearing is a very embarrassing category for governments bent on currency abuses, for in it is immanent the emancipation from the money monopoly of the State and it inevitably introduces into the prevailing system of payment the element of stable value. (With the currency laws of 1930 Soviet Russia prohibited the remuneration of workers with confirmed clearing checks. Workers' cooperatives in Soviet Russia are also not allowed to endorse checks.)

The fact that the real sovereign, Louis XIV, stood subjectively aloof from these theories, makes clear the meaning of that demand. Chamillard, with his quite inferior capacities, claimed for the sovereign a power which he was sure he and his friends would necessarily wield. Shrewdly enough, he eked out therefore his own deficiencies with the (filched) power of the sovereign. At the same time he met implicitly every criticism of his capacity as a finance minister by that very measure, in that any criticism appeared necessarily as an act of rebellion against the king, an attempt to challenge his sovereign rights.

So it was then; today it is scarcely different, Meanwhile the money theorists have grafted onto their claims the now well developed the theory of index numbers as well as the theory of the terrestrial influence of sunspots, which also may be regarded as established today. These three components may be said to form now a seemingly firmly founded unity knit together by mathematics, astronomy, statistics, and patriotism. It inspires in the cultured Asiatic, too no less awe than his less cultured compatriot exhibits before the idols in the temples of Benares, with their many heads and dozens of arms.

The modern monetary theory is fortunately of such recent date that its genesis may be easily followed in all its ramifications. It was born during the War and further "developed" during the inflations of the post War period and that simply for the purpose of justifying the financial policy of those years. What were the theorists to do? They had no proposals of their own to submit, They were obliged, how however, to say something, and so they just defended what the governments were doing. (Thus an eminent theorist of those

days did not shrink from affirming in print that in the "light" of the modern monetary theory the depreciation of the French assignats should not be offhand considered as due to the printing of notes. The official French view of that day, that the depreciation was the work of Hamburg speculators, might have, after all, something to say for itself.) In the minds of the younger generation, the modern theory has become an a priori form of thought in the sense of an Aristotelian category. The sunspot curves associated with the theory possess also the special advantage that if a critically inclined student should entertain the idea that the monopoly of the central banks of issue might be a possible cause of the depression, he could be at once silenced by referring him to the cosmic components of the monetary theory, the study of which requires today several years and much more mathematics than Copernicus needed to establish his world system. This same young scholar, who would not have been daunted by the mundane money powers, becomes, since he is only a critic and not a heretic, overawed by the celestial powers, which are so intimately associated with the former. However, a healthy reaction against the modern theory, with its belief in a kismet by means of the maxima and minima of the secular and other trade curves, has set in precisely in Iran. For instance, in the issue of 30 June 1930 of its "Revue", The Teheran Chamber of Commerce places those economists, who desire to postpone constructive reforms until, according to the trade cycle theory, the "bottom of the crisis" has been reached, on a level with astrologers who, counsel that action should only be taken in important enterprises when the constellations are favorably situated. The passage is quoted in Sir Arnold T. Wilson's excellent "Persia" (London 1932).

However, Reza Shah Pahlevi, who is now the hope of his country, may be assured that those counselors of his are altogether in the right, who place an Iranian paper currency on the European or American model that is, with a forced rate and the suppression of free dealings in gold on a level with the experiment, well known by all cultured Iranians, of Shah Kai Khatou in 1294, who, on the advice of Izz-ed-din Muzafor ibn Muhamed ibn Amid, the royal flag bearer, issued forced paper money (closely resembling that issued in China in November 1935 always the same idea), but was obliged by an insurrection of the people, to allow again, after three days, the use of honest money. Izz-ed-din Muzafer lost his life thereby. The exchange rate of the tchao notes fell within a few hours to one-tenths of their nominal value. Highwaymen paid cash to their victims (in tchao the nominal value of their robbery) and appealed to the forced rate. Without it, the value of the notes would have probably returned to par and maintained itself there, since the amount issued seems to have been quite moderate for Shiraz, e.g., only for 5 old toman, equivalent to about 625,000 Swiss francs. That was not much for such a large city. (Rabino, "Banking in Persia", p. 26.) It is remarkable that in these circumstances the "taxation basis" failed, i.e., that the population did not simply use the depreciated notes for making tax payments. The historians, who have carefully preserved for us the long name of the murdered flagbearer, paid no attention to this important point. It was probably a case where the taxation basis has failed in all times, namely, where the people and the business world are not sure of the amount of forced money issued and fear that the quantity of such money is about to be increased. Moreover, there is the point that only three days had elapsed between the first issue of the paper money and the murder of the flag bearer. The paper money circulation in Iran today confirms Lorenz von Stein's rule that a country may possess a third of its annual public revenue in paper money of stable value.

That a people should rise in revolt in order to compel its Government to issue sounder money, has happened often in ancient times, particularly in the East. This has, however, occurred only once in modern times, namely in October 1923 in Germany. But popular revolts having for their object the depreciation of money

have been frequent in recent years. It does not follow, however, that the mentality of peoples has changed of late. What is intended is always a removal of the shortage in means of payment and this, according to the common, but erroneous, opinion today of peoples, governments, and modern economic theory, is achieved through depreciation. The error of peoples, governments, and economists is revealed by the fact that so far the depreciations of money have in no country contributed to easing the depression, great as may have been

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the advantages reaped by some individuals. Asiatic economists deceive themselves for a pardonable reason. When they visit Europe or America, in order to study the effects of money depreciations and glimpse the magnificent buildings, the clean streets, the thousands of motor cars, and the many well dressed individuals, they are tempted to reason: "These Europeans and Americans know something. Everything I see here has cost money and this money men have known how to secure. The monetary theory emanating thence deserves therefore our respect. And the latest currency depreciation has evidently had a favorable effect, else the traffic on Fifth Avenue or around Victoria Station etc., would not be so enormous." Moreover, those whom the visitors meet, are almost always the men who had recommended currency depreciation and who are naturally convinced that the still surviving economic activity is only maintained by the preceding currency depreciation.

Returned to his own country, this economist naturally bases the advice he tenders his government on the impressions he has gathered. This inevitably paralyses the active intentions of the country's rulers, be he the Prime Minister or the Sovereign himself. His education does not suffice to refute the theorists on their own ground. What the "practical men", i.e., the bankers, the wholesale merchants, the manufacturers, and the labor leaders demand, does not contradict the theory. It always amounts to this, that of the "managed" money of one group more should be taken than hitherto and given to the others. The ruler receives the impression that he is faced here by a complex of tasks where the best he possesses common sense, knowledge of history, energy, and honest intentions has as little scope as, say, in the application of the integral calculus. (By the way, here also these qualities are not superfluous.) In the face of the welter of opinions and claims placed before him daily, he is almost in the position of a general during a war, from whom the truth is kept, but who yet must make decisions. Clausewitz, the great war theorist, writes on this point in his chapter "Information in War": "A large part of the information available during a war is contradictory, a still larger part is untrue, and the largest part by far is wrapped in uncertainty. . Well, indeed, if the reports, contradicting one another, create a certain equilibrium and call forth criticism. For the uninitiated it is far worse, if chance does not render him this service, but one report lends support to another, confirms, exaggerates, paints the picture with ever new colors, until necessity has hurriedly forced him to make a decision which is soon recognized as foolish, and all the reports as lies, exaggerations, mistakes and the like. . Firmly, in reliance on his better, inner knowledge, the leader must stand, like a rock whereon the waves break. This is not an easy part to play."

The part played by rulers faced by currency theorists is almost comparable with the position of Alphonso X, king of Castile. He found that Ptolemy's epicycles were exceedingly complicated and permitted himself, in the presence of astrologers, high ecclesiastics and other eminent personalities, the facetious remark that he would have constructed the universe more simply. This "blasphemy", it is said, cost him nearly his throne. But the ruler of our day would find it easy to shake the power of the theorists and even to set them at loggerheads, leaving him safely to carry out his own plans. He need only address to these gentlemen the

embarrassing question where the clearing element in their theory is to be found, which in practice from Nebuchadnezzar downwards mediates nine-tenths of all economic transactions. From this question there is but a step to accepting Milhaud's monetary system which places clearing in the centre and would also bring it within the grasp of peasants and workers (but nevertheless does not forbid any one to pay with gold, should he have any and wish to pay with it).

Asiatic peoples have, from time immemorial, shown a sound and deep respect for honesty and fitness in currency matters. This respect has been reinforced by traditions many centuries old and has always been justified by experience. No statesman in any Asiatic land, whether in peace or war, has lacked means or success if he listened in this to public opinion. Indeed, for over two thousand years the peoples of Asia have only regarded their ruler as legitimate and his reign as assured if he minted gold coins bearing his image or an appropriate inscription. The peoples are right! In Iran, too, only such a dynasty will endure whose rulers

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possess the courage, in defiance of the theorists, to mint gold coins of full weight and permit these to circulate freely. A gold shortage is almost impossible if trading in old and the possession of gold are not made difficult, and if, moreover, the mint, for a moderate fee, converts any gold brought to it into coins as, in fact, the (unexecuted) Iranian Act of 10 March 1930 Provides. The mintage fee pursuant to article 6 was to be 1 gold rial for 1 kg. fine gold and 1 old rial was to be equal to one-twentieth pahlavi or to an English gold shilling 1913 standard.

Of course, even after the introduction of the best currency laws and after putting into effect the principles proposed by Milhaud, there may yet passingly or for a longer period, and this in the best ruled country, be such a shortage of precious metal that it not only disappears from payment transactions, but becomes useless as a standard of value in certain economic domains, e.g., in leases. (In the worlds richest country, in France, the peasants, because they no longer meet with gold coins and therefore eye paper money with suspicion, are more and more tending to conclude their long term contracts in cereals instead of in gold, forcing thus the legislature to concern itself with this question.) China may now be approaching this condition. Silver is still practicable in China as a standard of value although it has disappeared from payment transactions. However, if the United States Treasury continues to attract silver by forced purchases, it might very well happen that silver would have to cease being a standard of value in China. It is true that some Chinese acquire thereby American dollars (paper dollars or bank balances) to the same extent as their country loses its silver. But the paper dollars do not become Chinese means of payment and, rightly enough, they are disliked as standards of value. Over large parts of China, as has been the custom for centuries, when there was a shortage of silver, resort is had to copper coins and even to copper as a provisional standard of value, also to notes made out in copper, although the edicts of the Nanking Government prescribe for both purposes the use of the notes of the central bank, which are detached from all concrete material. (The Kuomintang patriot exclaims, however that the fatherland is in danger and that at such times all means necessary for the defense of the country should be concentrated in the hands of the Government. How, it is urged, can the currency be safeguarded if the means of payment are not centralized in the Government? The answer is that in times of national danger the country's rifles should be in the hands of the soldiers and not in that of the Ministry of War. The shells should then be heaped by the side of the guns and not "centralized" in depots. And the clearing instruments, such as the standardized clearing check and the standardized purchasing certificate, should be, more

particularly in times of danger, in the hands of those who have something to clear, who must exchange labor power for rice and coal for tea and should not be the monopoly of the Finance Minister and the few who are in a position to clear without standardized certificates of small denominations. It should be rather the duty of the Finance Minister to encourage clearing transactions among the population and create, without delay, clearing centers where there are none, as well as agree to clearing arrangements for tax payments. Moreover, the Finance Minister might devote a small fraction of the sums now prodigally spent on vainly puffing into effect "currency laws", to translating quickly Milhaud's discourse, held in 1931 and entitled "Un projet d'action immédiate contre le chômage et contre la crise" and present a copy to every official. This discourse is reprinted in several languages in the various editions of the "Annals of Collective Economy". (In English, in: "Fresh Work, Fresh Markets", under the title: "A Plan for Immediate Action against Unemployment and the Economic Crisis. Simultaneous and Joint Provision of Employment and Markets"). It contains the essence of what should be done.

Such a currency, based, on the one hand, on the principles of clearing and, on the other, on a fixed quantity of some currency material as the monetary unit, no more requires a Minister to defend it than does the Chinese weight measure "pikul" or the measure of length "Li". Similarly, the old tael standard, based on a given weight of silver and only recently abolished, could not have been imperiled by any attack whatever, whether of a Government or of speculators, nor even by the combined might of all governments and all the world's speculators.

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An Asiatic statesman. must be equal to a situation like that prevailing now in China, and this involves that he recognizes it for what it is. How not to act in such situations follows from the results of the Nanking Government's conduct. Its currency policy actually led the competing authorities of the Northern Provinces, mainly in order to secure a serviceable currency and means of payment, cease in November 1935 all opposition against the separatism now latent everywhere in Asia.

Given the unrestricted right of issuing purchasing certificates whose value is fixed in a precious metal but which are not convertible into this, as well as a debt legislation which does not entitle the creditor to metal when there is a shortage of it, then the precious metal concerned remains practicable as a standard of value, even if it has disappeared from extensive regions, allowing for sufficient trade with countries where the precious metal concerned still circulates effectively and unrestrictedly. But should trade with such countries shrink into insignificance, or should the precious metal begin to depart from those countries also, a new standard of value would have to be introduced. In peace times, when nothing else is feasible, as now in China, it is open to every Asiatic people to adopt a copper currency. Such a currency existed already three centuries ago in Sweden and was the immediate cause for the introduction of the first European notes which were then most appropriately called "transport scrip".

Should, however, for any reason, copper cease to be available (e.g., because of the outbreak of a war, when the Government requires all copper for making shell bands), it might be considered whether the kilowatt hour of the power stations should not be chosen as measure of value, and this also for insurance contracts, the power stations issuing at the same time a kwh money.

(The "Revue d'Economie Politique", July-August number, 1934, Paris, published a most interesting correspondence between Laurent and Walras on physical labor units as standards of value.) Of course, the kilowatt hour does not represent as stable a value as freely circulating gold and silver. But in the course of time, as Asia comes to use wind power for producing kilowatt hours, this defect will perhaps be remedied. By the way, wind force acts with the third potential of the velocity of the wind. Thus windmills which in Central Europe operate "normally" at a wind velocity of 4-1/2 m, produce an eightfold result in Asia when the wind velocity is doubled (which frequently occurs in desert regions). In fact, according to Wilson's "Persia", windmills were invented in Seistan, "the land of winds", about the time of Mohammed. (Concerning the importance of windmills for the East see Laemmel, 'Sozialphysik'. )

At all events, in almost every region of Asia it is already possible to produce kilowatt hours in some form in such quantities that no currency policy, however senseless, of any leading power, could create a deficiency: If, for example, every district in China, where silver has disappeared, adopted a kwh standard and accepted as its monetary unit the kwh of the nearest power station, the United States could buy up with its dollars as much kwh money as it could pay for. The free right of issue in China would remedy at once any shortage occasioned by these purchases. In fact, the result would be that the purchases would in effect represent, on a kwh basis, a non interest bearing loan of the United States to China, repayable in goods or services, which would be very welcome to China.

A currency policy inspired by the principles of Milhaud would enable a statesman, on each attempt of neighboring countries to enrich themselves at its expense, through monetary measures taken, to turn the tables and benefit his own country instead. The advantage would be the greater the more the neighboring governments were enmeshed in their currency fallacies, the later they recognized their errors and the more exaggerated the measures they resorted to. To which add, as Voltaire well remarked, that governments possess generally sufficient fortitude to bear the misfortunes of their peoples and that therefore the evils arising from monetary abuses have to be very great before a government acknowledges its mistakes. Also, some highly placed personalities profit, by every currency absurdity and therefore defend it publicly with greater zeal and "logic" than the Government could. Hence a statesman's chances to profit by the fallacious currency policies of his neighbors, are decidedly favorable.

A huge efflux of precious metal abroad and a far reaching deflation occasioned thereby, occurred also in

Iran about 10 years ago. The description offered by Hassan Naficy Mocharravod Dowleh, in his highly instructive work "L'impôt et la vie économique et sociale en Perse" (Paris, 1924), of the then prevailing deflation phenomena, shows that everything that had ever been experienced in Europe and the United States, in the matter of trade depressions and unemployment, was far exceeded by what Iran underwent after the War. Naficy deplors the absence of credit institutions, as these make good as far as possible, the shortage of ready money, by notes, checks, and credit. Such institutions have since been established so that Iran possesses now not less and not worse paper money and bank money than other countries having a "managed currency". There is no reason, however, why present day conditions should not be considerably ameliorated and why currency legislation animated by Milhaud's principles should not be enacted after which all provisions relating to money and foreign exchange might be repealed.

The Currency Act of 1930 presented a notable beginning. Nevertheless, we need not regret that it was not put into effect. Article III of the Act (see the already mentioned excellent work by Hartner) established a fixed relation of value between silver rial and gold rial, that is a double monetary standard such as formerly existed in France and the countries of the Latin Monetary Union. Thus a rial containing 4 - 1/2 grams fine silver would be equal to 0,3661191 gram fine gold, equivalent to an old English gold shilling. This ratio could not possibly be maintained without prejudicing all Iran's creditors. Double monetary standards cannot continue for long. But a parallel monetary standard, such as Iran possessed for centuries, that is with free circulation of all means of payment and, above all, with free dealings in metal (Hartner describes the condition as "species standard"), would have been just the right thing.

We cannot, however, agree with Hartner when he states that the new Act introduced the concept of "legal tender" (see his work, p. 28), which was foreign to the Shiitic Law (see p. 91). True, in pursuance of the Currency Act, the debtor could pay the creditor, at his discretion, in gold coins and in silver coins, but, on the other hand, no provision of the Act entitles the creditor to demand a particular means of payment, at the creditor's discretion. Since article X of the Act states that henceforth taxes will be collected on a "gold basis", the evident meaning is that gold is to be the measure of value of the effective means of payment, exactly as was the case in Germany at the end of the inflation period. The ancient principle of the Shiitic law (the Sheriah), according to which, in the absence of special arrangements, the creditor must accept current means of payment, which the debtor is entitled to select, is hence maintained in the new Act. The Act therefore conforms to the rule enunciated by Milhaud in his "Organized Compensatory Trading" (London, 1937, p. 59).

That the old Sheriah draws such distinctions, probably not to be found in any European or American legislation (excepting perhaps in German legislation, see par. 242 of the German Code of Civil Law: "The debtor is bound to fulfil his obligations as required by good faith and in the light of commercial usage." That is, already before the War a creditor could not by any means claim gold coin!) must raise our respect for this ancient legislation also for Mohammed who inaugurated it, and for his followers, among whom there were shrewd thinkers. (Jurists and economists will find in the dissertation, ion, "Mohammedan Theories of Finance", by Nicolas F. Agnides, New York, 1916, much of value for non-Muslims also.

Notwithstanding the paper currency existing now in Iran, but which does not deter many merchants from keeping their books in gold toman, no people, by tradition and law apart from the latest stands nearer to Milhaud's ideas than that of Iran. It is hence not quite utopian to hope that the reforms proposed by Milhaud would be soon (perhaps sooner than elsewhere) introduced in that country.

A comparatively stable currency is indispensable for insurance purposes. The stability need not be absolute, as would be the case, for instance, with a perfect index currency (if it could



be developed). Even a stable silver currency would suffice if silver were allowed to circulate freely. The necessity of a stable currency becomes alarmingly manifest where, in currency depreciations, the insured is at once subjected to a more or less considerable "under insurance". (Insurance by assessments, in the form practiced by several Prussian

societies is, however a match for this. We shall return to the subject.) But a stable currency is not only required for the measurement of value, but also in order not to prejudice the insured in payments made to him. If a currency depreciation is expected, it might well be an advantage for him to remain uninsured and to save his whole premium, although if he insured himself, he would remain insured for a portion of his property when the currency depreciation has started.

The occasional advantage of remaining uninsured is demonstrated by the theory of value, especially as Daniel Bernoulli stated it. In par. 15 of his work that appeared in 1787, "De Mensura Sortis" (p. 43 of Prof. Pringsheim's translation, Leipzig, 1896), he calculates that, e.g., a merchant intending to dispatch goods of the value of 10,000 rubles from Amsterdam to Petersburg and knowing that the transport risk is 5% (two centuries ago it was really that!) but that he would have to pay a premium of 800 rubles; can bear the risk himself if he possesses 4,043 rubles apart from those goods. If his calculation is correct, it follows that a currency depreciation of three-eighths immediately after the signing of the insurance contract would render the insurance disadvantageous for this merchant even if it had been issued at a net premium of 500 rubles.

It is, moreover, remarkable that since Bernoulli's time, two centuries ago, there has been no noticeable progress in estimating the highest point in the insurance premium where the insurance commences to be less advantageous for the insured than self-insurance. From the present standpoint of the science of insurance, Bernoulli's illustration suggests a higher amount than 5043 rubles as the limit where the merchant may safely undertake to be his own insurer. We should consider today that the 5% probably mainly relates to partial losses and also that the inference is based on comparatively few observations. Condorcet showed, for instance, that when we have only the observation to rely on that, in 20 drawings out of an urn, 19 white and 1 black balls were drawn, there being no other information as to the contents of the urn, the probability of drawing next a black ball should be estimated as 5%, but with  $(1 + 1) : (20 + 1) = 2/21$  that is, quite differently than if we knew exactly that only 1/20th of all balls in the urn were black.

Condorcet deserves to be specially noticed here. His works are not only important for the development of public insurance, but also for the history of payment transactions. Elected Member of the Academy at the age of 27 and one of the most distinguished French mathematicians, he was appointed in 1771 Inspector of the Royal Mint and continued to hold this post until he was called to be Finance Commissioner in 1791. Condorcet's "Sur les monnaies", which appeared in December 1790; shows how well versed he was in mint matters, a domain very different indeed from that of payment transactions. He was Turgot's friend and collaborator for many years. During that period he had not only occasion to recognize the desirability of the lower classes having their persons insured but also to discover that the then prevailing private insurance system was manifestly not in a position to introduce such insurance. Accordingly, Condorcet published in 1790 a highly informative pamphlet of only 14 pages, "Sur les caisses d'accumulation". Several decades after his death, his ideas on the subject were realized in a number of countries, most comprehensively in the public life

insurance institutions established in some of the Prussian provinces in 1910. That a century after Condorcet, and without knowing him, the founders of these institutions proceeded as he had proposed in his day, proves Condorcet's profound economic insight.

A principal cause of the French Revolution and its direct occasion to which theme we shall return at the close of this study was a sudden, general shortage of means of payment. This rendered the already excessive burdens of the population - taxes, ground rents, etc. simply intolerable. In numerous instances even the means of payment needed for paying the army were wanting and several military revolts followed as a consequence. A substitute for the vanished money had to be found. All turned to the Inspector of the Royal Mint, the great and experienced economist Turgot's friend, the mathematician of world fame. But it must be admitted, Condorcet disappointed expectations. Certainly, he was not more disappointing than the others Ministers, authors, the National Assembly, and the king himself. However, his misapprehension of the only way of salvation, was a catastrophe, for he would have possessed sufficient authority to put into effect a sound policy.

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First, Condorcet did not see that the domain of public finance should be sharply separated from that of private payment transactions, The bankruptcy of the State was perhaps inevitable who could know it but the condition of the public finances should not have been the cause that, e.g., the silk manufacturers of Lyon, could not procure the money for paying their workmen's wages. Banks, on the model of the already long established and tried Scottish system, might have helped, especially those based on the system prohibited by the English Parliament in 1765 and 1775. Before this legislation was enacted, bankers had the right to issue notes bearing words to the effect that the holder can demand of the issuing bank the immediate conversion of the note into metallic currency, if the bank disposed of same, and that in the alternative, the note should be repayable at the option of the issuers (usually after six months), interest accruing being generally at 5% per annum. In practice, this system operated as would a system of purchasing certificates but this by means of a theoretically faulty juridical construction. One might almost say, therefore, that the system of purchasing certificates was already known at the time and had justified itself. It only asked to be the instrument for saving France.

The purchasing certificate system is not historically conditioned. It fits into every economic order where paper money circulates. Subsequently, when the system of assignats was in full force, when 800 workers in the National Printing Office did nothing day and night but print notes, whilst at the same time (or rather as a consequence) in accordance with the experience of every inflation, the shortage in means of payment became more acute at that moment in Paris, as Levasseur states, 80 different kinds of private money were issued, their only cover being that the issuer would accept them in payment at their face value. The same had happened shortly before in Scotland, when the notes of the banks became subject to compulsory redemption and the banks only dared to issue a small proportion of the means of payment required by the country. Numerous firms issued notes, which today we should describe as purchasing certificates; but the ruling

(The translator, Spiller, said here "competent" authorities, although their action proved their incompetency! Value standards, means of payment, clearing and credit conditions are much too important to leave them in the hands of politicians and bureaucrats. - J.Z., 4.12.01.)

authorities, as well as the economists, regarded this simply as a breach of the law. (See Kerr, "History of Banking in Scotland".) And why that? Because neither in Great Britain nor in

France would public opinion rid itself of the idea of convertibility. Unfortunately, Condorcet also held this view. In several passages of his writings on assignats, he stresses convertibility, of course deferred convertibility, and trust therein, as conditions for the circulation of paper means of payment. He advised that if this trust should be wanting, simply to reduce the issue or, as we should say, to produce a deflation. And yet the cause of the revolution was a deflation!

The National Assembly could naturally not see the advantage of such advice and the first assignats were printed. The smallest denominations were for over 200 livres, in order that they should not be used as a means of payment among the general population. Condorcet expressly praised this limitation, but the deflation grew in spite of the issue of 400 million livres in assignats. The urgency became also unmistakable to provide means of payment for the people. There seemed to be only one possibility realizable without delay, namely to issue assignats in small denominations. Condorcet contradicted no longer, but demanded the convertibility of the small denominations into copper, if silver should not be available. This, too was of course out of the question. He was so far removed from the idea of a means of payment based on clearing, and therefore from the idea of value maintenance through readiness to accept, that he even misjudged the sound plan proposed by several persons, of an inconvertible paper money having an unforced exchange rate but accepted at par in tax payments. He dismissed the plan in seven printed times without criticizing it. ("Plan d'un emprunt public avec des hypothèques spéciales", Paris 1789.)

In such a situation, in the midst of a sharp deflation and general ignorance of the nature of a means of payment, all governments have had recourse to inflation with forced value, and the French Government formed no exception. When, in addition, war broke out, an atmosphere was created where terror alone could flourish. (We who have experienced four years of war and some years of inflation, can appreciate that situation, whilst the great historians of the Revolution, Carlyle for instance, were faced by endless riddles -

because they passed their lives in a period having a stable currency and enjoying almost undisturbed peace.) Condorcet was placed on the Proscription List in 1793 and only escaped the guillotine by taking poison which he had long carried about with him. The French monetary system would probably have developed quite differently if Condorcet, Mint Inspector, Member of the Academy, mathematician of renown, as well as economist of high authority, could have made useful proposals in the direction of providing France with sufficient means of payment without inflation. If the French monetary system had thus remained sound, the Revolution would have taken a different direction. The terrorists would have remained what they were: Robespierre a sentimental lawyer and a determined opponent of capital punishment, Colot d'Herbois a successful dramatist and, as actor, the people's darling. It remains an as yet unfulfilled task of historians, at least to enumerate the instances where the world's history took a wrong turn simply because at a given period a given individual misconceived the means of payment problem and confused it with other problems.

### **K. INDEMNIFICATION OF LOSSES ONLY THROUGH REINSTATEMENT OF DESTROYED VALUES AND NOT THROUGH CASH PAYMENTS**

A very considerable proportion of all indemnities paid by insurance societies refers to damage caused by the insured themselves. To present this aspect in statistical form, is naturally not possible. However, insurance statistics afford sufficient guidance to permit us to recognize this kind of moral risk. For over a century it has been noted that war years are without exception "good" fire years. The contrary might have been expected, since in war time fire aid cannot be as efficient as in peace time. But in war time prices usually are on the up grade, and in times of rising prices men do not freely choose to become creditors, not even of an insurance society. Everybody who, in war time, possesses material values, whether a house or commodities, endeavors to retain them. Add to which, rising prices occasion a general "under-insurance". A store, for instance, valued today at 10.000 francs and insured for that amount, is, after the war has begun, suddenly worth 15.000 francs, but is only insured for 10.000 francs. The "supplementary insurance" will not be taken up so rapidly and the under insurance reduces very considerably the temptation, which might otherwise have existed, to obtain ready money by setting the store on fire. Insurance statistics relating to inflation times are even more suggestive than those referring to war times.

The temptation to obtain ready money by bringing about a fire loss is very great and is an aspect requiring careful study when contemplating the establishment of insurance societies in Asia. To illustrate the importance of this aspect, it is not superfluous to mention that in life assurance the number of suicides among the insured is far more considerable than among persons who have not insured their lives. Pre-War investigation by Scandinavian offices showed a ten times greater rate among insured than among non insured persons. In Germany the rate is about three times as high. Moreover, the suicide rate among the heavily insured is greater than that among the lightly insured. If we remember that the insured belong generally to sections of society where the causes driving the lower sections to suicide (namely, illness as a chief cause, next to it want) act less intensively; if we further remember that the insured amount is not paid to the insured but to the surviving dependents, we shall appreciate the strength of the temptation to mobilize ready money by bringing about an ordinary insurance loss. (Incidentally remarked, the statistics, although no proof of an irreproachable moral sense in the sections of society concerned, nevertheless show that the family sense existing in these sections, but denied by many of the older socialists, is very strong. Consider: every year, both in Europe and in the United States, several hundred individuals take their lives, only in order that their dependents may come into ready money. These statistics will undergo a great change after the introduction of Milhaud's purchasing certificates.)

It is noteworthy that many public insurance companies in Germany have managed to remove a large part of the temptation to secure ready money through bringing about fire losses, by simply handing no cash to the

insured, but making payments on his behalf. Thus if a house is burnt down, the societies pay the builders, the suppliers the architects, and others. In some Prussian societies this method has been applied for about two centuries. The insured would have therefore to conspire with the builders and many others if he wished to secure ready money, perhaps for paying a burdensome debt or even to enable him to go on a holiday tour or the like. Such conspiracies

are not unknown but the strength of the discouragement is evident. This partly explains why the fall in fire losses in time of war is not as great in public societies as in private ones. That is, the incentive for increasing fire losses, which did not operate during war time in the case of private offices, but existed in peace time, namely, the temptation to secure money by committing arson, was not reduced in public societies, simply because it was already absent more or less in peacetime.

This should be taken into consideration when establishing in Asia new insurance societies, more particularly public ones. The insurance conditions should therefore provide that the indemnity should not be paid directly to the claimant. The losses would thereby be reduced by probably not less than one-fourth they would have been in the absence of such a clause.

## **L. TARIFFS**

In this respect the experience of other insurance societies may be initially utilized, more especially the pre-War experiences of Russian offices (see the cited work by Sergowski).

In a preceding section we explained that in the case of under insurance a loan might be granted to the sufferer from damage. Of course, certain limits should be respected here. It might be provided that, for instance, the loan should not exceed the declared amount of the insurance. There is no room for details here.

The endeavor to place the insured in a situation economically corresponding to that he occupied before the loss, above all to replace completely the damaged objects, would be consistent with letting the insured bear any small losses which he is able to bear. Therefore, it might be provided that from every loss at least the value of three working days would be deducted and that losses valued at less than three days' work would not be indemnified. Larger margins would be frequently practicable. Such a provision would certainly induce the insured to be more careful with fire and naked lights than he would be if there were no such provision.

We owe the first detailed investigations about the eventual effect of such a clause to the American mathematician Whitney, who submitted them to the International Congress of Insurance Science at Vienna in 1909 (see vol. 3 of the Congress Proceedings). According to his figures, the indemnities for 10,000 losses relating to dwelling houses were distributed as stated in the following table, completed by Professor Riebesell of Berlin University:

Losses in Average loss - assuming number of total indemnity in percentage				
% of amount insured	an insurance amount of 100,000 for every house	losses	for all losses	of the total amount insured
0 to 10	5,000	8,627	43,135,000	42.87
10 " 20	15,000	502	7,530,000	7.48
20 " 30	25,000	201	5,025,000	4.99
30 " 40	35,000	130	4,550,000	4.52
40 " 50	45,000	130	4,185,000	4.16
50 " 60	55,000	73	4,015,000	3.99
60 " 70	65,000	60	3,900,000	3.88
70 " 80	75,000	53	3,975,000	3.95
80 " 90	85,000	48	4,080,000	4.05
90 " 100	98,000	213	20,235,000	20.11

It follows that the premium could have been 42.87% less if the insured had self-insured the first tenth of the amount insured (See Riebesell, "Die Mathematik der Feuerversicherung" (The Mathematics of Fire Insurance), Berlin, 1926.) For some years, unfortunately, the investigations relating to the influence of

margins have not been continued. It should be added that in recent times in Europe only experts connected with public insurance have examined this very important problem, It

appears, however, not to be generally known in insurance circles that the German insurance mathematician, Th. Wittstein, in his work published in 1885, "Das mathematische Risiko der Versicherungsgesellschaften" (The Mathematical Risk of Insurance Societies) p. 20, 67ff., presented a promising, and already in its initial stage, practical theory of partial losses. As Wittstein had no statistics to aid him, he assumed that out of 5,000 buildings, 1 is annually entirely destroyed by fire, 3 are three-quarters destroyed, 8 one-half, and 11 one-quarter, the other 4.977 buildings remaining undamaged. He also assumed an annual net premium of 2 per mil. His scheme, which combines the concepts "premium", "loss frequency" and "damage intensity", in a simple and distinct way, is not less scientific than Whitney's. In his tables Whitney does not indicate how many buildings are involved in the 10.000 losses and reaches therefore only circuitously the amount of a premium on the basis of his statistics.

Attention should be called here to a considerable improvement in building insurance conditions by the fire society of the Province of Brandenburg. The society regularly pays the full value of a destroyed building as estimated at the time it was new, even if it should transpire when settling that the insured had paid his contribution on the basis of too low a valuation. The society prepares the valuations with great care and exactitude. It can therefore actually undertake the risk that the valuations were inaccurate. (If the insurance contract is for 10 years, the society, bears the cost of the valuation; otherwise the insured.) Should, in the course of time, the price of building materials rise or the wages of building operatives increase, the society bears the risk involved. It can easily do this, since it works on the levy principle. Furthermore, since after great fires a house owner suffers usually from receiving no rent payments, the society indemnifies this loss for a period up to 6 months after the fire.

Should the house owner, when concluding his insurance contract, forget to expressly include something appertaining to his house of less than 2.000 marks value, say a stable, or if he should subsequently enhance the value of his house by extensions or reconstruction, but forget to communicate this to the society, the latter will provide him free of charge with a "precaution insurance" up to the value of 2.000 marks, or in the case of subsequent extensions, reconstructions, etc., up to 3% of the value of the house. The society also undertakes to pay indemnities in the case of fire losses due to insurrections or commotions. The contribution in 1935 for good urban buildings was 16 marks for each 100.000 marks insured. The insurance conditions leave little to be desired. The society which was founded in 1791 that is, more than two centuries ago has shown that the form of public insurance need constitute no obstacle to making insurance as perfect technically as possible, provided that legislation does not hamper its operations with redundant regulations.

### ***M. DISPENSING WITH REINSURANCE IN PRIVATE INSURANCE OFFICES***

A society such as that sketched above, which raises its contributions in a form most convenient for its members and collects these not in ready money, unless the members possess some, but offers its members the possibility of paying their contributions with their own labor and goods such a society may, in case of extremely heavy losses, very well impose sometimes a higher contribution than a private office could demand in premiums and in cash. Experience has also shown that damage fluctuations of about 100 of the mean damage quotient in the case of offices having about 10,000 insurances are somewhat rare if we exclude objects from insurance the value of which exceed about fivefold the average insurance amount. Public societies operating on the principles here described may therefore reasonably dispense with

reinsurance such as is customary among private offices and is indeed indispensable for them. The Prussian and Swiss public societies have, in fact dispensed with reinsurance proper for nearly two centuries and partly do so still. It is very important for Asiatic public societies that it is possible to waive re-insurance, for no European company engaged in re-insurance will risk its capital in the near future on objects which are at present left

alone by all European and United States companies engaged in direct insurance business. But there is always the possibility of several public insurance societies of a country sharing in the insurance of larger objects and thereby creating among themselves a system of reinsurance. Precisely in this direction, i.e., in the organization of mutual help, the federations of public insurance societies in Europe have been decidedly successful.

The technical insurance principles here expounded allow not only the waiving of reinsurance, but even the waving of guaranteed capital. However, this does not exclude a society later accumulating reserve funds in order to achieve the greatest uniformity possible in contributions.

If public societies desire to reinsure one another, the question arises how much of each risk a society should retain to prevent its being tempted to undertake bad risks at a cheap premium, whilst transferring the high risk to the shoulders of the other societies. In European insurance there is the rule that every society should retain in general at least one-tenth of a risk, if special circumstances do not warrant a higher reinsurance. However, the retained portion is graded according to the perils involved, Of dangerous risks, smaller amounts are retained than of less dangerous ones. Arrangements are made on the basis of comprehensive tables drawn up on "purely practical" principles or simply on the basis of the "finger tips impressions" of an official. This method is complicated and leads also to abuse. It would be much better to determine the amount retained according to the premium, the following arrangement being perhaps made with the reinsurance company, namely, that the company would take over of each object such a sum on its own account as would correspond approximately to an annual premium of 200 Swiss francs. Such an arrangement would not only be fairer than the hitherto customary mode of self retention, but would greatly simplify administrative work, prevent abuses, and constitute a most effective obstacle to attempts to let the re-insurance company bear not only an absolutely greater risk than the society bears, but also a relatively greater risk. In the case of the public societies here proposed, a standard contribution would replace the fixed premium customary among private offices. (On the technique of a system of re-insurance based on a premium amount as self retention, see a study by the author in the "Oesterreichische Revue" of 17 May 1932, under the heading "Ueber die Bestimmung des Selbstbehalts."

Where an object is collectively insured by several public societies, the following aspects deserve attention. Private insurance offices sometimes, and in any event more often than justifiable, decline to insure certain objects because of the great risk they involve, without considering that an appropriate premium corresponds to the contribution a large society would have to impose if it insured only the hazardous objects in question, together with an extra for administrative costs and reserve fund of 50%. Only if the proprietor declined to pay this premium, would a refusal to insure that risk be justified. An illustration may not be amiss here. The Pomeranian private insurance offices declined for many decades to insure windmills. They did not see that if on about 1 million marks windmill insurance there fall annually an average loss of 20,000 marks, or 20 per mil then with a double annual premium of



40 per mil, a windmill becomes insurable. A windmill which pays in contributions for every 1,000 rials insured 40 times as much as a well built stone house, is, despite its greater risk, to be considered technically in every way as insurable an object as that house. For scores of years the windmills in Pomerania were dependent for insurance on the public societies existing in that province and they are practically in the same position today. This demonstrates a remarkable usefulness of these societies. And the circumstances are similar in Asia. Many objects for which insurance protection is indispensable, such as windmills, would be probably insufficiently protected by private offices. It might, of course, happen that such objects carry too great a risk for any single public society. Here collective insurance would become appropriate. In a succeeding chapter the desirability of forming a federation of the public insurance societies of a country, say Iran, will be discussed. One of the tasks of the federation might be the organization of collective insurances on the principles proposed here. Such a system of insurance would also prove useful in the case of objects which cannot be rein stated by

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supplies and labor available in the district where the object is situated. Suppose a mosque is to be insured in a region where there is a complete deficiency of building materials, but which is otherwise flourishing. In such an instance it would perhaps not be absolutely essential, although desirable, to arrange for a co-insurance with other societies situated in districts where building materials are produced. Goods warrants, for which, say, in Tabriz hundreds or thousands of persons will readily supply all sorts of goods just as for silver coins, would be utilizable as a means of payment also in other, distant regions that supply timber and other building material, but probably only with a discount. However, if the society of the region supplying building materials participates in the insurance, it will be the easier to utilize in that district at par goods warrants issued in the district where the building was burnt down.

## **V. FRESH LEGISLATION**

Probably little fresh legislation would be required to enable the new societies to function smoothly and successfully. As already intimated, laws or edicts concerning compulsory participation would be necessary. The same laws could also stipulate, as did the corresponding Prussian Laws two centuries back (see the previously mentioned work by Managing Director Dr. Brunn) that the sufferers' claims against the society are not subject to seizure by any party, but are to be utilized exclusively for re-procuring or re-producing the destroyed values. Only if, on quite special grounds, such a re-ordering does not take place, the management of the society deciding to pay the sufferer from damage directly in money or in goods warrants, would the claims of creditors, to whom the damaged objects were pledged, have to be first satisfied.

The matter would have to be examined whether any loans eventually granted to sufferers from damage are adequately secured by present legislation. In any case, so far as its repayment claims are concerned, the society should have precedence of every other claim, including taxes.

A law should furthermore make it incumbent on the societies to form right from the beginning a federation and this federation should be invested with the legal powers necessary for the due performance of its functions.

The introduction of special insurance contract legislation need not be contemplated initially. But the following would be advisable. Every society should set up an Arbitration Council which is to decide in case of differences arising between the society's management and the members, this always on grounds of equity and allowing for public susceptibilities, there being in Mohammedan regions very generally no hesitation to respect the ancient "Sheriah. The decisions of the various committees should be from time to time; at least once a year, collected and published. After some years or decades these decisions would furnish a good basis for creating in every country concerned an appropriate insurance contract code. The federation might be entrusted with the collection of the decisions.

(In enacting laws and issuing edicts, the rule of Jefferson, one of the founders of the United States, should be observed, namely, that every law and edict should run for a stated length of time only. In principle, every generation should make its own laws. A country's constitution should provide that, in respect of every law over 60 ears old, any judge may publicly declare that in his decisions he would not apply it, but pronounce judgment pursuant to other principles which he would have to make known publicly, The highest judicial court might then, if it deemed it necessary, express its views on the subject. Litigants would be naturally entitled to submit their dispute before a court still ready to express judgment according to the old law and the demand of only one of the parties to the suit would have to suffice in this respect. That the view, that all suits ought to be dealt with according to a uniform law, is based on a wholly unjustified prejudice, has been shown by one no less eminent than Savigny, in his work "Vom Beruf unserer Zeit fuer Gesetzgebung und Rechtswissenschaft" (Of the Vocation of our Time for Legislation and Jurisprudence), first edition 1814, new issue Freiburg i/B., 1882, which is as yet far from being obsolete.

## **VI. INSURANCE OF NOMAD TRIBES**

The establishment of a system of livestock insurance for nomad tribes would be of great social, economic, and even political importance. How frequently has it not happened that a plague has annihilated the herd of a tribe, its only possession, and that it then reluctantly became a tribe of robbers whose predatory raids called forth large scale military measures.

It is by no means improbable that the migrations of the nomads under Attila, Jenghiz Khan, and Timur originated in, and were prompted by, devastating cattle plagues and the famines resulting from these. This incidentally suggests that the bad fodder harvest in 1786 in France, practically ignored by historians, compelled multitudes of peasants to slaughter their cattle and was one of the causes why, three years later, the Revolution assumed even greater violence in many rural districts than in Paris. (See Lavoisier's work, dated 1786: "La disette des bestiaux". (The Cattle Scarcity ), in Guillaumin's collection of Lavoisier's economic writings, p. 6. These writings prove that Lavoisier was not only the greatest chemist of his day but also a profound and far seeing economist. He deserves mention here because he is one of the few who, before Milhaud, had seen that the question of debt and tax payments is not only

a question relating to the distribution of the social product, but at least as much a question of means of payment. Consult his plan for establishing a provincial bank of issue, p. 20 of Guillaumin's edition.

Every Government in Asia has to take care that the herds of the nomads should be kept in being or replaced if destroyed by an epidemic. Of course, livestock insurance as practiced in Europe is not practicable in Asia. But what is possible and not too difficult to carry into effect is mutual credit aid among nomad tribes. Let us suppose that a tribe has lost 10,000 camels owing to an epidemic. In such case it should be possible, on the basis of prior arrangements, for this tribe to approach the other tribes in the country and ask them, following a previously fixed distribution formula to lend it that number of camels. Suppose the tribe undertook to return annually 1,100 camels for 12 years, this would correspond to nearly 4- 1/2 % annual interest for the lenders. If the tribe returned 1,000 camels annually for 15 years, this would signify an interest rate of almost exactly 5 -1/2 %. The restitution conditions should naturally be fixed in such a way that, on the one side, the paying capacity of the tribe should not be exceeded and that on the other, the lending tribes should have no undue burden placed on them. In partitioning the loan among the several lending tribes, mathematical exactitude cannot naturally be aimed at. The committee entrusted with the realization of the kind of cattle insurance proposed here, will perhaps fix the quota of one tribe at 80 camels, whilst in the opinion of the tribe concerned, 60 would have been a fairer number. If, however, the repayment conditions are not too unfavorable for the lenders, the tribe that would have preferred to lend 60 camels, would not mind much lending 80 instead. The increased interest would wipe out the disadvantage.

It would be desirable to appoint a special committee for organizing the proposed tribal livestock insurance. Possibly the most highly respected ministers of religion of every tribe would undertake the preliminary labors.

Here also the system of purchasing certificates will gradually come to be applied. Instead of contributing 60 camels in natura, a tribe will contribute as many purchasing certificates as would be required to buy from it 60 camels. A corresponding process would be employed in repaying the loan. But many tribes are so

isolated economically that, apart from trifles, they neither buy nor sell. The purchasing certificate, however, presupposes an economic domain of buying and setting. Still, it may be assumed that the economic isolation, of so many nomad tribes in Asia is, in fact, due to lack of means of payment in their regions. Thus the introduction of the certificates would greatly accelerate the tribes' joining in the general exchange of goods. Nor is this all. Many tribes only live as nomads because year by year the taxation system of their country has hitherto endangered the existence of the peasantry. Every year peasants, who cannot pay their taxes in the prescribed means of payment, take refuge among the nomads. These experiences naturally do not intensify the desire of the nomads for a settled life. Given however, permission to pay the taxes in purchasing certificates, many nomads, and probably the larger tribes, would settle down. The problem of insuring the nomads would then assume a quite different aspect. Today the number of nomads in Iran amounts still to

about 2 million. These furnish easily 200,000 warriors of the finest mettle, who in reality only obey their tribal chiefs a permanent and grave danger, and this not for Iran only.

## **VII. COOPERATION WITH A COUNTRY'S PRIVATE INSURANCE OFFICES**

Such collaboration will become practicable and also advantageous for both, public and private offices. Once the public societies have awakened an understanding of insurance matters in the population, many persons will conceive the idea, which would have remained foreign to them otherwise, of insuring in private offices property of theirs not subject to compulsory insurance in public societies.

In numerous cases a private office would be able to grant a co-insurance to public offices. Suppose that in a district of 100.000 inhabitants the capital of which has a population of 20.000, the artisans and merchants owning the bazaar of the district centre, insure their supplies and the bazaar itself at the district society -perhaps the society's way of collecting contributions appeals to them. Still, it might happen that the object is too large for the society and that for certain reasons it is not possible to secure a co-insurance with other public societies. In such case a private office will perhaps be able to take over a sufficiently large portion of the risk to allow the remainder to be borne without danger by the public society. Of course, the private office would then have to adopt the same method of collecting contributions as that employed by the public society. This will not prove difficult, particularly where a large bank collaborates in the collection of contributions in the manner previously indicated and where this bank is also the bank of the private office.

## **VIII. FEDERATION OF PUBLIC SOCIETIES**

### ***1. TIME OF FOUNDATION***

German and Swiss experience have shown that the operations of public insurance societies can be conducted with notably greater success through founding a federation. Accordingly, already after the establishment of a second society in a country, a federation should be formed, and any society subsequently established should become a member of the federation on starting.

### ***2. FEDERATIONAL AID IN CATASTROPHES***

The federation may prove particularly useful in catastrophes. For instance, in case of serious earthquakes, the federation may order the societies in districts not affected by the misfortune, to raise at once a loan in favor of the stricken districts. The loan should be partitioned among the societies on the principle that the share of each society was a loss that had occurred in its

own district. Suppose that an earthquake at Tabriz caused damage to the value of 100 million rials. It follows that the share of the Bushire district would be 2 million which amount therefore the Bushire society would have to lend to the Tabriz society. Bushire then acts as if there had been a loss of 2 million rials in its own district and imposes a corresponding contribution. The resulting proceeds it will transmit to Tabriz. In the case of such large amounts, by far the biggest part will probably be paid in goods warrants. These goods warrants will flow back very rapidly to Bushire because the affected societies will, with these goods warrants, buy in Bushire what they are in need of. This is a primitive method, but it has the advantage that it can be realized in a few days, that it does not disturb the country's monetary circulation, and that it enables real aid to be rendered promptly out of the Country's stock of goods and not out of its reserves of money.

The loan might be repaid in equal installments in 25 years, say quarterly 1,5% for interest and redemption. This would be equivalent to almost exactly  $\frac{7}{8}$  % quarterly interest, The repayment would be naturally in goods warrants which, according to the system here described, would be accepted in lieu of ready money in the Tabriz district.

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Ways will somehow be found to utilize the goods warrants in favor of the "creditor societies" perhaps through the help of a large bank. The repayments from loans for losses due to catastrophes might perhaps serve to gradually build up a reserve fund for the federation of the several societies.

### ***3. STATISTICS PREPARED BY THE FEDERATION***

Outside Japan Asia possesses as yet no adequate insurance statistics, However, after the establishment of public insurance societies, abundant statistical material would soon become available. The proper centre for the elaboration of this material would be the federation. The European federations of public insurance companies have also successfully started the elaboration of insurance statistics of great practical importance.

### ***4. A FEDERATIONAL PERIODICAL***

The federation should publish a monthly in the country's language and also in English or French. Such a periodical would help to disseminate the experiences of the several societies among all interested parties and would aid in detecting dangers, removing every kind of crudity, and revealing the resistance encountered by the insurance idea within the country.

## IX. CONCLUDING REMARKS

Public opinion in the United States and France, in Russia and Japan in Germany and Spain, is certainly not agreed as to the nature and functions of the State. But perhaps in all countries public opinion recognizes that it is the duty of the State to protect the individual, if he cannot protect himself, in the possession of property which the State regards as lawful. Accordingly, theft is as severely punished in Russia as in Italy or anywhere else. Indeed, in many countries even the right of animals to life and not to be made to suffer afflictions wantonly, is acknowledged by the State and cruelty to animals is punished most severely perhaps in Germany and England. (The decree issued in November 1935 by Minister Goering, calling on all motorists to look out at night for game crossing the highways, must have given great pleasure to friends of animals all the world over. Such a decree accords well with the mentality of the German people and suggests to many individuals reflections, actions, and abstentions in spheres unrelated to the protection of animals, whereby the sum of suffering in human society is reduced and indirect forces in favor of progress are released, forces which would otherwise have been frittered away in the sordid struggle of daily life.)

The protection of property carries with it undoubtedly protection by insurance for everyone whose property, earnings, health and life are menaced by fire and other accidents against which insurance is possible. The average man, it is true, frequently does not appreciate the advantage of protection by insurance and imagines that he may escape dangers through "prudence". He has not the vaguest idea of the law of large numbers, according to which among a million of the most prudent individuals there occur, nevertheless, a certain number of fire losses every year, a certain number of thefts varying little from year to year, and even the number of broken limbs, of blinded eyes, of square feet of epidermis annihilated, and much other misfortune, repeats itself in about the same proportions almost every year a circumstance the philosophical import of which obtrudes itself on everybody. (Nobel, the inventor of dynamite, was so much distressed by the many terrible accidents in his works that his friends feared that he might lose his reason. Nobel regarded himself as the cause of the death of many men and this weighed on him exceedingly. But later he learned that for decades the number of injured workmen per 1,000 tons of explosives had remained about equal in all countries and that this proportion was scarcely affected by his factories. This gave him courage, as he recognized that he had mistakenly made himself responsible for the activity of demonic forces wholly independent of the individual. This, of course, did not prevent him from carrying out his generous resolve, taken during the period when he was deeply depressed, of founding the "Nobel prizes".)

But already some two centuries ago the recognition of the essential meaning of the law of large numbers decidedly changed the basic religious outlook not only of individuals here and there but of numerous educated persons. This change also gradually, made itself felt among the general population and we have as yet by no means seen the last stage of this process of religious change. The movement started spontaneously in several European centers almost at the same time. The statistics of the brave Breslau prior, Kaspar Neumann, deserve special mention here. By examining 5,869 cases of death that took place in Breslau from 1687 to 1691, he wished to ascertain whether the rules of astrology (which has no fewer supporters today than it had then) were justified, according to which, at the death of any person, the sun

is mostly in opposition, in quadrature, or in conjunction to the position it had occupied at birth. He found no greater correspondence than was to be expected a priori on the basis of chance, but at the same time discovered uniformities of a quite different order, such as modern statistics reveal. Neumann's investigation has been probably by far the most comprehensive of its kind down to today and is, moreover, unknown to present day astrologers. The famous astronomer Halley, constructed out of the material furnished by his friend Neumann in 1693, the first mortality table, which is still indispensable for knowing the mortality at that period and thereby laid the foundations of the science of vital statistics. In contrast to Neumann, other priests were strongly biased against the application of mathematics to the phenomena of human life and were afraid from their viewpoint rightly so that in future people would appraise the value of prayers for averting misfortune differently from the past, when they once learnt that the sum of misfortune is roughly constant, if external circumstances remain unchanged and that this very fact may be taken advantage of by insuring against it. In the reign of Frederick the Great a pastor, it is related, preached against the practice of insurance and denounced it as rebellion against the decisions of Heaven, which from time to time meted out punishment to men for their sins, by conflagrations and the like. It rained after the service was over and the preacher was returning home protected by his umbrella. One of his flock utilized this for applying to the preacher the *reductio ad absurdum* argument. He abruptly closed the preacher's umbrella and admonished him to resign himself to the celestial decision which manifestly was intended to wet him through and through that day.

Among ministers of religion (short: clergy) the hostile attitude to insurance continued for a long time and even in the nineteenth century a large missionary society used to refrain insuring commodities sent to the heathen. It confined itself to having a blessing pronounced on them by one of its staff. (Unfortunately, the society issued no statistics as to the success of this method.)

To the credit of the clergy it should be stated, however, that it changed its viewpoint subsequently. Today the clergy forms an important agency for the spread of insurance. In United States churches the preacher not only calls with some frequency on his congregation to lead a moral life, but also stresses the point that it is sinning against oneself, against ones family and against the community, not to be adequately insured.

The preceding remarks are appropriate here if we consider that in many parts of Asia, e.g., in Iran, the influence of the clergy is not less than it was two centuries ago in Europe and that, moreover, in sundry Asiatic countries the clergy, alone are able to undertake the writing indissoluble connected with a system of insurance serving various sections of society. (It is stated that in many regions of Iran, which of itself is a highly cultured country, nineteen-twentieth of the population can neither read nor write.) It is therefore of great importance to win over the Asiatic clergy to the need of insurance. In fact, the clergy should be invited everywhere to collaborate, e.g., in the collection of contributions, in assessing damage, and in fixing insurance amounts. The remuneration for this help should not be ungenerous, especially as the Milhaud system of payment furnishes ample means for this.

The extensive conflagrations at Muhammera in 1935, where the bonded warehouse was destroyed, and at Teheran, where the bazaar, one of the largest and most beautiful in the East, was burnt down (and where the young Teheran fire brigade did splendid work!), showed that Iranian merchants more particularly were to a remarkable degree uninsured. The reason lay not only in the great difficulty for them of paying premiums in cash, but also largely in religious prejudice. Just as has happened formerly in Europe with

pious Christians, many Mohammedans, refuse today to purchase for money the protection which they regard as the mercy of heaven. This prejudice would not only be overcome by the collaboration of the clergy in insurance matters but also through the form of the insurance system. The same Mohammedan who will not buy with money protection against fire or help for his family in the case of a death and who like not a few in Europe calls the private insurance companies usurers, who enrich themselves by the misfortunes of the people (to read a report of such a company, which would at once disabuse his mind, would not occur to him), has no objection to an organization for mutual aid in misfortune, an organization not peremptorily demanding payment in money, although admitting it, and which in a manner not exceeding the comprehension of the people, only asks as contributions such material values as the insured possesses or services he can render. The plain man in Asia must gain this impression of insurance, and will gain it if the insurer is a public society based on mutuality, is not too large, and if it applies the Milhaud system of payment.

Moreover, the Mohammedan common law expressly declares it to be within the competence of a government, nay, its duty, to collect in the case of great disasters a religious tax from the faithful for the sufferers from damage, a tax which may be paid in material values. Mohammedan jurists have carefully and ably built up the zakat theory and this may well form a legal basis for the introduction of public insurance in Mohammedan districts, Mohammedan teachers of State rights are accustomed to make allowance for different means of payment when there is a shortage of ready money, although they have not reached as yet Milhaud's standpoint. Here they differ to their advantage from the Roman legal theorists, since the latter presupposed, as a matter of course, an adequate provision of the economy with means of payment, apparently not one of them, from Justinian onwards, having reflected whether this presupposition is always concretely fulfilled. Hence not one of them made a special investigation into the legal aspect of the circumstances marking economic crises. (Chinese, Japanese, and Indian economic literature also does not seem to record investigations respecting the special duties arising for a judge, an employer, a tax collector, and a statesman - when a general shortage of means of payments sets in.) During depressions the Roman jurists either asked for the property of an insolvent debtor to be seized and ruthlessly transferred by way of a public auction to the few who still possessed ready money, or, if the debtors revolted, they declared a moratorium and thereby injured the creditors not less than they had previously injured the debtors. It was far from the thought of those jurists to seek to escape from the meshes of the legal forms they had themselves spun, not even so far as definitely abnormal cases were concerned. Not so with the Mohammedan jurists. Although in civil law they maintained that liabilities expressed in money must be settled with money, they have, nevertheless, in the matter of fiscal law endeavored to respect the property of tax debtors during local or general crises in means of payment. To illustrate: Mohammedans discuss the point whether, if the zakat debtor owes the value of a sheep as zakat, but can only give the tax collector a camel in payment, the latter is bound to give ready money in change, of the difference in value. The prevailing opinion is that the tax collector may do this, but that the ruler should not oblige him to do it. (See the already cited work by Aghnides, "Mohammedan Theories of Finance".)

However, in recent years the "central bank of issue theory" has also begun to gain supporters in Asia. This theory is based on the view that a State should be regarded as sufficiently or even as too abundantly provided with means of payment when abroad there are the first signs of a discount of the notes or of the checks of large banks, but at the same time the central bank of issue is short of the means to support the exchange. Whether, at the same time, in many localities within the country itself (as frequently happened in Germany before the 1933 Revolution, especially before and after the crisis of 13 July 1931) pigs were bartered for



tobacco (as on the Congo) and cabbages for petrol, was regarded as not worthy of notice. The German crisis of July 1931 offers a serious warning to the statesmen of Asia not to expect more from their country's central bank of issue than it can properly offer.

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Probably in no country does money "roll" more rapidly than in Germany with its good commercial facilities. It transpired nevertheless that it does not suffice liberally to change the bills of exchange of a Berlin or Munich manufacturer for notes (that is, to discount the bills), in order that Thuringian villages and Bavarian forest districts may have sufficient notes in circulation. All the more a central bank of issue will not meet the situation in Asiatic countries. The fact that a Shanghai tea merchant has his bill of exchange discounted, does not furnish the Shantung peasant the means of payment he needs for paying his taxes and leases, never mind how frequently the bank of issue maintains the contrary.

Before the Civil War, the United States were much nearer to having a sound monetary system. The country was not supplied by a bank holding a monopoly, but, and this is generally forgotten, several thousand banks of issue helped to convert districts culturally in every respect inferior to the steppes of Iran and Mongolia into a civilized land superior in numbers, weapons, and education to the land of the Pharaohs. The monetary conditions in the United States prior to 1863, when, during the Civil War and relying on a force of several hundred thousand soldiers, the private banks of issue were abolished (this would have been impossible in peace times), raise the question how many centers of issue a country really needs. This question is easily answered. If we remember that means of payment based on clearing and the centers of issue here involved (banks of issue, credit banks issuing checks, clearing houses) are for the consuming power of a country what machinery and engineering works are for its technical producing powers, namely that which originally mobilizes these powers, the question presented assumes at once a much more exact form. That is, it is seen that we should not ask: "How many issuing centers does the country need?" or "How many issuing centers should be at the most allowed?", but rather "How many centers of issue will the country bear with?"

So long as in a country labor power remains unused, the harvest of the fields is rotting in the barns, and peasants weave their own cloth, while in the towns the looms are at a standstill, centers of issue are needed, for only the issue of conveniently divided and standardized means of payment, based on the obligation of possessors of material values or of creditors to accept these means of payment at par, and further based on orders to the value of the issued means of payment, only such an issue can exchange labor power for the harvest of the fields and the cloth of the townsman for the wool of the sheep breeder. And if only ten willing and capable workers find that they cannot exchange their labor power for provisions and for clothing, whilst foodstuffs are deteriorating in the shops and garments are being eaten by moths, a statesman should encourage these ten men to establish an issuing centre, since those which exist manifestly do not suffice for them, and he should also teach these ten how to proceed in the matter.

(It cannot be sufficiently repeated: first, by informing an employer who produces currently required articles, e.g., informing a farmer, that they are ready to work for him and that they would not ask for cash wages but would be satisfied to be paid with their employer's purchasing certificates, perhaps also receiving an equitably larger wage than would be paid in cash. Secondly, by simultaneously going the round and inquiring which shops would be ready to accept the purchasing certificates in lieu of money. The ten would then buy where they

found a response. Thirdly, if 1 and 2 should not be practicable right away, to form themselves into a cooperative society, to rent a closed-down or only partly utilized factory, to pay the rent with their own purchasing certificates and, further, making it publicly known that they are ready to buy raw materials with certificates and to sell their output to purchasers for such certificates. (Note by J.Z.: That would apply only to raw materials which could be very rapidly turned into consumer goods or services, since the latter would have to provide the real "readiness to accept cover". - J.Z., 4.12.01.) And fourth, by inviting all who are similarly situated to join with them; also by asking the local authorities to institute a clearing centre that might facilitate the spread of the system.)

Experience in the United States showed that, as soon as the least trading begins, there immediately a great demand for numerous local issuing centers develops. Thus, in 1852, rural Rhode Island had a bank of issue for every 2,000 inhabitants (roughly, for every 500 families), Pennsylvania, which in 1850 was already an industrial and commercial centre, had, on the contrary, only one bank of issue for every 40,000 inhabitants,

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Corey, "Lehrbuch der Volkswirtschaft", German translation by Adler, p 452.) "The dependence of the number of necessary centers of issue on the transport conditions of a region or, what amounts to the same thing, the dependence of the magnitude of an issuing centre on the demand in its vicinity, will become clear if we consider that in case of a trade panic it should be possible for the notes, goods warrants, etc., to flow back within a few hours to where they must be accepted at par. In China, where there are thousands of banks of issue, it may therefore happen that the notes of a bank are only accepted in a certain quarter of a town and nowhere else, the particular banker being unknown in any other place. But in his quarter it is perhaps only his notes that allow rents being paid, shopping being done, etc. We should remember that in many Chinese towns, with their dirty roads, impassable in rainy weather, where no tramway or underground railway exists, two relatively adjacent quarters are farther removed from each other in accessibility than Bronx is from Manhattan Junction (which is situated in the centre of Brooklyn) in New York, a distance of about eight hours for a pedestrian. Hence the large number of banks of issue now necessary in China is destined to diminish in proportion that transport facilities improve. In any event, no statesman in Asia should be frightened at the thought that, after a population has been granted the right to issue notes, every village may possess its own issuing centre and that only after years or decades to the extent that our statesman facilitates transport would their number decrease. It may be, however, that even in the more highly developed regions of Asia one centre of issue for every 50,000 inhabitants might be necessary, as formerly in Pennsylvania and in Scotland, in order that in case of mistrust arising, no holder should have to go far to convert his notes into goods or services, and also so as to render the economy independent of the money market.

The number of issuing centers in the United States might have been smaller (or their issues less extensive) if the Federal Government, the several States and the municipalities, had issued discountable paper money, every centre to the amount perhaps of one-quarter of its tax revenue and if the railways and navigation companies had also issued notes on the model of the Leipzig Dresden Railway a century ago (For particulars see Dr. Zander's paper on "Railway Money", in the "Annals", 1934.)

We may remark here that the liberty enjoyed by the American people at that period, to provide themselves with their own means of payment, did not suit certain persons and that therefore the United States press contained almost daily stupid attacks on the banks of issue. An able

criticism of these attacks will be found in Horn's work "Bankfreiheit" (German edition Stuttgart, 1867; French edition under the title "Liberté des banques", Paris, 1866). The general public was mainly misled by every case where a bank of issue was unable to redeem its notes in silver or gold being at once taken as proof that the bank had become bankrupt. Today, enlightened by Milhaud's writings, one would say that the redemption system failed and spontaneously converted itself into a system of unredeemable purchasing certificates, realizable in goods or services by the bank's debtors, without, however, this transformation being clearly recognized at the time. (The old terminology was not equal to this.) Still, W. B. Greene's remarks on convertibility in his "Mutual Banking" (Boston, 1870), are even today worthy of our attention. Greene pointed out that the notes of the banks alleged to be bankrupt continued to circulate and that the banks continued to pay dividends.

A future science of economics will regard it as a principle of economic morality that no one shall be entitled to secure means of payment from other economic spheres, most particularly not through the method of underselling, as long as his creditors are ready to accept his own means of payment at par. Such a morality would sharply contrast with the monetary morality of communism. The proceedings taken in Russia in 1935 against the issuers of emergency money (e.g. in Pensa) show that there the principle holds unchanged: "Even if the central bank of issue proves itself wholly unable to provide the industrial centers with means of payment for paying wages (to say nothing about other means of payment), even if the workers, to avoid grim hunger, flee from those centers as from pestilential regions; and even if, in the consumers' cooperatives of those localities, the goods, because they are not called for, a deteriorate, just as in the West even then no

factory manager no municipal administration, and no mine has the right to remunerate the workmen with conveniently divided and standardized notes, entitling the holders to claim the stored foodstuffs. Even in those deplorable circumstances the monopoly of the Moscow central bank of issue must be respected. (But the ill-treated population may suspect individual engineers or kulaks to have deliberately engendered the shortage!) The issuers of emergency money are accordingly imprisoned for "forgery. It may be granted, however, that for a communistically organized totalitarian State the emancipation of its subjects from the central bank might well be the beginning of the end,. Moreover, the issue of inconvertible (into rare metals! but convertible into wanted consumer goods and services! - J.Z., 4.12.01.) and standardized notes is by no means a complicated affair. In any case, it is far simpler than the issue of forged money, imitating the government's "real" money, and makes greater demands on the honesty of the issuers than on their business capacities. This is confirmed by the history of the banks of issue in the United States although or precisely because before the Civil War these notes were redeemable in metal. The thousands of American private banks of issue prior to 1861 were frequently established by humble folk workers peasants, tradesmen (see "Annals", 1935, p. 217 or page 177 of this series) who frequently could not spell correctly and were uncertain how to multiply two three-figured numbers. This is the more noteworthy seeing that for the issuers of paper money redeemable in metal the complications are much greater.

(The large scale banks of issue in the East tried, not infrequently, to rid themselves of the unwelcome competition of small banks in the villages by collecting the notes of the latter and then suddenly presenting a large number for redemption, especially if they knew that the small bank's metal reserves were low. The peasants protected their bank by simply whipping the agents of the large scale banks out of the village.) After impartially weighing the

circumstances, the conviction is bound to ripen that the issue of inconvertible purchasing certificates, more particularly in the limited domain of an insurance society, does not make too great a call on the intelligence of the individuals concerned in Asiatic countries. The contrary view would involve a considerable underestimate of the intelligence of Asiatics, which according to the unanimous reports from travelers, is in no Asiatic country below that of any European people, not even where general education is utterly neglected. Hence it does not by any means follow that in Asia there is only the choice between primitive payment in kind and payment in money.

If in commercial and public payments in Asia deliveries in kind are frequent, we need not conclude that Asiatics have always uncritically accepted the system of payments made in kind. On the contrary, for ages, owing to the abuses to which this system is inevitably subject, it has been severely criticized and if it has nonetheless been retained, it has been only because a system like Milhaud's was as little known in Asia as anywhere else and because ready money was not available.

(Note by J.Z., 4.12.01: I suspect that the issue of private emergency and self-help money, tokens or clearing certificates has been as frequently in Asia as in Western countries - and as insufficiently reported, at least from the monetary point of view, apart from that of coin and note collectors. On 26 July 1954 Ulrich von Beckerath sent me a note, with the following book and pointed out page 105, commenting: "Our goods warrant system - prohibited by the government in ancient China." Herbert Franke: *Geld und Wirtschaft in China unter der Mongolen-Herrschaft, Beitrage zur Wirtschaftsgeschichte der Yuean-Zeit*, 1949, Otto Harrassowitz, Leipzig (China under the Rule of the Mongols.): "Finally, in the document collections, two decrees are preserved which demonstrated that, because of the shortage of paper money, merchants proceeded to self-help, by making out assignments to goods and putting them into circulation instead of money. The one decree, YT, 20, 30b, is from the year 1294 and is dated of the 28th day of the 3rd month, the other is a decree of the Central Directory from the 9th month of the year 1314 (TK, 14, 28a) and it runs: 'Recently the owners of brothels, wine houses, tea shops and baths have repeatedly made out bamboo or wooden tablets or paper certificates and brought these into circulation, with a discount against paper money. That is an offence against the paper money law. These assignments were accepted only in the shops concerned, e.g., for wine and could not generally circulated in all streets and markets. It has been decided that these superfluous bamboo and wooden tablets and paper slips are altogether prohibited.'

"The decree of 1294 has a similar content. Induced through the shortage of paper money in small denominations, the people in Kiang-nan had issued goods warrants on tea, flour, bamboo and wine and put them into circulation. Already then a prohibition was published prohibiting officials and private people from accepting and passing on such goods warrants."

If they really had been "superfluous" rather than, in spite of their inconvenience, a local economic necessity, at least temporarily, the merchants would hardly have bothered to issue them nor would the public have accepted them, since, quite apparently, they were not legal tender but market-rated notes. They were so urgently needed that they locally circulated even at a discount. How early would an almost perfect system have developed without such prohibitions? In German and England at least, from about 1400 -1500 onwards, a similar development was prevented by the prohibitive "anti-truck laws", and related regulations and juridical decisions. Monetary sense, even then, was not entirely non-existent or impossible - but simply outlawed! "Street-money" in China and extensive clearing, even of mere notes made out and passed by individuals in payment, for minor purchases, as substitutes for official bank checks, were repeatedly reported by travelers in the Far East. - J.Z., 4.12.01.)

As proof that payments in kind are disliked in Asia and that therefore the soil is well prepared for a system dispensing with them but not requiring ready money, may be taken the line of reasoning in Hassan Naficy's work on taxation in Iran. Here is an example from his volume:

In the case of a tax assessed in cereals and collected as recently as ten years ago, this law permitted a "tara" of 5%, The tax collectors exploited this by compelling the peasants to deliver them cereals of a good quality and unadulterated and then mixed this with up to 3% of impurities, after having first abstracted for themselves an equivalent proportion of good cereals. That the cereals thereby lost their value for the government left them cold. Owing to a general shortage of means of payment, Iran was more heavily burdened with taxes ten years ago than any other country; but the central government nevertheless received only the equivalent of about 4 Swiss francs per capita. Despite the prevailing abuses, the Turkish Government received before the War about 22 to 23 Swiss francs, as much as Frederick the Great in Prussia. The revenue of the Iranian king Yesdegerd, prior to the Mohammedan conquest, may, apparently, be estimated as of the same amount, that is, if we assume that the country was populated to the same degree as it is at present. (See Naficy's volume.) The present ruler, Rez Sha Pahlevi, has preferred to dispense with taxes in kind rather than tolerate any longer the existing abuses. In China the experiences with taxes paid in rice have not been more satisfactory than those in Iran with corn.

Only the Milhaud system renders it possible to place the taxpayer monetarily in a position as if he were

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allowed to pay in kind and yet for the Government not to be monetarily worse off than if it were paid in money, the settlement procedure being at the same time as simple and obvious as if payments were effected in coin. (An aside: Since many Asiatics cannot read, the purchasing certificates should be so designed that an illiterate could negotiate them. The coin, of which the certificate is the equivalent, should therefore be imaged on the certificate besides which there should be as many dots or figures as correspond to the value of the certificate. Thus a certificate for 5 rials or 5 rupees should contain the number 5 five times, perhaps one figure in each corner and one in the centre and somewhere also 5 dots. The people would readily understand this. The dots could be at a distance of 1 inch or 1 centimeter from one another. This would provide the peoples with a useful measure. Asiatic households mostly lack such facilities.)

We may remark here that the transition from barter to sale for money should not be regarded as a transition from simple economic conditions calling for no reflection to complicated ones requiring this. To recognize this, the descriptions of bartering provided by travelers should be read. Thus H. Barth, the African explorer, writes in his "Reisen und Entdeckungen in Nord und Zentralafrika von 1849 bis 1855" (Travels and Discoveries in North and Central Africa from 1849 to 1855): "A small farmer, who brought his corn to the Monday market at Kukawa (in the Sudan), firmly refused to accept shells in payment and was seldom satisfied with thalers. (This is the well known Maria Theresa thaler). He who wants to buy corn must, accordingly, if he only possesses thaler, barter these for shells, or rather he buys shells and with these he buys a shirt "kulgu" and only after repeated barter transactions is he able to get his corn. The inconvenience experienced by the user of such a market is really so great that I frequently saw my servants return utterly exhausted." Karl Menger, from whose "Grundsätze der Volkswirtschaftslehre" (Principles of Economics), second edition, p 245, the quotation is taken, reports even more circuitous, but quite common barter operations from East Africa,

following V. L. Cameron's work "Across Africa", 1877). (Readers wishing to consult Menger's treatise in English, are referred to the translation published in 1934 by the London School of Economics and Political Science, constituting No. 17 of Reprints of Scarce Tracts in Economic and Political Science. The work is one of the best ever printed.)

The inhabitants of Kukawa, which was then a town of 60.000 inhabitants, had evidently no conception of what Knapp, in his "Staatliche Theorie des Geldes" (State Theory of Money), called the "circulatory satisfaction" of a creditor, as against his real satisfaction. This is the more surprising as the kingdom of Bornu is an old civilized country and has had for many centuries commercial relations with peoples to whom the meaning of a "circulatory satisfaction" has been familiar from antiquity. Furthermore, in Barth's time both cowry shells and Maria Theresa thaler circulated in that country, however, not as money, but as goods. It appears that when the majority of a people lacks the sense of "circulatory satisfaction", this represents an important, although as yet uninvestigated, racial mark. This racial mark is not to be found in any Asiatic people.

(Well, here he made a concession to the Nazi's racist mentality, either to please the censor or because of a personal bias. But the "purest" "Aryan" had and has, as a rule, as little appreciation of monetary and exchange freedom, perhaps even less, than have many supposedly "primitive" or "uncivilized" people in backward countries. At least the latter do not subscribe to the mythology of central banking, "political representation", authoritarian leadership and majoritarian "democratic" laws. An anthropologist told me that in the Congo there existed, at least for a time, 5 different juridical systems, peacefully competing with each other. As for authoritarian "leadership", enslavement and mass murder practices: the Nazis had many predecessors in the Africa of the past and of the present. - Compare also the remarks by von Beckerath on the "makuta" index standard of Negroes. - J.Z., 4.12.01.)

The lack of an appreciation of the more perfect forms of exchange need not signalize general inferiority. Bart's accounts suggest, for instance, a high state of civilization in the people of Bornu. The sense for poetry is strongly developed in them. Any reader interested in this aspect may be referred to the "Mitteilungen des Seminars fuer orientalische Sprachen" (Reports from the Seminar for Oriental Languages) in Berlin (1914, Abt. III), which contains a translation by R. Prietze of a song of lament of a young slave girl from Bornu, whose fellow slave and lover Mamadu was sold by his master to Morocco. Here is a song that Herder would have gladly placed in his collection. Attention may also be directed to the collection of 377 proverbs of this people, published by Prietze in the following year, a people which three or four generations back had no sense for the circulatory satisfaction of a creditor. (Now, under French rule, they have probably learnt it. [Most likely, they have only learnt the myths of monetary despotism! - J.Z., 4.12.01.] Prietze quotes a proverb current among the peoples of Bornu, which certainly must date from recent times: "A man's goodness resides in his money he who has no money, deteriorates.")

We must bear in mind such ethnographical accounts in order not to lose patience when noting that recent money theorists (because of atavism) are destitute of any sense for appreciating circulatory satisfaction

through means of payment, as where for example, they dismiss Zander's railway money (Annals, 1934) with the remark that everybody does not travel daily by rail. These theorists attribute the value of paper money exclusively to the obedience of subjects to a State command, as if the consciousness of having done one's duty as subjects and the feeling of

being satisfied as creditors were not two entirely different sentiments. These theorists forget that the commercial value not only of paper money but even of gold and silver resides wholly in that circulatory satisfaction and in no way in being able to use the old coins received for stopping a tooth of ours or for plating our watch cover. (See Knapp, "Staatliche Theorie des Geldes", chapter 3.)

Milhaud's system, although based on a new and somewhat abstract principle, is yet so simple, clear, and concrete that already the initial steps in its execution must strongly influence the prevailing misconceptions of men, including those of theorists, about the essence of a means of payment. Although, on the whole, based on circulatory satisfaction, like every system of paper means of payment, it opens for everybody, who does not understand the nature of this satisfaction or forgets it for the moment, or becomes suddenly suspicious, or allows himself to be incited, the way to a real and immediate satisfaction. The shops where he can exchange the means of payment he dislikes, for bread, butter, etc., are indicated by posters. This advantage of a clearness, obvious also to the masses of our time, with its currency madness, which has completely taken the place of the ancient delusion of witchcraft, cannot be too highly valued.

But the Milhaud system of payment does not represent only a technical improvement, after the manner of postage stamps or electricity meters (the want of which latter retarded for decades the development of electrical technology). It is much more than that. More particularly, its application to insurance leads to the recognition of its significance for the theory of property. That is, the system renders possible (to this we shall return at the close) a quite different type of property to that with which men, particularly in Asia, had to be satisfied. Thereby it opens the way for a different and better type of civilization.

If it be true that insurance is the condition sine qua non for surmounting those semi-barbarous social conditions that still prevail in Asia, in spite of the high cultivation of its elite and the remarkable intelligence of its masses; if the sum of suffering in human society can only be reduced through insurance to the degree reached here and there in Europe (mortality of men 30 years old 3 per mil; only 3 days' illness per annum; only 1 policeman for every thousand inhabitants; and scarcely a drunken man on pay day this exists in quiet parts of Switzerland, Denmark and Scotland); and if, moreover, insurance is simply unrealizable in most regions of Asia without the Milhaud payment system, then this in itself demonstrates the significance of the system for the civilizing of the Asiatic masses.

For the populations of the eighteenth century, insurance was still something of a novelty, but they nevertheless fully recognized its value. They esteemed it so highly that they found nothing more laudable to say in justification of the State than that it is a general insurance institution for mankind, taxes being its insurance premiums. (Thus in his "Essai philosophique sur les probabilités", Laplace writes in the section treating of insurance companies: "A free people may be regarded as a large association the members of which mutually guarantee their possessions, by bearing proportionately the charges of such a guaranty.")

This belief, however, was badly shaken by the French Revolution, particularly among the profoundest thinkers, e.g., in the case of Wilhelm von Humboldt, who accordingly published in 1794 his "Die Grenzen der Wirksamkeit des Staates" (It only circulated in manuscript form among his friends and was not published before 1851 in Breslau. - The ed.), and in that of Joh. Gottl. Fichte, who already in 1793, in his volume on the French Revolution, contended that men should have the right to resign from States such as the old feudal State or the Terror State of 1793, as they do from a church.

It came to pass that the Government of France, the greatest of the then existing civilized States, spread in

one year more insecurity among its citizens than the lack of insurance companies had meant for it during the preceding century. It did this by requisitions that were more extensive than had been previously those of the feudal lords, by mass executions (more especially of State creditors, of whom Robespierre had lists prepared) which not even Torquemada would have risked; by legalizing (already under the rule of the Gironde) a system of denunciation unknown before or since (Nicolas, Robespierre's friend, printed forms for denunciation which the authorities furnished to any applicant; see Sieburg, "Robespierre", p. 61); and by an inflation capable of astonishing us, accompanied by laws on "price profiteering", "foreign exchange", etc., such as have been generally issued during inflationary periods. Hundreds of thousands were thrown into prison. Such a State could no longer appear as an insurance institution to a philosopher and led, especially in Germany, to reflections which were very much opposed to those we have cited from Laplace.

By examining more carefully the idea of insurance, Girardin first showed that whilst States have thus far not been true insurance institutions, the State could be and should be the great insurance institution of mankind. He further pointed out that the synthesis of compulsion and freedom sought by philosophers in the law of nature, and jeered at as a chimera by "practical men", had been long since realized in insurance and that the principles of the science and the technique of insurance were only waiting to demonstrate their usefulness in sociology, economics, and public rights. (See: "La Politique Universelle", second edition, 1854.)

(Revisionist and monetary view of the French Revolution! - J.Z.)

What, then, was the ultimate cause of the outbreak of the French Revolution in 1789 and its steadily growing cruelty which at last shocked the terrorists themselves? (It happened in July 1794, a few days before the fall of Robespierre. The Revolutionary tribunal had condemned 160 accused, mainly, it appears, owing to some remarks concerning the food of prisoners putrid herrings the stench of which caused some to faint away. But the Convention dared not to have the 160 accused executed at the same time, but spread the "fournée" over three days.)

It is well worth seeking to discover what was the primary cause of the horrors of the French Revolution, for it was the same cause that is now intensively operating in Asia (just one of the many contributing factors neglected by both sides in Vietnam. - The Ed.) making not only impossible there a broadly based insurance system, but occasioning in many localities revolutionary horrors not behind those of the Paris September murders. (It is too often forgotten that there is in China a region much larger and more densely populated than France, which has been for years, and is still ruled by terrorizing communist governments.)

Besides, the means that would make practicable insurance, in Asia in circumstances suggesting to most that they are an absolute obstacle to this end these means (they, and they alone), drawn from the arsenal of the Milhaud system, may represent in a social conflagration like the great French Revolution, what a carbonic acid extinguisher is in case of fires involving wood, paper, and even celluloid, namely a means which acts effectively where ordinary fire appliances fail. If such expedients have already been tried out in a domain like insurance, a statesman does not have to create them out of nothing in an emergency. They are at hand, and trained persons also exist who know how to use them. But should a government, during an event such as the storming of the Bastille, lose its head (which has happened to more robust natures than Louis XVI. read the story by Gibbon of the Nika rebellion under Justinian), a local authority would be able to satisfy the rebellious masses, namely (since in rebellions brought about by deflationary emergencies this is mostly the aim) to provide means of payment and foodstuffs, within one hour if necessary, if it is conversant with the Milhaud system of, purchasing certificates. And this familiarity with the system, the local authority



will possess if there are public insurance societies where the system is applied in practice. The reverse side of this medal should not be overlooked. The system offers financial facilities to the leaders of a revolution who know how to manipulate it, while most revolutions in the history of the world miscarried because the revolutionaries did not know how to finance their movement. (An extensive manuscript by Ulrich von Beckerath on the financial history of revolutions and containing a program for the sound financing of rightful revolutions was, alas, destroyed in one of the allied air raids on the civil population of Berlin. - The Ed.)

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Whether, for instance, the Soviet Government could maintain itself if the Milhaud system were known throughout the country, is doubtful. Of course, before the system becomes a menace to a government, the latter must have been very reckless. The average man, inclined as he is to tolerate considerable oppression rather than to run serious risks, is not easily moved. "It is fear that gives rise to rebellions", says a Bornu proverb. (See the aforementioned collection.)

What then, was the cause proper of the French Revolution or, more exactly, of the forms that marked its birth? Was feudalism really, as commonly thought, the cause? This is impossible, for centuries before that event feudalism had assumed far more brutal forms than under Louis XVI. and the people remained quiet on the whole. Where the emcyclopedists the culprits? No; for most Frenchmen were unaware of their existence, simply because they could neither read nor write. Besides, Robespierre, Saint Just, Marat, and the whole Jacobin Club esteemed them lightly and even persecuted them later. Was it due to the extravagance of the Court? No; for this extravagance was not so great as a few decades before under Louis XV. when the country was less developed industrially. The upkeep of the Court demanded at most one fiftieth of the national output, probably much less. Was the Church to blame? Was it unable to keep alive the religion of the people? No; for after the storming of the Bastille, the masses spontaneously organized processions of gratitude in honor of St. Geneviève. They were therefore decidedly religious. Was it due to revolutionary propaganda? No! In her memoirs Madame Roland testifies that among the 1.200 deputies of the General Assembly only about a dozen were Republicans by conviction. Robespierre himself was long after 1789 no Republican and even published a periodical called "Le défenseur de la constitution". What, then was the cause?

The real cause of the Revolution operated with such force that no student could overtook it, although most have regarded it as a simple accompaniment of these phenomena which made more noise then. The cause was the catastrophic shortage of coins in the country due as the sudden reappearance of the coins after the Reign of Terror proves in large measure to hoarding and not a little to export. Why so many coins should have been suddenly hoarded, we shall not examine here; but hitherto every revolution in the history of mankind, even every local rebellion, has resulted (Here one has to keep in mind that the French Revolution consisted out of a series of risings. While a currency famine existed already before it began, each successive rising tended to make it worse. -The Ed. )

in the masses holding fast to their ready money. (This happened, for instance, during the inflation in Germany in 1918 and 1919, when, as a result, in many localities, in December 1918, the war loan interest coupons were officially declared means of payment for the time being.) In France it also happened that some time before the Revolution the notes of the Caisse d'Escompte had their exchange rate fixed, even if only for Paris, and that at the time the nature of a forced currency was known even to the man in the street. Modest shopkeepers, too, were then aware that such measures were almost always harbingers of a coming inflation.

In any event, already in 1788 there were abundant signs in France of deflationary phenomena. Taxpayers lacked the means wherewith to pay their taxes. To aggravate the situation, many taxes were farmed out and the tax farmers proceeded in the case of a delay in payments as they have ever done, with utter ruthlessness. The "publicans", so often mentioned in the New Testament, were tax farmers. That Christ did not keep this class of men at a distance and that he considered them even capable of being saved, aroused no less amazement and indignation than does today Gandhi's assertion that the pariahs are men just like the Brahmins. See Matthew, ch. 9, 12.) Luke, chap. 3, 12. )

Landlords were not paid and "debtors' morals" reached an "unprecedentedly low level", i.e., it was as it always has been in times of disturbed monetary circulation. In turn, landlords were pressed by their mortgage creditors and ran the risk of losing their houses, indeed the whole creditor class appeared to consist of anti-social individuals also as it has always been in times of disturbed monetary circulation. Manufacturers were unable to collect the amounts long due to them from shopkeepers. They therefore

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decided on reducing the wages of their men and knew how to enforce their decision. Frequently enough, they postponed wage payments for a time, and all that whilst food prices remained almost unchanged. (The quantity theory teaches that a change in the price level corresponds to the quantity of money. This is quite correct but change within what time? A difference in time of one month can give birth to the gravest social revolutions.)

The number of beggars in France soared while almsgiving declined. Public workshops were established, precisely as later in 1848 and as in many countries after the depression of 1930. Of the 600.000 inhabitants of Paris, 200.000 became directly or indirectly (as dependents) unemployed and, with a passion that alarmed the propertied classes, clamored for bread and work. The Church, which usually knew how to meet emergencies and which maintained at the time a quarter of the population of Spain, could not give because its own revenues were rapidly ebbing. Priests had to listen to harsh invectives and were convinced that these could only have been learnt from Voltaire and Diderot. The Minister of War was in arrears with the soldiers' pay in many regiments and the soldiers revolted, refusing to fire at the people storming the bakers' shops. The Government imposed new taxes and the population called for a reduction of the old. Many priests did not receive their stipends and sympathized with the masses. Even a considerable proportion of the feudal lords, hard pressed by their creditors, also came to feel sympathy for the people.

Parliamentary government, and even many useful reforms were introduced. Only money became more and more scarce. The party in power was at a loss what to do. The first assignats were being printed, the issue being manipulated as ineptly as possible, e.g., as already remarked, no assignats under 200 Livres were issued in order not to drive out the metallic money circulating among the masses strangely missing. The fact that it was just from here that it had long been removed and that it should have been, therefore, on the contrary, a question of providing the masses with new means of payment. However, the Ministers, the National Assembly, the experts, public opinion, all shared the general prejudice, which shortly before had induced the then much admired English Parliament to pass legislation, in 1765 in Scotland and in 1775 in England, prohibiting the issue of banknotes under 1 pound the same prejudice which induced an Adam Smith to state that metallic currency has a natural tendency to appear in sufficient amounts wherever paper money is kept away. (In his "Free Banking", Henry Meulen describes the highly interesting events associated with the publication of the

Acts of 1765 and 1775. His is among the few descriptions based on a personal and careful study of sources. From this it undoubtedly transpires that the English and Scotch bank of issue system was the outcome of a deflation and for a time and up to a certain point actually removed it.) France's metallic currency did not, as was hoped, confirm the general prejudice. It had definitely vanished and the masses could not pay. Church estates were confiscated. A pity 'tis, however, that soldiers cannot be paid with estates.

Having come to power, the Girondists proceeded like so many other people's governments have done when in money difficulties. They incited to war with other countries, countries that, it was said, conspired with the nobility and kept on depressing the exchange rate of the assignats by a bourse maneuver difficult for us to conceive. Robespierre, without an inkling of insight into economics, but no dolt, and at heart a Rousseauite pacifist, struggled desperately with the Jacobins against war, thereby naturally placing the weak king still further at the mercy of the Girondists, wholly dependent financially as he was on his Parliament. On 20 April 1792, with a heavy heart the king, in the name of France nine-tenths of which was for peace declared war. (How different would have been the course of history if Louis had had some grasp of monetary matters; if he had in good time made appropriate decisions; and if he had in this way become strong enough to defy the warmongers!) Financial difficulties became, of course, intensified. No Girondist had the faintest notion how to finance a war. Despite the multiplication of assignats, the shortage of ready money was not less acute, not did the tax revenue rise. The feudal Lords were in the same predicament as the Exchequer. They, and their stewards more particularly, brought correspondingly greater pressure to bear on any of the peasantry suspected of still possessing something, perhaps ready money. No talk now of respites such as were frequently granted before the Revolution in cases of emergency, or of temporary transformations of money payments into

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payments in kind, and of course no assistance in hard cases as was formerly often rendered by many feudal Lords. There was a prompt reply to this. Hundreds of local peasant revolts drove a large proportion of the nobility across the frontier; its estates were confiscated and sold; and for a few days this helped to fill the coffers of the State.

The authorities, pressed by soldiers demanding their pay, by starving unemployed workers, by State creditors who felt themselves defrauded, and by taxpayers sinking under their burdens (payable in ready money, be it understood), were at their wits' end. Frequently there were among the authorities humanely inclined individuals, sharing the views of the encyclopedists, who imperiled their own life rather than order the crowds to be fired at. The king, perhaps the noblest representative of the Bourbon dynasty, was wholly of the same mind. But the soldiers cried for food and demanded their pay. A decision had to be reached, and eventually this could only be to seize money relentlessly, wherever it might be found.

Would Turgot, who was justly admired have been able to act differently than did his successors? It may be emphatically asserted that he would have acted just as they did and this indeed may be based on a remark of his, a remark that in his day was generally approved and greatly increased men's confidence in him. "It is therefore," wrote Turgot in a Letter to Abbé Cicé, "a point both of theory and experience that the masses can never receive paper" (Editor's addition: "otherwise than") as representing money and consequently as convertible into money". See "Das Geld" (Money), by Prof. Robert Eisler, p. 240. ) A statesman holding such a view cannot, even if he be a genius, proceed differently than did every French Finance Minister down to Napoleon's time. Turgot not otherwise than Terray, Calonne not otherwise

than Cambon. Faced by a sharp deflation, in fact by an inflation created by him as an emergency measure, such a statesman would be helpless. Daily, disturbed monetary conditions will cause him unaccustomed difficulties in every official step he takes, to overcome which the ordinary experience of Governments is of little assistance to him. Inevitably he will look upon this resistance, which he finds amongst almost all with whom he has dealings, as the very cause of his deficits. (Similarly, in 1911, the New York Water Supply Board charged the city's inhabitants with being incorrigible water wastrels, who did not respect the collective good and were indifferent to all appeals until, by accident, it discovered a huge hole in a water main.)

If, in addition, a statesman has sprung from the people, has had no experience in governing, and belongs to a family who were always the objects, never the subjects, of administrative activity, in whom therefore certain qualities of temperament and character indispensable in "dealings with subordinates" could not be inherited, then even from the first day this statesman will misjudge the special influences affecting every large administration, influences entirely independent of the individuality of the various subordinates. He will be lost in personalities. Every inevitable friction in the State machine, he will at once ascribe to opposition and corruption. He will not even, as did the statesmen of the "ancien régime", know how to distinguish the new "monetary" disturbances from the purely administrative ones, which are also of daily occurrence in normal times. Quite novel phenomena, such as the depreciation of just issued State paper money, despite its being "over covered" by "the wealth of the whole nation", only, unfortunately, with an insufficient fiscal basis (which often already appears when the State paper money is only equal to half of the annual tax revenue) such a phenomenon is simply regarded as the work of "speculators", for the nature of stock exchange speculation is naturally unknown to him, and also to public opinion, which supports him.

(Note by J.Z.: Beckerath pointed out above, that the first assignats were in denominations of 200 livres. At least for all minor tax-payers, who may have owed only 10 or 20 livres in taxes, and who may have never received in payment of as much as 200 livres at a time, the assignates of 200 livres may as well have not been in existence at all, as far as their tax payments obligations were concerned, even if the issue of all such large denomination assignats had been fully covered by taxes due, in total, during the next 3 months. It would be as if I would have to pay a tax debt of \$ 10,000, e.g. in a \$ 10,000 note, at a time when other means of exchange are very short, and no one would ever pay me as much as \$ 10,000 at a time, e.g. in such a note and, due to the shortage of exchange media, and correspondingly few sales. Then I could not gradually accumulate \$ 10,000 in small denominations, either. In other words, full tax foundation for paper money in large denominations is not enough when there is insufficient circulation of paper money with tax foundation in small denominations. In the extreme case, a single paper money note might represent the tax returns of a whole country for the next 3 months. Thus it seems to possess "tax foundation" in full. But it would certainly not be issued in convenient enough denominations to mediate the millions of daily trades in small exchanges. Who could be effectively paid with it and who could, effectively, pay his taxes with it - J.Z., 5.12.01.)

Once the new ruler has victimized some (perhaps punished with death a few official irregularities, where in normal times a reprimand would have sufficed) he ceases to be capable of straightforward thinking and is only to justify his conduct in his own eyes, he discovers continually fresh conspiracies and "punishes" these. The more evident the futility of his deep devotion to the public welfare appears, the more he seeks for persons who cross his plans, for his failure, he thinks, could not be due to anything but individuals personally antagonistic to him. (Any one whose ancestors had regarded for thousands of years thunder and lightning as the work of persons,

although super terrestrial ones, as also epidemics, bad harvests, conflagrations, and accidents of every kind, has, without knowing it, to struggle against a special type of inherited defect.) He will only apply the category of causality" when the application of the category "persons" is opposed to his personal interests. The excuses of the French terrorists after the Reign of Terror offer in this connection an interesting illustration. Attempts were even made to explain the September murders "causally". Robespierre was in any event completely incapable of thinking "causally". He had already sacrificed his co-rulers who were too humane to be as consistent as he was. Danton, Camille Desmoulins, none was spared.

Robespierre is the type of the incorruptible and virtuous ruler never absent in any great revolution. He risks his life daily in order to save the State by the application of his principles. In private life he proves to be accessible, cultured, urbane, and modest. However, he does not understand that providing the State and its citizens with means of payment does not represent an act of devotion of these citizens to the well being of the State. It is rather a technical problem (and that not in the sphere production, as Lenin thought, who closely resembled his predecessor Robespierre, but in that of payment, which cannot be solved with ten million dynamos).

After a ruler like Robespierre has sacrificed his friends, he sacrifices his health, his sleep, his family happiness, and anything else there remains to sacrifice. But money he cannot procure, his soldiers suffer want, townsmen are starving and freezing, peasants are being plundered, and only the inflation profiteers find ways and means not only to revel in luxury, but to live in quiet and unharmed. Cursed money! Is not possible to live without money? Did not the Spartans live without it? And Robespierre was not the only one who reached this conclusion. Everywhere projects for "rejuvenating society" were discussed. Towns were to disappear. Officials were to be paid in kind. Factories were to be abolished. Farming! Rural bliss in a people returned to nature! Money requirements replaced by virtue, and if necessary, held down by terrorism! In fact, how many of the reform programs of the last fifty, and particularly of the last twenty years do not read like this too?

Meanwhile, the country overwhelmed Robespierre with manifestations of the deepest submissiveness. The coffers of the local authorities were, that is, as empty as his. They must requisition everything, as the taxation screw no longer squeezed out anything; and for this they must have the permission of the Committee of Public Welfare.

Although in Paris 800 workers were busy, day and night printing assignats, the shortage of means of payment (as in every inflation) remained unaffected. Bands of forgers assisted, uninvited, the Paris printers, some economists probably rightly estimating that a third of the circulating assignats were forged.

Cautiously, every requisition was made "in the name of the people" and with reference to government legislation, at least with reference to utterances by Robespierre and sometimes by Marat. A report was also forthwith sent to the capital, the local authority explaining how scrupulously it had carried out the government's principles. At the same time, a request was made for national guards because "the patriots, despite their zeal to transfer the possessions of the nobility to, the people, are still in want." (If a few years previously public, insurance societies or even private ones, had been organized and if they had been operated by a system of payment like that of the old Scottish banks, every village would have possessed an instrument for collecting dues despite any money shortage. Everywhere, recourse would have been had to this instrument instead of to requisitioning, if only because, at a low estimate, it would have yielded threefold.)

However, Robespierre was fully aware that the requisitions of the local authorities diminished his own resources. Accordingly, although unsuccessfully, he asked that the system of requisitioning should be centralized in Paris, even that all executions should be concentrated there.

One thing is certain, namely that the general financial stringency; despite the apparent submissiveness of the local authorities, rapidly gave rise to a sharp opposition between the Committee of Public Welfare and the Provinces, as has been the case similarly, in all revolutions of all times among every people, when the revolution has spread to the population as a whole, But Robespierre saw clearly that the government could only carry through a decision to prohibit requisitioning on the part of the "patriots" in the provinces, if it

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could obtain revenues for the local authorities. Who was responsible for the daily disappearance of the daily stream of newly printed assignats? The stock exchange was closed (26/6/1793); then the joint stock companies (28/8/1793), including the insurance companies; and, lastly, the banks (8/9/1793) all to no avail. Money remained scarce. (Sieburg, "Robespierre", p. 103.)

Eventually, Robespierre felt convinced that under a monetary system, "corruption" cannot be excluded and hence he resolved to introduce the social program of the 27 year old Saint Just , a sort of money-less economy, and to guillotine every opponent of this program. On 7 Thermidor, two days before his fall, Robespierre attacked Cambon, the Finance Minister, and accused him also of "corruption". Cambon defended himself vigorously and with success. He was the first man, for months, who had dared to contradict Robespierre. On 9 Thermidor, a few hours before the fall of the Triumvirate, Saint Just commenced his great programmatic speech (the manuscript of which has been fortunately preserved), but he was soon interrupted by the events recorded in all history books.

It may be said, what meaning have these long passed events for us? The answer is they are not passed. The forces one might almost say, the events of those times have always existed and will always exist. They are chained demons who from time to time, when the intellectual aristocracy fails mankind or is entangled in prejudices, regain their freedom and then rage unit they are exhausted or until some superior spirit binds and imprisons them again.

(I would rather say: "dangerous errors, myths and prejudices" than "demons". - J.Z., 5.12.01.)

Whenever there is a deflation, like that which occurred in revolutionary France, the masses and their leaders do not look for the causes of the prevailing evils, but for culprits. It is too late then to explain to the masses that it is not a question of who is guilty. Every outstanding person the wealthy man, the official of high and middle rank, the artist, the scholar above all will then be exposed to the same danger as in the period from 1792 to 1794. Just as at that time, there will be no lack of a Marat who persecutes the scholarly because they have killed, with their silence, some indifferent utterance of his. (By the way, Goethe quotes a few such in his "Farbenlehre"; similarly Gehler's old encyclopedia of physics under "Licht" [light] and "Waerme" [heat].)

But there might be no Charlotte Corday to save science by sacrificing her own life and stabbing the monster before he could bring down the intellectual level of his country to that of the Spain of the Middle Ages.

At the next revolution generated by the exigencies of a deflation the Terror will dispose of a much more alluring terminology than under Marat and Robespierre, and it will be

correspondingly more difficult to resist it. Since Trotzky for the first time represented the solution of our economic problems (which however, like most communists, he could not distinguish from social problems) in terms of a war to be won, speaking e.g., of a production battle, this form of expression, since it appeals directly to the inmost instincts of the average man, has already been widely adopted. In non-communistic countries, dependent much less on production than on markets, such as Japan, it serves to fill the posts of the Ministry of Trade with heroes. Trotzky's terminology has certainly led the masses, even more than formerly, to conceive the solution of economic problems as a task which, like war, calls for personal daring, and not, as the older socialists believed, for men exerting their constructive powers. These powers, which terrorists, just because they are destructive, only very exceptionally possess, appertain to the personality of a man, not to his person. Already in Saint Just's program, but even more in all Robespierre's speeches, is this want of constructive detail noticeable exactly as in the declarations of modern terrorists (read Lenin's writings!) - this sharply marked inclination to deal only in generalities. (Asiatic readers will here think of the great social reformer Buddha, who abolished suttee, the caste system the lying on nailed planks, in order to attain religious illumination, and did much else for which pious Brahmins drove his disciples from India with fire and sword Buddha, the one among all religious founders, who declared sinful the use of generalities in speech when important matters are under consideration. Once he surprised some of his disciples addressing a crowd in general terms and was very indignant. He called

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them together and gave them a model sermon, "the chain of suffering", which is to be found in every collection of his speeches and deals exclusively with concrete matter containing not a single generality. )

Speeches such as Robespierre was accustomed to deliver (scarcely one of these but rouses a feeling of tedium in reading), reveal also a want of what a statesman must possess, even should he have no administrative experience, namely true leadership. A true leader knows in veriest detail what he desires and is able to convey this knowledge to others.

A terrorist considers the first essential for solving the social problem to be courage, possesses some, and seeks for opportunities to display it. Without wishing to belittle courage (Schopenhauer says that "next to sagacity, courage is a quality very important for our happiness"), we should remember that many animals excel man in this (see Schopenhauer's Aphorisms ). Perhaps during the whole Reign of Terror no Jacobin showed more courage in any fight than does a hen defending her chicks against a hawk. Of course, the higher type of terrorist also hazards his life - the life he has in common with every earthworm; and in fidelity, devotion, and incorruptibility many a brave sheep-dog has outdone a Couthon, Saint Just, and Robespierre.

Intellectualism, then? By no means. "Great thoughts spring from the heart", says Vauvenargues, and the masses feel that this is true. In the end, they turn away from terrorism, perhaps even whilst the abuses that brought it about continue, as happened in Thermidor of the year 2 of the Republic

Let economists meanwhile bear in mind that in 1793 and 1794 a regulator of public opinion was silently at work, one which today is wanting but was then the cause that the ideas of the masses about value, prices (particularly maximum prices), money, buying and selling, could not widely depart from reality that is, a little sound metallic currency circulated, although prohibited, beside the paper money. But today at least a thousand million people have never

seen metallic money of full value and fewer people than a thousand years ago are accustomed to use it as a means of payment.

(It may not be inappropriate at this point to expose a mistake made by many of Milhaud's critics. His purchasing certificate is not intended to replace metallic money in all circumstances, but only to deal with or prevent a shortage thereof; otherwise expressed, to function where coins are not available. The currency laws of a country should therefore, even where they favor the Milhaud system; expressly declare gold coins of full weight to be legal tender if presented as payment in the customary way. That is what jurists even today when Milhaud's writings are known, overlook. It is something quite a different from the right that existed practically everywhere in 1913, of creditors to insist on being paid in gold coins.

(Editor's note: With regard to the fanaticism exhibited by some enemies of a gold coin circulation and free dealings in gold, von Beckerath, in later years, no longer advocates legal tender for gold coins but a general freedom to select for all private contracts a standard of value of one's choice. He is convinced that a gold reckoning standard, based on actual coin circulation and the valuations of a free gold market, will at last prove to be the least evil or most convenient and will thus be almost generally accepted voluntarily.)

The general means of payment of the largest part of mankind is today, what it had never been before in the world's history, a kind of paper money whose value and quantity depend primarily on the opinions and the decisions of a very few men perhaps not more than a hundred. Not many have insight into these relations and the masses are of course entirely without it. Hence, in the case of monetary perturbations, public opinion never thinks of demanding, and it is not likely to think of demanding, in the near future, what it had demanded after the Reign of Terror in France and what would actually suffice, in very many cases, in order to reestablish at least such monetary conditions as might enable people to remain alive. This demand would include repeal of any legislation restricting the private possession of precious metals, access to the mint for those who desire to turn ingots into coins, and a government declaration that it will not issue forced currency. Public opinion demanded this after the reign of the Jacobins was over and Napoleon granted it, we know with what success. That, however, was the effect of the continued circulation, however restricted and illegal, of metallic coins side by side with paper money.

Today the masses would not think of making such demands, nor would governments think of beginning

their reform activities here. The masses are not thinking today of metallic money; they only ask that their Government should run to earth the "economic mischief makers". The government, consisting today in almost all countries of energetic and talented personalities, but who do not even know, about the theory of payment transactions, that it exists, beats up, of course, the mischief makers, identifies these, as is inevitable, with those denounced by general opinion with the middle class in Russia, with the importers in China, and with the shopkeepers almost everywhere, just as in 1793 and 179 in France.

The next revolution produced by deflationary exigencies can only intensify this attitude. Precisely as then, and with less opposition, that which is really a problem of liquidity, will be regarded as one of performance, and that which is a problem of transfer from individual to individual, as one of distribution of the social product (which naturally also exists alongside it). The solution will not be sought in the sphere of exchange, but in that of values. (Bastiat's "De la valeur" should be consulted here.)



In the main, the money circulation will consist again of standardized requisitioning warrants, issued by the government then in power, and its acceptance will be once more an act of obedience to the government, not an equitable arrangement between debtor and creditor.

The economic world, weary of its Commoduses, who do not know how to better spend the labor product of the peoples, entrusted to them, than on (of course, well or organized) circus performances (The Olympic Games took place in Berlin in 1936 and the Nazi government spared no costs. - The Ed.), even showing, like their illustrious ancestor, every kind of heroism (granted!) weary also of its censors, who call upon us to be stoical in monetary standard questions, to agree to sacrifices as the essential. condition for increasing the sale of bread and cheese, to discipline ourselves, so that walking sticks and opera glasses might be sold, to practice the virtues of our forefathers, in order yes well, in order, above all things, to be able to bear the crushing burden a little longer: this economic world is now awaiting its Pertinax. He is perhaps no hero, and in any case his head is not laurel crowned; nor is, he a scholar, for he is unable as much as to calculate trade cycles; nor is he apparently a genius, for everybody understands him at once. He also seems to lack certain Catonic virtues. But he is a man who is trusted, a ruler who can rule, and who ends the madness of his age simply by not participating in it. Perhaps a man who is accommodating; who readily refrains from ordering everybody about and from mixing himself in everything; and who prefers to teach his subjects how to help themselves and thereby bestows on his country more liberty than all the storm bells of the Great Revolution rang in. A man like all of us we hope; but who has made his own the new system of payment. This places him above his people and above his foreign colleagues.

He does not ask his subjects for gold if they are without any, nor does he expect from Caius the banknotes that Titus has hoarded. He demands purchasing certificates, pays with these, and is at any time ready to sell his goods that is, tax receipts - for certificates accepted at par. Only under his government does real property become possible, for he alone permits proprietors to pay with what they have, not obliging them, that is, to pay with what only a happy chance can provide them, nor taking their property if chance should be against them.

This is his new conception of governing. Silently, without blood or iron, without triumphal arches and processions, without a new calendar and without introducing new fashions, he opens a new age. Is this statesman already among us?