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What Can Be Learned from the Myth-covered Ancestry of Money

Monetary reformers are by nature scholarly folk. These days they are seeking footholds in history to help understand how our banks and government got us into the current mess. Up to now the origins of banks were traced by most money reformers to the coming apart of the Roman empire and the loss of the art of mining, so that when trade began to stir again between one part of Europe and another, there was not enough gold or silver to support armies or police forces to protect that trade. The old Roman roads were no longer safe enough for the trader of say Dutch wool.

Roman roads were built to last but no longer were policed for the safety of merchants. So instead of traveling with cash as well as merchandise — a sufficient risk — they left their gold or silver behind with a goldsmith and received a draft. A colleague say in Florence or Milan would redeem the draft in gold and silver. The cities — often walled — were still adequately policed. The countries in between were not. The vast Roman empire had shrunk effectively to municipalities.

The much-recounted tale of the leap from gold and silver to drafts undoubtedly covered an aspect of the newly improvised trading forms, but is several thousand years inaccurate in its version of how and when banking itself developed.

The fact is that banks rose *before* money itself did. The various functions of money and the circumstances under which and when they were delivered could hardly be more inaccurate than currently conceived. Money came later than credit — thousands of years later. Today money and credit are having their necks and purposes twisted and abused. Learning more about the really detailed development of credit and eventu-

ally money, may help limber up our minds to deal with the weird uses that money, stripped of its one-time unique powers, is being put to today.

The Real Panorama of Money Development

Our source for this effort is a three-volume series "Deutsche Bankengeschichte" by Ernst Klein (German Bank History). The first volume, from which we expect to draw most copiously, is entitled *From the Beginnings to the End of the Old Empire (1806)*. (I will rarely quote a title in the original German, but rather include it in my English translation.) The author of the first volume is Professor Ernst Klein and his associates in the institution are also academic specialists. The publishers are Fritz Knapp Verlag, Frankfurt am Main. Publication date for Vol. 1 is 1982.

"If you propose to track the historical development of banking, you would be wise to abandon excessively narrow categories, especially if these are based on the various modern concepts, and consider banks or bankers any persons or institutions, who professionally occupy themselves with the business of payment and the circulation of credit.

"In this broad sense, the banking business is older than money, particularly when we exclude the various forms of commodity money, but rather insist on identifying money with coined metal. For we encounter the latter for the first time in the Greek cultural areas of Asia Minor only in the 8th and 7th centuries before Christ.

On the other hand banking turns up in three thousand years BC in the Older Orient. It appears to have begun in palaces and temples as deposit institutions, for temples

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and royal palaces in their warehouses were equipped to receive the most varied types of exchangeable or non-exchangeable security for loans. To begin with the purpose fulfilled was safe storage, but eventually as ‘irregular deposits’ that gave the receiver, be it temple or palace, the right to dispose of the deposited goods, but only after a pre-agreed – upon period during which it was obliged to return the goods, either with or without interest as the agreement required.

“However, when the deposits called for an interest payment, this required a correspondingly more active business approach. In fact not only the temples and palaces involved, but private persons came to make loans against security (‘lombardieren’) in various forms. It was a form of money – lending with interest charged against interest owed. In Babylonia the normal interest rate was between 10 and 25% for loans in silver, in corn between 20% and 33%; insofar as the state set a maximum interest rate, it was between 20 and 30%.

“Moreover, even in the days of Hamurapi (1728-1686 BC) it was one of the normal businesses of the temples and royal storage buildings, to make payments to third parties according to their instructions. They could also receive and make payments and receive credits for the given account. There is no evidence of purely bookkeeping entries recording and balancing trading at this time. That is why we often find the provision that the customer provide a receipt to be given to the party making a payment. Bookkeeping entries alone would not yet suffice.

“In neo-Babylonian times – 7 to 5 centuries BC – banking activities were extended and refined so that in place of useful goods money loans moved into prominence – this included mortgages and cash loans. Current and checking-account business came to the fore. What was a novelty, however, was the detail that near the temple and the palaces, professional banks eventually appeared, most often as family enterprises. These were mostly family concerns, active in all banking activities then practiced. From Mesopotamian sources two such private banks are known to us, the wholesale purchasers Egibi from Sippar (7, 6th centuries BC) and Murasha from Nippur (5th century BC) Alongside their wholesale trading, they also engaged in banking, hence using modern parlance they were ‘merchant bankers,’ and thus remote ancestors of that specialty.

“In Athens in the 4th century BC there

were already 23 private banks of various sizes and significance that in addition to money exchange accomplished by hand, also engaged in accepting deposits and making loans. Depositors achieved the ability to withdraw and deposit money into their accounts without having to actually withdraw the funds physically that they wished to transfer only with the creation of the legal institutions of the mortgage – a term that embraced far more than the same legal institution in modern times.

“Since the foreign trade in Old Greece was almost exclusively by sea, it called for a considerable investment between the commodities traded and the shipping required for the purpose. Since the capital invested and the profit earned would take considerable time to return, to say nothing of the added risk during warfare, interest rates on credits granted for such purposes would run from 20% to 33 1/3% The sea-faring debtor was under a burden of debt and risk, this expensive form of credit must be seen as including primitive maritime insurance.”

The Secret Held by the Very Word “Bank”

“‘Pasion,’ the most significant Athens ‘trapezit’ of the 4th century BC owned alongside its bank its own ships, farms, and houses. ‘Trapezit,’ the Greek for ‘banker,’ referred to the folding bench from which these primitive ‘bankers’ conducted their business, exactly as ‘banker’ derives from ‘bank’ or ‘bench.’ It ran a factory producing shields, and even rented out domestic equipment, probably acquired as forfeited security.

“In Ptolemaic Egypt complete banking with transactions entirely recorded of deposits and withdrawals developed. From there it spread to Rome. It should hardly surprise us that at this time the current account where deposits and withdrawals were looked after entirely by banking deposits and withdrawals. Rome became the banking capital of the empire while the other cities played subordinate roles.

“The Roman ‘argentarius’ in contrast to the ‘trapezit’ of the east arose among particularly distinguished families, whose social status reinforced the moral level of its commitments and eased the transition of banking to a status of complete trust and services.

“Since Diocletian (284-305 AD) a considerable decline in Rome’s banking becomes apparent. Peasants, by far the greatest portion of the Roman empire’s population had ever greater need of banks in times of

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Has Our Government Been Atom-bombing Us Economically?

The New York Times (3/08, "AIG, Where Taxpayers' Dollars Go to Die" by Gretchen Morgenson) gets close to relationship between the bomb that blew up Hiroshima, and Washington's current attempts to straighten out the world economy.

But let's begin by quoting the *Times* piece by one of its best economic writers – though that will barely position you to approach a readily awaiting solution.

"Derivatives are dangerous."

"That simple sentence, written by Warren Buffett, begins an enlightening discussion in Berkshire Hathaway's most recent annual report. Mr. Buffett's views on derivatives gleaned from his own unhappy encounters with them, should be required reading for all US taxpayers.

"Why? Because we own almost 80% of the American International Group, the giant insurer whose collapse was a direct result of derivatives it sold during the late, great credit boom.

"AIG nearly barreled off the cliff last September when it couldn't meet its obligations to customers who had bought a version of derivatives called credit default swaps. Such swaps are insurance policies: bondholders buy them to protect themselves from default on various forms of debt.

"When AIG couldn't meet the wave of obligations it owed on the swaps last fall as Wall Street went into a tailspin, the Federal Reserve stepped in with a an \$85 billion loan to keep the hobbled insurer from going bankrupt; over all, the government has pledged a total of \$160 billion to AIG to help it meet its obligations and restructure operations.

"So is AIG the taxpayer gift that keeps on taking? Sure looks that way. And while no one can say with certainty whether more money will be needed, the sheer volume of derivatives engineered by a London unit of AIG suggests that taxpayers haven't yet seen the bottom of this money pit.

"Some \$440 billion in credit default swaps sat on the company's books before it collapsed. Its biggest customers, European banks and US investment banks, bought the swaps to insure against a variety of debt holdings, including pools of mortgages and corporate loans.

"Because of the way in which AIG wrote

its swaps, and because the company had a double-A credit rating at the time, it did not have to put up the collateral to assure its customers that it would be able to pay on the insurance if necessary. Collateral would be required only if AIG's credit rating were cut or if the debt underlying the swaps declined.

"Both these 'unthinkable' events occurred in 2008. Suddenly, AIG had to cough up collateral it didn't have.

"So, you see, the rescue of AIG also involved a bailout of its many customers, none of whom the insurer or the government is willing to identify.

"Nevertheless, Edward M. Liddy, the chief executive of AIG explained to investors last week that the 'vast majority' of taxpayer funds 'have passed through AIG to other financial institutions' as the company unwound deals with its customers.

"On Wall Street, those customers are known as 'counterparties' and Mr. Liddy wouldn't provide details on who the counterparties were or how much they received. But a person briefed on the details said AIG's former customers include Goldman Sachs, Merrill Lynch and two large French banks, Société Générale and Calyon.

"All the banks declined to comment.

"How much money has gone to counterparties since the company's collapse? The person briefed on the deals put the figure at around \$50 billion."

A Bottomless Hole of Liability

"Unfortunately that is likely to rise.

"According to its most recent financial statements, AIG had \$302 billion in credit insurance commitments at the end of 2008. Of course, the company is not going to have to make good on all that insurance: the underlying securities re not all going to zero.

"But as the economy deteriorates, AIG's insurance bets certainly become more perilous. And because most of AIG's swaps are known as the 'pay as you go' type, collateral must be supplied when the underlying debt declines in value. Swap arrangements made by other insurers require payments only if a default occurs.

"So the meter is constantly running at AIG. Just as quickly as taxpayer funds flow into the firm, chunks of it go right out the

door to settle derivative claims.

"AIG's insurance commitment stood at 'only' \$302 billion in part because the government has already voided \$62 billion or so, that now sits in a facility that the Federal Reserve Bank of New York oversees and which we, the taxpayers, own.

"To rip up those contracts, the taxpayers had to make AIG's counterparties whole by buying the debt that AIG had insured and paying out – in cash – the remaining amount owed to the counterparties.

"Of the \$302 billion in insurance outstanding at AIG, about \$235 billion was sold to foreign banks and covers prime home mortgages and corporate loans. The banks that bought this insurance did so to reduce the money they must set aside for regulatory capital requirements.

"AIG also wrote \$50 billion of insurance on pools of corporate loans. These contracts are performing OK for now, the company has said.

"But there's yet another complication that will probably force AIG to cough up cash more quickly than it otherwise might have had to. That's because it didn't simply write insurance protection on debt; it also entered into another derivative contract – known as an interest rate swap – with counterparties buying the protection.

"The reason AIG entered into the second contract was that banks feared they were also exposed to interest-rate risk on the loans bundled into debt pools.

"Presto! AIG was happy to remove that risk by writing another complicated swap.

"Now, however, AIG not only has to meet collateral calls as the value of the debt it insured withers, but also has to post collateral relating to the interest-rate swaps.

"Another troubling aspect of these deals is how long it takes to untangle them when they go awry. Back to Mr. Buffett's recent shareholder letter: when Berkshire acquired the insurance company General Re in 1998, he wrote, General Re had 23,218 derivatives contracts that it had struck with 884 counterparties.

"Mr. Buffett wanted out from under the contracts and he began unwinding them. Though we were under no pressure and were operating in benign markets he said, 'it took us five years and more than \$400 million in losses to largely complete the task.'

"When you look back with benefit of hindsight, it is amazing how outsized AIG's insurance commitment was, at \$440 billion. After all, in 2005, when AIG put many of these swaps on its books, the market value

of the entire company was around \$200 billion.

“That means the geniuses at AIG who wrote the insurance were willing to bet more than their company’s value that defaults would not become problematic.

“That’s some throw of the dice. Too bad it came up snake eyes for taxpayers.”

That gives you a good view of a battlefield when the great war had been supposedly “won” by speculative banking that in the process has devastated not only its rivals, but itself and society at the peak of its victory.

Our next bit of evidence to grasp how we got where we wish we weren’t is a great tremendously helpful concept that helps us understand how some economic policies prevail, while most have gone under. The French economist to whom I refer was François Perroux, and his illuminating idea was the “dominant revenue.” This holds that in every period there tends to be a specially privileged class whose revenue, in both its volume and rate, is taken as a reliable index of the over-all welfare of society as a whole. After the Napoleonic Wars in Britain it was the revenues of the large landowners who protected their domestic markets under high tariff walls.

This provided even wages at survival levels higher than they would have preferred. Then it became the earnings of the industrialists, who needed low tariffs not only to help bring wages down, and cheaper raw material imports but as an example to the still unindustrialized remainder of the world of the advantages of free trade from which the British near-monopolist industries would be the principal beneficiaries. More recently the dominant revenue shifted to speculative banking that, while acquiring ever world-wide scope and deregulation, has brought us to the present impasse.

In the process of attaining its present dominant position, speculative banking has had to subvert and indeed wipe out from economists’ memories every lesson learned during at least 60 years of world crisis (1930 to 1939, six years of war, and a good two decades of reconstruction from the Depression and war years. Much of this has been expunged from university curricula of economics, and from all current text-books). This despite the prolixity of media adequate for carrying a full deck of alternate theories to choose from.

I regret very much that my good friend Perroux has been dead for a couple of decades and cannot join us in combating the

most virulent and elaborate confirmation of his “dominant revenue” view that today threatens to make a desert of the world economy.

Co-victim in the suppression of key economic theory has been our crucial history itself.

What had given President F.D. Roosevelt the tools for nudging the economy out of the Great Depression was that he intuitively dislodged the dominant revenue of the day – the banks that had before their collapse acquired control of just about every branch of the economy that caught their fancy. This had led to such disastrous results that by the time of President Roosevelt’s inauguration for his first term 9,000 US banks had already shut their doors and one of President Roosevelt’s first acts was to declare a bank moratorium across the board which was to last for a full month. Shortly after the banks opened their doors again the *Glass-Steagall* law had been brought in barring the banks from acquiring interests in the non-banking financial pillars – stock brokerages, insurance companies and mortgage firms. The reason: each of these non-banking pillars has its own cash and near-cash (i.e., interest-bearing) reserves needed for its own business.

A Shift in the World’s “Dominant Revenue”

Give the banks access to these and they would use them as monetary base for applying the bank multiplier creating thereby ten times the money base. Worse than that: the banks could only increase their rate of growth by proceeding to take over cash reserves from one non-banking pillar to another, at an ever quicker rate, since its economic appraisals had shifted from net capital worth to the *growth rate*.

Banks came to be evaluated according to their rate of growth by taking over precisely the cash and near-cash reserves of the non-banking financial pillars. Evaluation was switched from ownership expressed in terms of legal tender to growth rates calculated by derivatives.

Let me diverge from a moment to make the point that the human mind is very prone to borrow from the current technology that has taken over society for appraising and hence organizing society itself. Thus Karl Marx, great thinker that he was, reflected in some aspects of his view the society that he lived in the structure details he attributed to society. He was born pretty well in the railway-building age where stations are located in advance at definite points along

the tracks in predetermined sequence until the train arrives at the grand terminal when all passengers leave the train with beatific smiles on their faces.

Unfortunately, we live today in the age of the atomic bomb. It would be entirely in place for us to check carefully to make sure that we are not unconsciously being misled in our incredibly atrocious economic policy moving persistently – almost religiously – in the direction of disaster that can conceivable wipe out entire sectors of the human race. To make the point I must explain in simple terms the essentials of mathematics in general, what their immense power are and where they simply cannot provide what economists are seeking from them.

Mathematics has no empirical content. Their tremendous powers are strictly *analytical* to shake out the implications of data provided by other sources. Some seventy-years ago John Maynard Keynes – who was mathematically trained – dissented from economists who were trying to deduce from data decades old, what was likely to take place decades in the future. You need to know nothing further about mathematics to have foretold with complete certainty that the insurance provided with the backing of governments based on derivatives – i.e., rates of growth of ever higher orders. The high official, whether of the Treasury or the central bank, whether in the US, the UK or in Canada should not be allowed to approach the unwinding of the ever more avaricious debt position of AIG or any other financial institution, unless this matter is grasped.

Not only are these trying to milk mathematics under the illusion that it has an udder, but it is being – unconsciously guided by the most shattering, technological invasion of our epoch – the atomic bomb. To explain the point I am going briefly to explain how the mathematics of the atomic bomb – the exponential curve works, and how, misconstrued it would blow up not the target city or whatever, but the crew dispatching it. This is roughly what is happening with our subprime debt forecasts.

First the exponential sequence. This is not a synonym for “very big” or very, very big. I have known and admired for other many reasons eminent economists with limited mathematical knowledge who covered entire blackboards with what they thought was an illustration of “exponential growth.” Their explanation was the famous one that had the Virgin Mary bought a 3% bond of unlimited term, by now the interest

would exceed all the silver mined, and hence must be beyond being paid. But the Infant Jesus to cash in would have had to wait 2009 years. The bomb dropped on Hiroshima went off in seconds.

The exponential in “exponential growth” refers to the index over each term of the series takes the rate of increase of the in the infinite series to a higher order, until it circles the globe and still goes on growing at an ever more advanced exponential rate.

The basic principle of differential calculus is that you ignore terms of degree of growth smaller than a single order. as the smaller terms on the left disappear because of this basic derivative principle you can pick up another term at the other end of the infinite series even though it may by

then be in China or indeed round the world and be back in Canada travelling ever east. But there is an important caveat that our derivative-crazy economist forgot and are still forgetting.

The terms on the farther eastern end of our screen are far greater than those lost one by one due to the differentiating process on the Western end. And if you are dealing with atomic bombs that does make a difference because it will be only the differentiating process by the constant coordinates it leaves that will decide the *direction* in which the atomic explosion – or for that matter the success of AIG’s enterprises will flourish. for it will be the *constant* coordinates that will determine the direction in which the atomic explosion will be directed – whether

the bomb put together with that in mind changes the proportions of the variously directed component of the bombs. For this a series of constant coordinates were devised to make sure that the direction of the exponential series is strictly what is needed to keep it going straight ahead. Those constant coordinates – devised precisely for that purpose. If they don’t get this right the bomb may have ended blowing up our ally in Vladivostok rather than Hiroshima.

How did physicists manage to produce those constant coordinates – by using what are known as factorial expressions that reduce the impact of the highest term of the series. As the high new constant picked up on the “east” replaces those that have disappeared in the “west,” the coordinates remain

Putting Pants on “Naked” Short Sales

The Wall Street Journal (19/03, “Naked’ Short Sales Provoke Complaints but No Inquiries” by Kara Scannell) puts a further question mark of harvest-moon dimensions over the accountancy and general reckonings of the Obama team in the White House: “Washington – The Securities and Exchange Commission (SEC) received 5,000 complaints over a year and a half about an aggressive form of short selling that critics call market manipulation, but it didn’t bring any enforcement cases, according to a report by the agency’s inspector general.

“The finding will likely stoke the debate about short selling, which has been blamed for driving down shares of financial stocks, and the SEC’s aggressiveness in enforcement.

“Short selling occurs when investors borrow shares and sell them, hoping the stock will fall and they can buy back the shares at a lower price. In the ‘naked’ variation, investors sell stock without first borrowing the shares.

“Naked short selling is legal in principle but may shade into impropriety if market players use the practice to flood the market with sell orders.”

The propriety or impropriety of the naked short will depend only if it passes a grander and literally infinitely more stringent test than what *WSJ* applies: swap insurance, which we will briefly define and refer our readers to more extensive explanations of the issue that will be carried at least in one article in every subsequent issue of *ER*.

The “swap insurance” written with AIG,

for example, is based on the infinite sequence of growth rates as approximated by the infinitesimal calculus of Newton. This deals with rates of growth to the first degree, but ignores higher ones (second degree of tininess).

Thus it starts with a constant 1 that cannot grow and hence becomes zero, but the next degree consists of the variable x , whose rate or growth thus becomes 1, and subsequent terms of the variable all move in response to the rates. Since it is an infinite series not to worry about the move to the right of all subsequent terms, because it is an infinite series, it cannot run out. However, the terms of the variable that disappear on the left, although they do turn up on the extreme right, turn up with far greater constant coordinates. Unless this is allowed for with an entirely new set of constant coordinates – mostly “factorials” $1/2 \times 3 \times 4 \times \dots$ that series can misguide you across continents and oceans.¹

The series you have ended up with in your innocent “swap insurance” is nothing other than the maths of the atomic bomb. And to make sure that its infinite powers are properly directed you need carefully considered constant coordinates, otherwise the atomic bomb might have ended up hitting Washington rather than Hiroshima. Something closely resembling such a mishap has occurred in the world economy. That is where the world’s corrective research must now concentrate. Otherwise, having misjudged the problem, there is not a chance that we will come up with an effective

solution.

“The inspector general’s report said the SEC received some 5,000 complaints alleging possible market manipulation using short sales between January 1, 2007 and June 20, 2008. Of those, 123 or 2.5% were forwarded for investigation and no cases were brought, the report said. By comparison, about 12.5% of emails alleging insider trading prompted an investigation.

“The report, by SEC Inspector General H. David Kotz, said the agency lacks uniform procedures for handling tips. He also noted understaffing, saying four people were charged with reviewing 1.38 million e-mails that came in during the year-and-a-half period.

“In a written response, the SEC’s enforcement staff played down the likelihood of naked short-selling abuses. It noted that most trades settle on time. The SEC staff said the agency needs to ‘intelligently leverage’ its resources and a large number of complains provide ‘no support for the allegations.’

“Defenders of naked short-selling say it can provide liquidity by allowing trades to go through even when orders can’t immediately get their hands on shares to sell.”

So this is what is happening to our the all-wise, all-knowing, all-powerful to which we have assigned humanity’s ultimate fate?

William Krehm

1. The so-called factorial is the result of integrating and exactly cancels out the coordinates resulting from differentiation to make the series possible. The constant coordinates of any linear equation determine where the variables are headed in space.

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unchanged. (For further details, see the footnotes on pages 5 and 15.)

How do they do that — I can only surmise by compounded various uranium products in indicated quantities. Or similarly AIG may bankrupt both itself and Washington instead of making them prosperous and merry. How did they handle that in the atom bomb? Of course I have no inside knowledge of that but the only feasible one was to adjust the relative strengths of explosive uranium products to keep the net result in a straight line. Otherwise it could have ended up hitting the people who discharged the bomb.

But that raises another question. Who hatched the idea that you can "insure" any risk? Will the Fed or the US Treasury insure the equation $2+2=5$? That is no risk, but a certainty — it is wrong. That is the question that the mathematicians of Wall Street should have asked and answered, It was never asked. But boy, did the world get the answer. Surely President Obama should be asking just that question, otherwise before you know it we will be put through the same paces once more.

Come to think of it, isn't just that what

Myth from page 2

interest of groups so empowered has defined what is feasible and what is not. crisis and crop failures, and to meet their obligations fallen due. The state, for its part, took ever more time in meeting the payments for the army's provisioning and the salaries of court officials. This was exceedingly profitable initially, but ended up in losses and decline for the banking system.

"The large land-owners could satisfy their own needs when credit instruments became necessary. Banking, however, remained indispensable for trade and commerce. Churches and monasteries took over some bank functions The state, provided some banking services through its own offices. Finally the great migrations and the invasion of the Langobards in 568 gave Italian banking its final blow."

What lessons does this checkered background of banking over thousands of years offer us today? It may help us find our way out of the current maze of speculative irresponsibility. Very substantial ones. It is proof over the millennia, that credit and money are very malleable concepts. By disregarding what was provided by law even if it is still on the books, those who ultimately determine what laws are forgotten even they may remain on our law books. And though what is not law but useful to those with power and ambitions will find ways of filling such gaps. Thus for several millennia the

has happened with the world economy under the blessing of financial derivatives. It is not for nothing that at almost every economic conference I have attended in the last decade, serious discussion of economic derivatives were banned from discussion. It had become one of if not the chief Dominant Revenue in our world.

Why not have a grand enquiry along these lines before our governments go on solving the crisis under the guidance of the guys who engineered it without having a clue of what they were up to Did we need President Obama to give us more of the same?¹

William Krehm

1. The rate of growth of 1, being a constant is zero, and hence that term disappears. But the rate of growth of x, the next term becomes 1 which becomes zero with the next differentiation and thus the infinite series keeps moving one step at a time to the east, but its coordinates grow with giant steps, Hence the series must have special constant coordinates — "factorials" — to keep the bomb moving straight ahead remains 1.

The rate of growth of the second term — the "1" being a constant doesn't grow, i.e., is becomes zero, so term 2 replaces term one in the growth rate series. Not to worry, since it is an infinite series that can curl around the earth if necessary adding a term at the extreme right wherever you wish it to go, that is much greater than the constant term loss from term one in getting its first derivative (growth rate).

interest of groups so empowered has defined what is feasible and what is not.

This helps us understand the bungling of the Obama government in repeatedly bailing out the AIG in ways that will serve the major bank executives — even if in the process they have to close their minds to the existence of credit of \$3 trillion in the US and \$300 billion in Canada prepaid by our government. All that need be done is to introduce "accrual" accountancy in the government's books as was done with physical investments by government in the 1996 in the US and in 2002 in Canada. Such double-entry ledgers are enforced by these very governments when it suits the ends of their favored banks. But when it comes to government investments in human capital — education, health, the environment it is never mentioned.

And the key importance of government investment in human capital was one of the great lessons that came out of the Second World War. Theodore Schultz, the US economist who in 1961 proclaimed the misleading prediction of the hundreds of economists Washington sent to Japan and German to predict how long it would take those two defeated Axis powers to resume their roles as formidable traders on world markets.

William Krehm

State Bank of India — Is Liquid and Wishes to Lend

Elsewhere in this issue we quote from a German source on the earliest origins of banking that informs us that banking preceded the notion of money by several millennia. And that our original merchants' form of credit rather was coined gold or silver or any other specially designated commodity by several *thousand* years. Indeed the very term bank (or the corresponding Greek *trapezit*) refers to the small foldable tables that small operators quite late in the game set outside the temples and palaces where the heavy business of *exchanging credit* took place. The original bankers dealt in the exchange of diverse debts and securities supporting debts, and of course the money coins of the innumerable principalities when they came into existence. From there they used their wits to prosper and grow.

In that article we have dealt with the many implications of all this. For this article I wish only to draw a further specific lesson from this excellently documented but generally unrecognized fact: if credit could have been developed in such an abundance of forms before coined money or even metallic money came into existence, it by no means follows that we are restricted to any particular pattern of handling the organization of our monetary credit system. We must consider ourselves perfectly free to observe what has disorganized the world economy to the point of world bankruptcy, and pick up whatever changes our dreadful experiences would counsel.

And that is why we should consider carefully possible lessons that contradict what has been taken for the right relationship between central banks — even state-owned ones — and private banks that have forfeited more respect in the past two or three decades than probably ever. Its success in India is, of course, less than a perfect argument for adopting them in the US or Canada. But given the official cures proposed for our ailing credit systems even by President Obama and his advisers, there appears no serious alternative — not even serious accountancy for governments which would include accrual accountancy that would not write off government investments in human capital as a current expenditure. That contradicts the conclusions that emerged from Washington's own investigation based on the wrong

forecasts of hundreds of economists that the US government sent to Japan and Germany at the close of WWII to forecast how long it would take before Japan and Germany could become formidable competitors on world markets again. Sixteen years later one of these economists reached the conclusion — that no one of his colleagues question that I am aware of — that they were so wrong in their predictions of the time needed for such recovery because they had concentrated on physical destruction in the war, and overlooked the importance of their highly educated, skilled and disciplined work forces had come out of the struggle essentially intact. From this he concluded that the rapid recovery of Germany and Japan from wartime destruction proves that investment in human capital is the most productive investment a government can make.

India's Versatile Central Bank

We must then recognize that what has been taught in our university economic courses has been a caricature of economic theory created to serve very special interests.

The news in fact deals with a government central bank of a major country that from many indications had a major future before it. At this point we will begin our quotation from *The Wall Street Journal* (30/3, "State Bank of India — Has Cash, will Lend" by Eric Bellman): "Mumbai — State-owned State Bank of India is lending like the global credit crisis never happened, as it looks for places to park billions of dollars in new deposits.

"Consumers have shifted tens of billions of dollars to India's state-run banks amid the bailouts of the world's most sophisticated financial institutions and concerns that global problems could infect India's private-sector banks.

"State Bank of India has been the biggest beneficiary of that trend. It is India's largest bank by assets, including private sector lenders, and is 60% owned by the government, but has remained a traditional lender rather than expanding into other financial instruments that sank many international banks. That conservatism saw its deposit base swell by close to 40% in the three months ended December 31.

"Now it is on a spending spree, cutting interest rates on loans, snatching customers

from competitors and doing its part to prevent India from getting stuck in the global slowdown.

"Subhra Chatterjee, 39 years old and a cell phone company employee in Kolkata, used to have his home loan with ICICI Bank Ltd., India's largest private-sector bank. He appreciated ICICI's telephone-banking and online banking services as well as their bright branches.

"But in the last six months, his view of private-sector banks has soured as he watched banks elsewhere implode. This month, he flipped his savings and his \$40,000 home loan to State Bank of India.

"People are disillusioned with the private-sector banks and all the charisma that was originally coming out of the private sector,' he said. 'State Bank is extremely cash rich. That is why I changed to them.'

"V. Vaidyanathan, executive director of ICICI Bank said in an interview that the rise in deposits at state-run banks has more to do with the higher deposit rates and lower lending rates they are offering than with a flight to quality. He also noted that while liquidity late last year was 'tight' for many banks, deposits are increasing again.

"While banks in the US and elsewhere are cutting back, State Bank of India is expanding. It hired 35,000 workers last year, plans to hire 10,000 in the coming year, and is adding 4,000 ATMs and 2,000 branches to its network of almost 10,000.

"The health of State Bank of India and India's other state-controlled banks, plus their willingness to ratchet up lending in tough times are reasons why India's growth is relatively healthy compared with other economies. In the coming year, India's economy is expected to expand at 6%, down from 9% a couple of years ago.

"Over the weekend Indian Prime Minister Manmohan Singh said the country needs its banks to lower interest rates further following repeated monetary-easing measures by the central bank.

"With ample liquidity and low inflation, there is scope, perhaps, for a further moderation in interest rates,' he told a meeting of Indian business leaders Saturday.

"State Bank's history goes back more than 200 years to India's days as a British colony. After independence, the government took it over, and the bank has been expected since then to act in the interest of uplifting the People of India.

"That used to mean it had to give loans that it didn't expect to get back or set up branches to sparsely populated rural areas

that couldn't support them."

Undoubtedly that is not unrelated to the Gandhi-Nehru tradition that lives on. The good Lord bless it.

"During the last 15 years though, as India reformed its economy State Bank has received more independence from the government to boost its profits and modernize its economy to compete with private-sector banks.

"The bank's cash glut is behind its latest move to cut interest rates and promote home loans, car loans and small business loans. Its mortgage loans are 8%, more than 2% below some of its competitors. It has matched that a nationwide advertising campaign, 'Economy Booming or Slowing, SBI Keeps Your Business Moving,' says one of the Bank's posters. State Bank says about 60% of its loans are taken over from competitors.

"Lending at State Bank and other public-sector banks rose 29% last year, up from 20% in 2007. State Bank plans to use some consumers' yearning for safety to claw back some of the market share it had lost in the last decade. The company is sitting on close to \$20 billion in cash above what it needs to operate. And if it can take advantage of its strong competitive position now, it could emerge from the downturn far stronger.

"The bank is also using the surge in business to upgrade some of its branches. At a branch in the heart of old Mumbai, half way between the Bombay Stock Exchange and India's central bank, some clerks still sit under electric fans. Long lines of customers wait their turn, and banking hours run from 10.30 am to 4.30 pm. Just across the street, a brightly lit, air-conditioned ICICI Bank branch is open from 8 am to 8 pm. On a nearby corner, ABN Amro Bank and HSBC also provide cheerier alternatives.

"State Bank is repainting its branches with a uniform color scheme, adding air conditioning, televisions and an electronic token system to more customers faster. 'We are asking people to smile more often,' said a general manager at State Bank's headquarters in Mumbai. 'We want our people to be more customer-friendly.'

"It is the stability, not the smiles, that is luring customers. Foreign banks said they often can't compete with State Bank of India's rates. Growth in lending by foreign banks slowed down to 17% last year from 31% in 2007. State Bank of India shares have shed about 35% value in the last 12 months."

W.K.

Learning from Roosevelt

The trouble with making money countless storeys high by applying the maths of the atom bomb without quite understanding what you are getting into is this: once you are convinced that you can make any deal safe by taking out insurance on it, you may end up insuring even the maths of the atom bomb. Or otherwise put: Does AIG or the US Government understand that there are matters that are uninsurable simply because they are incorrect. For example, choosing a very simple one: $2+2=5$ is incorrect and hence cannot be insured except brainlessly or deceptively. That does not rule out a gamble that insures a deal based on that bad arithmetic, much as our banks have put together subprime packaged bonds with the intention of unloading the resulting loss by "bankers' exit" otherwise known as "finding a bigger sucker." The corresponding package of bad ethics packaged with equally bad mathematics has two similar components at the other end of the market-place, eager to insure a deal based on such faulty arithmetic, betting that they can come up with the additional insurance rates that are lower than mega-gambling losses that can be passed on to bigger suckers.

Let me proceed to *The Wall Street Journal* (27/03, "The US's Fly on the Wall" by Liam Pleven). In the 4th year of the Great Depression when F.D. Roosevelt was inaugurated for his first term, 9,000 US banks had already shut their doors and the new president declared a moratorium that closed all banks for a month, during which the new president consulted just about anyone coming with a new idea for getting out of this ever deeper mess. In that way the new president brought in the *Glass-Steagall* law that forbade banks to acquire an interest in "non-banking financial pillars." At the time there were only three: such stock brokerages, insurance, and real estate mortgages.

Note that so long as those restrictions were really applied, the extravagances of investment banks, insurance companies like AIG, and of subprime mortgages, and brokerage deals based on them by our banks, would have been impossible. These were needed to finance the legitimate businesses of each of the financial groups mentioned. Moreover the cash reserves of each of these non-banking companies is largely lent out short-term at interest, which makes them "near-money" – rather than legal tender.

They are thus far more sensitive in their market value to every twitch of the benchmark interest rate declared by the central bank. That tends to make the interest rate hyper-responsive to interest rates. Particularly since when in the 1990s the statutory reserves – a portion of the deposits the banks received from the public that had to be re-deposited with the central bank that earned no interest was discontinued. These statutory reserves had made capital available to the government for its investments at no cost.

The *Journal* writes: "Inside American International Group Inc., a group of top executives called the Credit Rich Committee oversaw some of the company's biggest bets, such as the insurer's foray into credit-default swaps. But even after a \$173 billion government bailout, this group, which reviewed and approved risk-taking decisions, remains largely unchanged. At least five of the 10 committee members have served for years, according to internal company documents. Some served as far back as 2003 and 2004, the documents show."

AIG's Glass-eyed Staff Inspector

"Even amid change at AIG, much of the company's day-to-day infrastructure remains in place. Many of the high-level AIG executives who approved the insurer's risk-taking before the company's near-collapse still are at their posts.

Under the above common heading is an article by Peter Lattman: "Regulators and Congress still want more answers about what happened inside American International Group Inc.

"One place they could turn to is a government-appointed attorney who has been on site and inside AIG board-committee meetings for the past four years.

"AIG has paid lawyer James Cole and his firm, Bryan Cave LLP about \$20 million to oversee business practices at the insurer, according to people familiar with the matter. His reports on the company's progress, periodically delivered to federal regulators since 2005 aren't public.

"Mr. Cole was installed inside AIG as a monitor, or independent consultant, as part of a \$126 million settlement struck in November 2004 between AIG and the Justice Department and Securities and Exchange Commission.

"That pact, called deferred-prosecution

agreement, arose from allegations that the insurer sold products that helped companies manipulate their financial earnings. As part of the settlement, the Justice Department agreed not to pursue criminal charges against the company in exchange for implementing reforms and the review of certain financial transaction by Mr. Cole.

“The Washington-based Mr. Cole wasn’t assigned to examine many of the issues at the heart of AIG’s near-collapse such as credit-default swaps or retention bonuses.

“Mr. Cole was involved in top-level board-committee meetings and general corporate oversight which gave US officials a direct line into goings-on at the insurer prior to its near-collapse last year.

“These documents also prohibit me from making any public comment on that work.

“His original assignment, which began in January 2005, was to investigate financial transactions dating back to 2000 in which AIG helped companies smooth earnings. Some of those transactions were structured by the insurers’ financial products group,

the unit that would later write billions of dollars in credit-default-swap contracts that turned sour.

“His responsibilities broadened in November 2006, after a separate settlement with the SEC and New York State authorities. In that case, AIG paid \$1.6 billion to resolve an inquiry into irregularities and bid-rigging allegations. That agreement called for Mr. Cole to examine AIG’s controls on financial reporting as well as oversight over corporate governance in areas such as compliance.

“Mr. Cole attended AIG board-committee meetings, including at least two audit-committee meetings during February 2008 in which the board discussed a finding by its auditors that there was ‘material weakness,’ according to board minutes.

“The findings by AIG’s auditors, PricewaterhouseCoopers LLP, forced the insurer to take big losses on credit-default-swap contracts.

“Last September the federal government initially bailed out AIG with an \$85 billion

loan, largely because the company could not absorb losses on its credit-default-swap portfolio. The insurer received an expanded government rescue in early October and another in November, bringing the total federal funds to about \$173 billion.

“Prosecutors entered into 103 deferred and non-prosecution agreements with US firms between 2002 and 2009, compared with 11 such agreements between 1992 and 2001, according to the *Corporate Crime Reporter*.

“These came under criticism from legal specialists, who argued they didn’t result in sufficient punishment and oversight. Last year, such criticism led the Justice Department to release new internal guidelines governing the selection and use of monitors in such agreements.

“At the time the original deferred-prosecution agreement was struck, AIG’s then-chairman, Maurice ‘Hank’ Greenberg, said it brought ‘finality to the claims raised by the SEC and the Department of Justice.’”

W.K.

Chicks in Forefront of New Housing Crisis

If the housing crisis is not shrinking, some of the housing involved would seem to be. *The Wall Street Journal* (02/12, “Farmers Face Empty-Nest Syndrome Amid Chicken Housing Crisis” by Lauren Etter) reports: “Center Ridge, Ark. – Like many Americans, Darris and Sarah Dixon are struggling with mortgage payments and trying to avoid bankruptcy.

“But the home the Dixons live in isn’t the problem. The problem is their three chicken houses, on which they owe nearly \$500,000.

“‘There’s no way we’ll make the chicken house payments,’ Mr. Dixon says from his farm abutting the Ozark Mountains.

“A chicken housing crisis has cropped up in the US, and it’s producing some of the same bleak results as the human one – foreclosures, lawsuits and devastated homeowners.

“In the wake of last year’s bankruptcy filing by poultry giant Pilgrim’s Pride Corp., hundreds of farmers find themselves unable to make mortgage payments on their pricey chicken coops.

“To cut costs, Pilgrim’s, the nation’s second-largest chicken company, has terminated contracts with at least 300 farms in Arkansas, Florida and North Carolina.

Under these contracts, farmers receive a set price per pound for raising chickens supplied by Pilgrim’s until they are ready for slaughter. The company turns the birds into nuggets, wings and other food.

“Pilgrim’s still has more than 5,000 contracts nationwide, and executives say they are trying to cut as few contracts as possible. They say the reason the 300 farms weren’t needed was that Pilgrim’s stopped or reduced production at processing plants in those areas recently. ‘It’s a very sad situation,’ says Don Jackson, the company’s president and chief executive. But ‘the company is in bad shape.’ Last year Pilgrim’s had a loss of nearly \$1 billion.”

Which is very sad indeed. But shouldn’t there have been some government office to warn the farmers assuming the risk of looking of financing the costly huge, chicken houses, rather than the company that shifted the responsibility to dirt farmers that cannot be expected to understand the implications of signing a mortgage for a hunk of real estate that is beyond their ability to foresee once the huge corporation that has sidestepped the responsibility, wants out. There is a lesson there in elementary ethics that governments must not be allowed to overlook.

“For the farmers who have been cut loose, no contract means no chicks – and no money to pay off the coop mortgages. Chicken houses without chickens or contracts have virtually no resale value.”

That improves on the hazards of subprime human housing mortgages – value drops to zero instantaneously.

“With the poultry industry in retreat, rival producers aren’t looking for new growers. Tyson Foods Inc., the largest chicken company, and Perdue Farms Inc., the third largest, both say they’re not cutting contracts with their farmers because of the industry downturn.”

That means that Pilgrim’s was allowing its ethical trousers to drop down to pass on a major corporation risk to dirt farmers who could not even conceive of the extent of the risk that was being passed on to them.

“Today’s chicken houses are bigger and more sophisticated than the coops of yore. Made from corrugated metal and wooden beams, the cavernous shacks can be longer than a football field and cost more than \$200,000. To maximize profits, many farmers own at least four houses, meaning high-six figure mortgages are common.

W.K.

Barely Afloat on a Wreckage of an Idea

There is so much repoliticking to be done to prevent the world's political structures from caving in, that there is hardly a time-worn economic wreckage utterly discredited because of the quite different political goals it served. And with such loads of nasty memories proclaiming utterly discredited economic ideas hallowed, how do we get out of this mess? Thus the International Monetary Fund, which had been proclaimed a virtual preserve of the US to dole out financial assistance to Third World countries on terms that condemned them to remain hopelessly indebted forever. It was a condition that for its loans that statutory reserves never be allowed a country contracting for IMF help. That could be read in either of two ways, but since the Americans – after Breton Woods the only power in the imminent peace that had an adequate supply of hard currency could dictate the interpretation. Britain herself had to sell much of her foreign investments so that the main gold reserve she brought out of the conflict became the medals pinned on her military heroes' chests. As far as her investments that had served to sustain her empire even during the 1930s, they had to be liquidated while Washington with tapping toe determined how much of US Lend-Lease still remained to be repaid.

Britain, however had a wealth of untouchable capital beyond the reach of the International Monetary Fund, her immense wealth in accumulated human capital. And that, with the post-war domestic legislation including the nationalization of the Bank of England, permitted it to ward off too great a dependence of the IMF and Washington's other schemes for setting up the post-war too close to its own tastes.

Let *The New York Times* (30/03, "Rising Powers Challenge US on IMF Role" by Mark Landler) takes up the theme: "Washington – Barely six months ago, the International Monetary Fund emerged from years of declining relevance, hurriedly cobbling together emergency loans for countries from Ireland to Pakistan, as the first wave of the financial crisis hit.

"Now, with world leaders gathering this week in London to plot a response to the gravest global economic downturn since World War II, the fund is becoming a chip in a contest to reshape the post-crisis landscape.

"The Obama administration has made fortifying the IMF one of its primary goals for the meeting of the Group of 20, which includes leading industrial and developing countries and the European Union. But China, India, and other rising powers seem to believe that the made-in-America crisis has curtailed the ability of the US to set the agenda.

"But Treasury Secretary Timothy F. Geithner, who once worked for the fund, has called for its resources to be expanded by \$500 billion, effectively tripling its lending capacity to distressed countries and cementing its status as the lender of the last resort for much of the world.

"Japan and the European Union has each pledged \$100 billion; the US has pledged a similar sum, though its money will take longer to arrive because of the need for congressional security. China with its mammoth foreign exchange reserves, is the next obvious donor.

"Yet officials of China and other developing countries have served notice that they are reluctant to make comparable pledges without a greater say in the operations of the fund, which is run by a Frenchman Dominique Strauss-Kahn, and is strongly influenced by the US and Western Europe.

"A senior Chinese leader, Wang Qishan, said Friday that Beijing was willing to kick in some money, but he called for an overhaul of the way in which the fund is governed. China wants its quota – which determines its financial contribution and voting power – adjusted to reflect its economic weight better."

The Last Hurrah for the US and Europe as World Saviours

"China's contribution, Mr. Wang said, should not be based on the size of its reserves but on its economic output per person, which is still modest. Some American officials now expected a pledge in the order of \$50 billion from China.

"Their arms may yet be twisted, but they simply do not want to pony up based on vague promises of governance reform," said Eswar S. Prasad, a professor of economics at Cornell University who discussed the matter with the Chinese and Indian officials.

"Given the inevitability that these countries will have a growing influence, the

London summit meeting, which begins Thursday, is likely to be remembered 'as the last hurrah for the US and Europe rescuing the world economy,' said Simon Johnson, a professor at MIT and a former chief economist of the fund.

"One reason the IMF has emerged as such a popular cause is that the US has been unable to rally countries behind its other major priority: economic stimulus. The European Union opposes further stimulus packages in 2010, arguing that its social security safety nets makes an increase in government spending unnecessary.

"France and Germany are more receptive than the US to giving regulators supranational authority to scrutinize global banks and other financial companies.

"The US is desperate trying to assert leadership as if it were ten years ago, when the US set the agenda,' said Kenneth S. Rogoff, an economist at Harvard and another chief former economist of the fund.

"Since last year, the IMF made nearly \$50 billion in loans to 13 countries. It is streamlining the process for making loans and loosening its strings, hoping to counter the resentment built up against it during past crises because of its stringent demands.

"At a preparatory meeting two weeks ago, finance ministers of the Group of 20 agreed to a 'very substantially' increased financing though the Europeans favored an extra \$250 billion, not \$500 billion.

"The Chinese have seized on the fund for another purpose: to tweak the US. The governor of the Chinese central Bank, Zhou Xiaochuan, recently proposed that the American dollar be phased out as the world's default reserve currency. As a replacement, he suggested using special drawing rights, or SDRs, the synthetic currency created by the fund for transactions between it and its 185 member countries.

"Few economists view that idea as a realistic one, at least for years to come. But the mere assertion that the dollar's pre-eminence is waning – a theme picked up by Russian officials as well – sends a message.

"I don't think the Chinese or Russians really believe the SDR is a viable currency,' said Mr. Prasad, the Cornell economist. 'But they're laying down a very clear marker that they're going to be much more assertive about their role.'

"Mr. Geithner took the remarks seri-

ously enough that he publicly affirmed the primacy of the dollar.

“The US will address China’s status this week, when it announces details of a new high-level strategic and economic dialogue with Beijing, led by Mr. Geithner and Secretary of State Hillary Rodham Clinton, according to a senior administration official, who spoke anonymously. The announcement will come after the first meeting between President Obama and the Chinese president, Hu Jintao in London.

Mr. Geithner was the IMF director of

policy planning from 2001 to 2003, after his first stint in the Treasury. He recruited Edwin M. Truman, another former Treasury official and a longtime advocate of the fund, as a temporary adviser for the Group of 20 meeting.

“Just before leaving his academic position at the Peterson Institute for International Economics, Mr. Truman proposed that the fund issue \$250 billion in SDRs to all its members on a one-time basis, as another way of increasing its resources, Western European countries, he said could use

their SDRs to lend money to their troubled eastern neighbours.

“That proposal is in a current draft of the statement to be issued at the Group of 20 meeting. If all the American proposals for the fund are adopted, its resources will approach \$1 trillion – a big number, even in these extraordinary times.

“Yet for Mr. Johnson of MIT it merely shows how difficult it is for the US to marshal support for anything else. The only thing left is the IMF.”

W.K.

Restarting from the Primeval Beginnings Again?

We refer our readers to our opening article where we quoted a German scholarly work on the beginnings of banking thousands of years before money had been invented and the groping beginnings of trade were carried on in palaces and temples – in part because they had the storage space to park the securities that accompanied every transaction.

At that time bankers – named after the folding benches placed outside the temples and palaces – with a keen sense for profits, were prepared to rake them in whether by changing one municipal currency into another, advancing or delaying payments until they were actually due, profiting from rising prices, whatever, as long as it promised a profit. And there was still no such thing as receiving a bank account balance. Every item transacted had to be documented separately. Now that our banking system is in grave troubles, and banks are no longer really trusting even one another, what is more inevitable than that everything thing should tend to move from standing on its legs to standing on its head. The essence of banking is trust, and that throughout the world is in short supply.

But let me quote from *The New York Times* (19/03, “As Credit Cards Falter, the Cash Variety Gains Popularity” by James Flanagan): “Three small companies are playing a role in a business that has been growing as the economy’s troubles have deepened – the business of prepaid cash cards.

“The cards, which have the Visa, Master Card and Discover logos, act like portable checking accounts, though they are replenished with deposits made at retail outlets rather than banks.

“Distribution and management of these debit-like accounts are handled by small ser-

vice companies, prominently the Green Dot Corporation, the NetSpend Corporation and nFinanSe Inc. They provide computer servers and software as well as customer service to networks of retailers, drug-store chains and check-cashing outlets.

“The business serves a market that has existed for decades among the 44 million adult Americans who do not have bank accounts. And some experts put the size of the market even higher, at 73 million, to include potential cash card customers who have little access to bank services because they have low incomes and are unable to maintain minimum account balances.

“Yet the number of ‘unbanked’ and ‘underbanked’ people is growing rapidly in the current economic crisis. The Mercator Advisory Group, a research service focused on the credit and payments industry, estimated in November that the volume of transactions on general-purpose prepaid cards totaled more than \$4 billion in 2008. It forecast an increase to \$72 billion in 2009 and \$10.8 billion in 2010.

“‘The rapid growth squares with what we see in the market-place,’ said Mark Troughton, president of cards and networks at Green Dot, ‘but we find the totals too low. We did more than \$4 billion by ourselves last year.’

“Green Dot, based in Monrovia, Calif., started operating its prepaid reloadable cash-card business in 2001 for such retail chains as Kriger supermarkets and Walgreens drugstores. Green Dot now has 550 employees and about \$350 million in annual revenues. It receives a portion of card purchase fees, up to \$9.95 annually, as well as fees for reloading cards and a monthly maintenance fee of \$4.95 an account.”

It is in some ways the equivalent of the

primitive banker with his folding desk outside the temple or palace thousands of years ago when we had the seeds of banking, but still no money. Now its a similar phenomenon moving in reverse. Proving the extent of the trouble the world is in.

“Since 2007, Green Dot has stepped up to bigger business, managing the prepaid card business for Wal-Mart Stores. Wal-Mart recently lowered fees to \$3 for the initial, \$3 for each replenishment and \$3 for maintenance each month – and no fees if customers deposit paychecks into their cash card accounts.

“The resemblance to bank services is unmistakable and Mr. Troughton was enthusiastic in describing what he sees as a new era for Green Dot’s business. ‘In the next few months, we are going to be rolling out new financial services for cash card customers,’ he said.

“Jerry R. Welch, the chairman of another small service company, nFinanSe, said, he, too, saw Wal-Mart’s expansion as an indication of the potential for growth for the business.... A retailer sees people coming in to load cash onto their cards and says, ‘These people are using me as a bank – and that’s good. I should sell them something while they’re here.... A reloadable card is better than a bank account because a customer can shop online. And our card gives text messaging notations and balances,’ he said.

“You will note that – with a touch of modern technology – the cash card is retracing the historic path so arduously left behind by the pioneer bankers outside those temples and palaces millennia ago.

“Either way, traditionally or with new financial services, a cash business is growing while credit services retreat.”

W.K.

Innocence of Basic Facts of Globalized Economy Is One of the Few Common Traits of Our Globalized Planet

It seems that the Labor government in the UK is breaking its false teeth over the same details of our globalized economy as the smart boys that head or aspire to head our governments on this side of the big waters.

The Wall Street Journal (20/02, “Bank Bailouts, Sinking Revenue Fray UK’s Ledger” by Alistair MacDonald and Laurence Norman) informs us: “London – The combination of government bailouts and failing tax revenue combined Thursday to show the perilous state of the UK’s balance sheet.

“The country’s office of National Statistics said two bailed-out banks – Royal Bank of Scotland Group PLC and Lloyd’s Banking Group PLC – have been classified as public-sector entities, moving as much as £1.5 trillion (\$2,136 trillion) of liabilities to the country’s balance sheet.

“Meanwhile, the UK Treasury reported that tax receipts for January, usually a bumper month, dropped 10% from a year ago to £53.8 billion. Declines were across the board; corporate taxes contributed 20% less than a year earlier and value-added – tax revenue was down 10%, partly after the UK lowered this tax to help stimulate consumer spending. That resulted in the smallest January repayment of debt to date for the UK government in 14 years.

“As a result, economists said, the rate at which Treasury Chief Alistair Darling will have to increase his already massive borrowing forecasts for coming years. That could limit the government’s ability to deliver further stimulus to the economy.

“Given the rate at which the UK public finances are deteriorating – it is frankly anyone’s guess as to how high the public deficits may go over the next couple of years,” said Howard Archer, an economist of HIS Global Insight.

“Mr. Archer expects worsening fiscal positions across Europe as tax revenue falls and governments have to spend to stimulate the economy, though he believes the UK will be one of the worst hit.

“The UK isn’t the only place where there is debate over classifying bailout recipients as public-sector entities. In the US, for example, the Bush administration kept Fannie

Mae and Freddie Mac off the federal books, but the Obama administration is expected to decide soon whether to move the mortgage giants onto the federal budget, heaping huge sums on the federal deficit.

“Prices of UK government bonds, or gilts, tumbled Thursday as concerns mounted over the state of the country’s public finances sending yields higher.

“In the fiscal year to January, net public-sector borrowing stood at £67.2 billion, according to government figures, the highest figure since records began in 1993. That compares with £23.1 in the year-earlier period. The government has targeted if £78 billion for the fiscal year that ends April 5.

“Government spending in January totaled £45.5 billion, up 6.6% from a year earlier. That includes an increase of 15% to £13.5 billion in social benefits, such as unemployment insurance.

“One large cost has been the attempts to bail out the banking system. That impact was underscored by the classification of RBS and Lloyds as public sector entities, because the UK has effective control of the two banks via government bailouts. The statistics office estimates their liabilities are likely to more than double the government’s current debt load, and at £1.5 trillion would equal the country’s gross domestic product. The figures, which were expected, don’t take into account the banks’ assets.”

Our Forgotten Balance Sheets

At this juncture I must pause to make the point that those in charge of our governments have long taken gross liberties with their bookkeeping to advance the speculative banking interest. They have willfully forgotten what a balance sheet is and, of course, a balanced balance sheet is supposed to be.

How and why this happened was best explained by a leading French economist, now dead, and his keen explanation buried with him, François Perroux. He diagnosed this mania for balancing items that were not intended to be balanced, and in fact cannot and should no be balanced, he summed up in his idea of the “privileged revenue” which runs as follows: In every

age there is a privileged revenue – that of the group in power – whose revenue, both in its rate and absolute volume, is taken as a reliable index of the well-being of society as a whole. After the Napoleonic Wars, it was the revenue that the large British landowners were able to exact because of the high tariff walls.

Those tariffs kept the wages of the industrial workers which were already at the subsistence level unnecessarily high, until the industrialist under the Reform Act were able to bring them down. Then what ensued was a period when not only Britain enjoyed low tariffs and low industrial wages, but propagated the virtues of free trade to the world at large. Until industrial competitors had appeared on virtually all points of the compass, and at that point Britain became protectionist for very different reasons than those that prompted the free trade mantra of a century earlier.

The privileged revenue has since the 1970s become that of speculative banking, defined by not only the scrapping but the suppression of the very memory of the *Glass-Steagall* legislation brought in by President F.D. Roosevelt at the depth of the crisis of the thirties. That banned the banks from acquiring interests in the non-banking financial pillars – at the time, to wit, stock brokerages, insurance and mortgage corporations.

The reason? Each of these maintained liquid reserves of cash and short-term interest loans that they needed for their own business. Allow the banks to lay hands on that and they will use those reserves – much of it short-term interest-bearing near-cash rather than strictly cash which has the unique merit of not mirroring inversely the movement interest rates. All of the banks to appropriate that as their “dominant revenue” and they will use it as money base for issuing interest-bearing credit, not once but storey-wise, at an ever quicker pace – this being when notions of growth have been borrowed – under a great taboo against open discussion of the matter – from the atomic bomb nothing less.

Obviously that is completely incompatible with the very notion of a balanced

budget – a phenomenon unthinkable and excluded, unless you have serious book-keeping.

To have balanced books you need accrual accountancy that enters every transaction twice – once the money in cash or credit that financed the transaction which is “amortized” over the likely useful life of the capital assets acquired by the expenditure, and again on the other side of the ledger the assets acquired that are “depreciated” over their likely useful existence.

That is accrual or double-entry book-keeping that the Templar order of Crusaders is said to have brought back to central and Western Europe almost a thousand years ago.

It was at the basis of the success of the Venetian Republic that alone of all the European states it managed to carry on a successful trade relationship with the Islamic nations, because double-entry accountancy allowed them to accept Islamic partners by respecting the Muslim religious principle

that he who shares the risk of an enterprise may have a part in its profits.

By the 14th century double-entry book-keeping had spread across Europe. Until, of course, Francois Perroux’s “privileged revenue” entered the picture. Until 1996, no modern European nation, with the exception of a couple of Scandinavian governments applied it to their own books. Private parties – corporate or private – had no choice in the matter.

W.K.

Even Without Mortgages Castaway Boats have Become a Problem

It makes you wonder in those celebrated times when the French revolutionaries were slicing off monarchs’ heads, how did they dispose of the gold crowns?

The New York Times (1/04, “Too Costly to Keep, Pleasure Boats are Becoming Castaways” by David Streitfield) tells an odd tale: “Mount Pleasant, SC – Boat owners are abandoning ship. They often sandpaper over the names and file off the registry numbers, doing their best to render the boats and themselves untraceable. Then they casually ditch the vessels in the middle of busy harbors, beach them at low tide on the banks of creeks or occasionally scuttle them outright.

“Our waters have become dumping grounds,” said Maj. Paul R. Ouellette of the Florida Fish and Wildlife Conservation Commission. “It’s got to the point where something has to be done.”

“Derelict boats are environmental and navigational hazards, leaking toxins and posing obstacles for other craft, especially at night. Thieves plunder their scrap metal. In a storm, these runabouts and sailboats, cruisers and sailboats can break free or break up, causing havoc.

“Some of those disposing of their boats are in the same bind as overstretched homeowners who face steep payments on an asset diminishing in value and decide not to continue. They either default on the debt or take bolder measures.

“Marina and maritime officials around the country say they believe, however, that most of the abandoned vessels cluttering their waters are fully paid for. They are expensive-to-maintain toys that have lost their appeal. The owners cannot sell them, because the second-hand market is overwhelmed. They cannot afford to spend

hundreds of dollars a month mooring and maintaining them. And they do not have the thousands of dollars to properly dispose of them.

“When Brian A. Lewis of Seattle tried to sell his boat, Jubilee, no one would pay his asking price of \$28,500. Mr. Lewis told police investigators that maintaining the boat ‘caused extreme anxiety’ which led him to drill a two-inch hole in Jubilee’s hull last March.

“The boat sank in Puget Sound, and Mr. Lewis informed his insurance company it was an accident. His scheme came undone when the state, seeking to prevent environmental damage, raised Jubilee. Mr. Lewis pleaded guilty last week to insurance fraud.

“While there are no reliable national statistics on boating fraud, Todd Schwede, an insurance investigator in San Diego, said the number of suspicious cases he was handling had roughly tripled in the last year, to around 70.

“In many cases, he said, the boater is following this logic: ‘I am over-insured on this boat. If I make it go away so no one will find it, the insurance company will give me enough to cover the debt and I will make something on the deal as well.’

Lt. David Dipre, who coordinates Florida’s derelict vessel program, said the handful of owners he had managed to track down were guilty more of negligence than fraud.

“They say, ‘I had a dream of sailing around the world. I just never got around to it.’ Then they have some bad times and they leave it to someone else to clean up the mess,’ Lieutenant Dipre said.

“Florida officials say they are moving more aggressively to unclog the local inlets, harbors, swamps and rivers. The state appropriated funds to remove 118 derelicts

this summer up from only a handful last year.

“In January it became illegal in South Carolina to abandon a boat on a public waterway. Violators can be fined \$5,000 and jailed for 30 days.

“We never needed a law before said Gary Santos, a Mount Pleasant councilman.

“Not that having one is necessarily proving much of a deterrent. Mr. Santos took a spin on a friend’s motorboat the other day and saw a newly abandoned catamaran within seconds of leaving the dock.

“It had been run aground at an awkward angle. A weathered ‘for sale’ sign testament to the owner’s inability to get rid of it. Local watermen said the boat had appeared one day in February, and had not been touched in weeks.

“Boats are luxuries,’ Mr. Santos said. ‘This isn’t a good moment for luxuries.’

“South Carolina’s unemployment rate in February was 11%, the second highest in the nation after Michigan. The online classified ad service Craigslist in Charleston, SC, features dozens of boats for sale every day.

“California is taking a more benign approach, with plans in the legislature for a boater bailout. Under a law proposed by state Representative Ted Lieu, owners of marginally seaworthy vessels would be encouraged to surrender them to the state. If they abandoned the boat anyway, the bill would double the fine to \$1,000.

“The cost of the disposals would be paid by existing fees on boat owners, Representative Lieu said that ‘in a perfect world’ the fear of punishment would be enough to get people to stop abandoning their boats.

“But to actually enforce that would take way more governmental resources than we have,’ he said.” ■

The New World Being Remade

The New York Times (20/03, "Foreign Ways and War Scars Test Hospital" by Denise Grady) warns us against too sweeping generalizations about our southern neighbour and its treatment of immigrants: "Minneapolis – Hennepin County Medical Center, a sprawling complex in downtown Minneapolis offers an extraordinary vantage point on the ways immigrants are testing the American medical establishment. The new arrivals – many fleeing repression, war, genocide or grinding poverty – bring distinctive patterns of illness and injury and cultural beliefs about life, death, sickness and health.

"In a city where Swedes and Norwegians once had separate hospitals, Hennepin spends \$3 million a year on interpreters fluent in 50 languages to communicate effectively with its foreign-born patients.

"Many arrive with health problems seldom seen in this country – vitamin deficiencies, intestinal parasites and infectious diseases like tuberculosis – and unusually high levels of emotional trauma and stress. Over time, as they pick up Western habits, some develop Western ailments, too, like obesity, diabetes and heart disease, and yet they often question the unfamiliar lifelong treatments these chronic diseases need.

"Some also resist conventional medical wisdom or practices, forcing change on the hospital. The objections of Somali women to having babies delivered by male doctors has led Hennepin, gradually, to develop an obstetrical staff made up almost entirely of women.

"Doctors say that for many of these newcomers, the most common health problems, and the hardest to treat, lie at the blurry line between body and mind, where emotional scars from troubled pasts may surface as physical illness, pain and depression.

"Like many American cities, Minneapolis has seen a tremendous influx of Hispanics, many of them here illegally from Mexico and Ecuador, both legal and illegal, make up the biggest immigrant group in the state, as well as in the nation.

"But since the late 1970s, this once lily-white city on the prairie, frozen solid half the year, has also been taking on waves of legal refugees from more far-flung parts of the world: Vietnam, Cambodia, Laos, Russia, Bosnia and Herzegovina, Liberia, Ethiopia, Somalia, Myanmar.

"So many people came here from war zones that a non-profit group opened the nation's first Center for Victims of Torture in Minneapolis in 1987. Statewide, the number of foreign-born people more than doubled in the 1990s and is nearly a quarter of a million now. They make up 5% of the population. The influx from Somalia has been especially large. A million people fled the country when the civil war broke out. Many spent years in squalid, disease-ridden refugee camps or shantytowns in Ethiopia or Kenya.

"The lucky ones, granted refugee status, started arriving in the US in the mid-1990s. Many were relocated to Minneapolis by the State Department because of the city's strong social services and its many civic group that help newcomers. There are an estimated 35,000 to 40,000 Somalis in Minnesota, mostly in Minneapolis, more than in any other American city.

"'Nobody can count us,' said Dr. Osman Harare, a physician and public health official in Somalia who became a patient advocate and interpreter at Hennepin. 'We are nomads.'"

Minneapolis Opens Arms to Transplanted Africans and Asians

"The community is thriving, though it is not without troubles. The FBI has been investigating whether young Somali men in Minneapolis have been recruited to commit terrorist acts in Somalia, and health officials have been looking into reports of unusually high rates of autism in the children of Somali immigrants.

"446-bed public hospital, Hennepin has a reputation of turning no one away. No questions are asked about immigration status. About 20% of its patients were born in other countries and they account for \$100 million of expenses for patient care. Hennepin's interpreters are called on to help patients more than 130,000 times a year. The greatest demand is for Spanish, and thereafter Somali.

"Most Somalis are in this country legally and qualify for various government health insurance programs. Those in the country illegally used to be eligible for Medicare, but are not any more, except for emergencies, or if they are pregnant or under 18.

"On a Tuesday afternoon last fall, a 62-year-old woman from Somalia made

her first visit to the hospital. Initially, she was exuberant, speaking so rapidly that an interpreter had difficulty keeping up.

"I love this big government hospital, the same government that welcomed me here after the war and the sadness of Somalia. She had a dozen bottles of pills from other clinics in the Twin Cities, and a long list of ailments arthritis, digestive trouble, allergies insomnia, and worst of all, pain. Twice in recent months she had gone to the emergency room for terrible aches in her legs and burning pain in her side.

The nurse said she would order a blood test to measure vitamin D, because deficiencies are common in Somalis and are a frequent cause of aches and pains. (Aching all over is not uncommon among Somalis, and older people sometimes tell doctors they feel as if camels or horses have been walking on them all night.)

"The body uses sunlight to make vitamin D, and dark-skinned people make less than whites. Somali women are especially prone to deficiencies because their traditional clothing covers so much of their skin.

"Mrs. Deborah Boehm, a nurse practitioner at Hennepin, predicted that much of her new patient's physical troubles, would turn out to have emotional roots in Somalia. Anguish morphing into physical pain is something Mrs. Boehm has seen time and time again in treating Somali refugees.

"At her urging, the clinic brought in a psychologist, and Mrs. Boehm said, 'I aggressively worked on getting these women into therapy.'

"Dr. Mary Bradmiller, the psychologist, said the rates of depression were post-traumatic stress disorder were high. Most of the Somali patients are mothers with 'tremendous psychosomatic stress, domestic violence, child protection issues, war trauma, nightmares, flashbacks and separation from their families,' Dr. Bradmiller said.

"A study of 1,134 Somali and Eritrean refugees in the US in 2004 found that 25% of the men and 47% of the women had been tortured. The torture of women frequently involves rape."

Our world itself has been unconscionably abused, and needs peace and healing on par with the fine work done on their immigrants in Minneapolis. Let us not rush into another blind stretch of what has reduced it to this plight. We need helpful analysis that will track its nightmares to their real sources. Anything less will only guarantee of ever more of the same.

W.K.

Buffett Bites the Dust, As Will President Obama's Advisers

In its 11/03 issue *National Post* carries a remarkable article from Reuters, "Buffett's derivatives play has many questioning wisdom" by Jonathan Ford. It comes close to what I've been trying to get across, in my horror at what President Obama believes will save the world economy, that I shall begin by reproducing it verbatim: "He sold to a range of unknown counterparties between 2006 and the end of last year. The indices in question have slumped, putting the Sage potentially on the hook for an AIG-style payout. On a mark-to-market basis, the positions were US \$10 billion underwater at the end of 2008, giving a US \$5.1 billion loss after the premium is accounted for.

"Why, one might ask, did Mr. Buffett make such a bet? This is, after all the man who has railed in the past against over-the-counter derivatives, describing them as 'financial weapons of mass destruction.'

"In broad terms, the Sage says that it's all OK because he, unlike others, knows what he is doing. The options were sold dearly, so the chance of a big loss is acceptably low. Stocks tend to rise in line with nominal GDP, especially in the long run.

"In any case, any payouts only have to be settled when the options expire.

"The credit crunch has exposed many one-time financial heroes as having feet of clay. Even the great Sage of Omaha, Warren Buffett, has fallen from grace.

"The shift in mood has been brutal. The price of shares in the Sage's investment company, Berkshire Hathaway (BRKa/NYSE), has more than halved since last September. Meanwhile, his one-time iron-clad balance sheet now looks rather frail. The credit default swap market is saying that the company's vaunted AAA rating is so much baloney. Berkshire's bonds are trading close to junk levels.

"The pain is largely self-inflicted. It stems from Mr. Buffett's decision to raise US \$4.9 billion by writing put options that insured buyers against falls in the value of several large global stock indices, including the S&P 500 and the FTSE 100. These between 2019 and 2028, which is quite a way out in the future. Mr. Buffett has also argued that that the Black Scholes formula, used to value options, overstates his likely future liability against the puts (an argu-

ment, incidentally, were he really to believe it, would lead him to keep writing and selling puts ad infinitum)."

Here Mr. Ford comes close to the crux of things: the swaps deal starts at the infinite end (i.e., there is no end) the accumulated debt tower overhead. Quite apart from the detail that disturbed infinity goes against him simply declares bankruptcy, leaving him without the protection he was counting on. When mortals tangle with infinity no handy outcome is likely or even possible.

Keynes Was No Palm-reader

Keynes had criticized far more modest economists who tried foretelling what will occur from what happened in the past – even when dealing with very finite gonebys and peering down the road. The number of crucial laws resulting from the Roosevelt reforms are being rubbed out or simply disregarded. How then, could you begin predicting the future from the past? However, following around with the exponential curve and dealing with infinite futures is infinitely more serious stuff.

"Investors have no choice but to trust the Sage if they continue to hold the stock, as they don't have the information to make their own assessment. Intriguingly, many of them seem to be exiting. Perhaps they don't like the slight whiff of hubris and the hypocrisy in the air. It is hard to escape the perception that for all the talk of value, the Sage sold many of these derivatives mainly to provide a kicker to spruce up the returns from his sagging stock portfolio.

"There is also something worrying about selling puts on the stock market and using the proceeds to buy, um, stocks. It's in effect a double-or-nothing bet and if it goes wrong, the Sage is in double trouble. His liabilities will shoot up just as his asset portfolio is shrinking."

So far we have quoted largely from Mr. Ford. But we would add a crucial observation about the exponential curve – the mathematics of the atomic bomb. It is directly derived from the infinitesimal calculus invented almost at the same time by Isaac Newton in Britain and Gottfried Leibniz on the continent.

In essence it deals with infinitesimal growth of an infinite series: each of term

grows one degree higher than the preceding term. The first term "1" being a constant, doesn't grow at all, and thus disappears to 0. Not to worry. Being an infinite series it moves but a single term to the right where there are always an unlimited terms in reserve. But the second term being of the first degree of the variable becomes 1 since it grows as the second degree. The third term being x of infinitesimal growth rates – starting with 1, which being a constant has no growth rate and if you take the growth rather of an infinite series of variable each of one degree higher than the preceding one.

So the total effect of the successive differentiations of the series is that the entire series – as far as the *variables* and their derivatives are concerned – grow. The constant coordinates are quite another matter, for because of them the term on the right that replaces the term lost on the extreme left are increased by an ever increasing number of constants.

Unless these constants are carefully controlled by constant coordinates added the direction of the resulting series will be seriously and constantly altered – applied to spatial problems this is achieved largely by adding a rational number in the denominator that cancels out the sequence of differentiations of the algebraic part of the series. Those constants be it noted are the means of directing the course of the resulting series. Unless this had been taken care of, the original atomic bomb directed at Hiroshima could have ended up hitting Vladivostok or Washington.¹

Not dissimilarly today the use of derivatives on unlimited powers, since there is no adjustment for proper direction and control of the powers of the derivatives of ever greater degree or control of their direction, this has been a major factor in the world economy running out of control. Indeed such concerns are simply skipped over since the unrestrained market is on faith believed to solve all problems.

W.K.

1. Increase rates $(x+dx)$ squared equals x squared + $2(x+dx)$ squared plus dx squared. The third term disappears because it is of the second order of tininess – the rate of growth multiplied by itself. The first term x square disappears because it is the original size of the third term and it is the rate of growth or the next term which we are interested in. The third term is disregarded because it is of double degree of smallness and would shrink into near-nonexistence as the growth rate became ever tinier. So the third term in the series reduces to dx squared.

RENEW TODAY!
(SEE PAGE 2)

Do President Obama's Advisers Remember What Planet They're On?

After reading *The Wall Street Journal* (03/10, "Deductions for Wealthy May Stand" by John D. McKinnon and Martin Vaughan) we scratched our head and wondered whether we were really on the same planet with President Obama: "Republicans have already taken aim at rate increases planned for higher-income earners, as well as the administration's plans to raise hundreds of billions dollars through climate change legislation.

"During two days of congressional hearings on the Obama budget this week. Democrats ended their own concerns.

"Sen. Max Baucus (D. Mont.) the Senate's top tax writer as chairman of the Finance Committee, told Mr. Geithner he was especially concerned about paying expanded health coverage with a deductions curb that 'has nothing to do with health care.' He added, 'I'm wondering about the viability of that provision.'

"'We recognize there are other ways to do this,' Mr. Geithner, a high US Treasury official who has been oddly enough chosen by President Obama as high adviser, where a fresh line of investigation is obviously needed, than the official paths in the Treasury and the Fed."

To put it mildly, after all, the essence of the basic policies that brought the US and the world out of the 1930 crisis came from those two official institutions – but only when their greater inheritance from the Roosevelt years and the financing of World War II had been expunged not only from official policy, but from university economics and history courses, and the preeminence of the exponential growth of our private banks elevated to the guiding "dominant revenue."

Certainly one of the most invaluable lessons about not only contemporary society but about society itself – if we generalize what we learned in our contemporary society about earlier social forms. At the end of the war, Washington lost no time in sending hundreds of economists to Japan and Germany to predict how long it would take these great powers to reappear on world markets as the formidable competitors they had been. In 1961, one of these economists, Theodore Schultz of the University of Chicago published a study explaining that the

American economists had come up with the wrong answer because they had concentrated on the physical destruction, and ignored that the highly skilled, disciplined, and educated work forces had come out of the war essentially intact. For this analysis, Schultz was for a very few years feted, given awards, and then precipitously forgotten. Nobody but a few determined believers in the teachings of history, like COMER, remember the name today.

Yet what Schultz unlocked was a ready-made solution for curing the current world crisis, with a treasure-house of prepaid resources that could solve the current ever-sinking world crisis almost at once. But this has been deliberately forgotten.

Double-entry accountancy – also known as "accrual accountancy" – was brought to Europe by an order of Crusaders roughly one thousand years ago. It made possible the glories of the Venetian Republic the trade of which was mostly with the Muslim world.

The principles of accrual accountancy are simple enough. Every transaction is entered into the ledger twice. Once its cost in cash or credit outlaid, is entered and "amortized" over roughly the expected useful life of the physical assets acquired as the investment. The latter in private accounts, corporate or personal, is "depreciated" over its likely period of usefulness. In this way the future of the investment and its degree of profitability can be closely followed. The great German poet Goethe wrote in raptures about the beauty of accrual accountancy.

Our Governments Cook Their Own Books

That, however, is not how government have kept their own books in very recent centuries. They have carefully "amortized" their costs, but on the other side of the ledger until 1996 the US and in Canada – a botch-job of depreciation was done in 2002 after years of argument between the then Minister of Finances Paul Martin and the Auditor General who refused to approve the books until serious accountancy were brought in.

What led to this great change in adopting serious accountancy in the USA was the North American Free Trade Alliance that almost shut down the Mexican economy.

To save the situation Mexico's partners in NAFTA after decades of resistance brought in accrual accountancy. That disclosed completely ignored physical assets of – the process being carried back to 1959 – close to \$1.25 trillion in physical capital assets that had been left out in stating the government assets. Called "savings" – which they were not since that implies assets in cash or readily convertible into cash – which these rediscovered assets were not. Some might be century-old bridges, highways or buildings. A nudge and a wink to the appraisal agencies transmitted the real nature of the new figure. This brought relief to the world crisis of the day, and ushered in an age of low interest rates, that had been kept at alpine heights because of the distortions of such accountancy that buried basic economic situation rather than disclosed it.

However, the change was confined to *physical* investments of government. Its investment in *human* capital, education, and hence health, the environment, psychological continued being treated as current spending rather than as investments, even though the discrepancy between two contrasting systems – one of scrupulous accrual accountancy brought in for physical assets of central government, and the other treating the investments of the government in human capital was treated as a non-investment but as an expenditure that had to be slashed whenever the government seemed to be running out of liquid assets.

Financing all government investments through the central bank – both in the US where the Federal Reserve remains under private ownership, though much of its profits reverts to the central government, or in Canada where since 1938 the Bank of Canada having been repurchased from some 12,000 shareholders at a good profit from the original shareholders after a less than four-year ownership.

Obviously there is an intolerable rift between maintaining accrual accountancy for the physical assets of government, and so-called "cash accountancy" or the investment in human capital.

Right there the courts of the land should see and condemn this as unconstitutional. It can only serve private interests in exploiting the accountancy rift.

That is why, it is with the deepest regret that we see President Obama allowing himself to be paddled ever further out to sea.

It is time for the courts of the land – given the ever deteriorating state of our banks

and Washington's attempts to bail them out. The Fed and the Treasury having suppressed even the *Glass-Steagall* legislation that Roosevelt brought in to start pushing the economy laboriously out of the Great

Depression. Without being closely aware of that, the world does not stand a chance of getting out of the ever-deepening economic depression.

W. Krehm

Army Suicides Making Headlines

Of all papers, the two-page spread in *The Wall Street Journal* ("A General's Personal Battle – The military is facing a sharp spike in suicides," by Yochi J. Dreazen) places the biggest question-mark over Washington's current effort to save the world: 'Fort Carson, Colo. – Maj. Gen. Mark Graham is on the frontlines of the Army's struggle to stop its soldiers from killing themselves. Through a series of novel experiments, the 32-year-military veteran has turned his sprawling base here into a suicide-prevention laboratory.

"One reason: Fort Carson has seen nine suicides in the past 15 months. Another: a 21-year-old ROTC cadet at the University of Kentucky killed himself in the apartment he shared with his brother and sister. He was Kevin Graham, Gen. Graham's younger son.

"After Kevin's suicide in 2000, Gen. Graham says he showed few outward signs of mourning and refused all invitations to speak about the death. It was a familiar response within a military still uncomfortable discussing suicide and its repercussions. It wasn't until another tragedy struck the family that Gen. Graham decided to tackle the issue head on.

"I will blame myself for the rest of my life for not doing more to help my son,' he says quietly, sitting in his living room at Fort Carson, an array of family photographs on a table in front of him. 'It never goes away.' Suicide is emerging as the military's newest conflict.

At a Senate hearing last week, Gen. Peter Chiarelli, the Pentagon has confirmed that 140 soldiers killed themselves, the highest number in decades. Would it not be helpful to have added how long and in how many different countries and in violent clash with how many different cultures this entailed. For surely that must not only put more mileage between the battlefield and the home hearth. Wars used to be ideally conceived as defending. And surely the gap in the cultures that we are in battle with and over such stretches of time, must blow up questions and doubts about what it is all about. It is hard to conceive that the human species undertook its epic development with the supreme goal of killing its own kind in the most virtuoso way.

Even the fact that our American neighbours have voted themselves a coloured president adds at least more confusion to this panoramic paradox in space and time. From birth to death humans are assailed by enough questions that beg but don't always receive an answer. Along with the other trials of modern life in the army – with the weaponry power having experienced more explosive growth than our moral contentment in having launched them. What ensues is at best a confounding broth.

But let us get back to the *WSJ* piece.

"Beyond Fort Carson, the Army has launched a broad push to reduce the incidence of suicide. Over the next four months, all soldiers will receive additional training in suicide prevention and broader mental health issues. In February and March, the army for the first time ever excused units from their normal duties so, one by one, they could learn new ways of trying to identify soldiers in need of help.

"Military officials, including Adm. Mike Mullen, chairman of the Joint Chiefs of Staff, attribute the increase to repeated deployments in Iraq and Afghanistan. Earlier this month, Adm. Mullen visited Kentucky's Fort Campbell, which has had eight suicides so far this year. Asked about the stresses of repeat deployments during a town-hall meeting with soldiers, he said: 'I can't believe that is not a huge factor' in the number of suicides. Soldiers have been sent as many as four times, often with less than a year between deployments. The situation will likely worsen as the Obama administration boosts troop levels in Afghanistan."

Soldiers Can Seem Fine Even When They Are Not

"It's cumulative and the problems don't show up right away,' says Anne League, the chief of psychiatry at Fort Carson. 'Soldiers can seem fine at first, even if they're not.'

"The Army said that for the first time the rate of suicide in the military exceeded that of the general population last year – 20.2 per 100,000 people in the military, compared with the civilian rate of 19.5 per

100,000. (The Centers for Disease Control say the overall civilian suicide rate was 11 per 100,000 for 2005 – the most recent year available – but the army adjusts the figure to reflect the military's younger and much more heavily male demographics.) The Army's suicide rate was 12.7 per 100,000 in 2005, 15.3 in 2006 and 16.8 in 2007.

"Military suicide rates tend to increase during wartime, according to military mental-health personnel like Dr. League, but the current numbers are the highest since the Army began tracking the issue in the 1980s. During the first Gulf War in 1991, for example, the Army's suicide rate was 14.4 per 100,000.

"In the early 1980s, Ann Haas, now the director of prevention projects at the American Foundation for Suicide Prevention, studied a group of 100 Vietnam veterans at a Veterans Administration Hospital in Montrose, NY. All the veterans had been diagnosed with *post-traumatic stress disorder*. Over the course of her research, three of the veterans killed themselves, a startlingly high percentage.

"What we now call PTSD has been part of the aftermath of combat as long as we've had wars,' she said. 'And there is higher incidence of suicide among people who have been diagnosed with PTSD, like returning veterans.'

"Teasing out the underlying causes is difficult, since it is impossible to fully understand just what prompts someone to commit suicide. Military officials point out that one-third of the soldiers who took their own lives last year had never been deployed to Iraq or Afghanistan, though they say the soldiers might still have felt the stresses of constant training and pending overseas tours.'

"Defense Secretary Robert Gates and other senior Pentagon officials believe that the suicide rate is being pushed higher by the Army's rising divorce rate. Repeated deployments to Iraq and Afghanistan are pushing Army relationships to the breaking point, and many military marriages are buckling under the strain.

Continues on next page

Bank of Canada Could Ease Nation's Money Woes

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The economy is in very bad shape. We cannot expand the economy without increasing the money supply.

It is in these difficult times that the federal government should use its own bank, the Bank of Canada, to create the funds necessary for investment in education and health, as well as infrastructure improvements.

This would increase the money supply, necessary to expand the economy. As the sole shareholder of the Bank of Canada, these funds would be interest-free. Too much of our money supply, about 90% is created by the financial system as interest-bearing debt.

We financed the Second World War with government-created money, and because it is permanent, we experienced 30 years of economic growth with low inflation.

Now is the time to use our most valuable assets, the Bank of Canada.

Andre Marentette, Lakeshore

Feds Should be Borrowing from Bank of Canada

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Re: Bank of Canada could ease nation's money woes, February 26, by Andre Marentette.

I agree that the government should use its own bank, the Bank of Canada, to create the funds necessary for investment in education, health and infrastructure improvements. As sole shareholder, when the government borrows from it, all the interest paid is returned to it as dividend, minus a very small amount for administration.

Any debt built up in this way does not add to the debt burden of interest and would not add to our taxes.

The Canadian Labour Congress is organizing a "campaign for change" to tell the government it is not doing enough for the hundreds of thousands of Canadians who have lost and who will lose their jobs. If the government borrowed from its own bank, it could do much more to help the unemployed.

Richard Priestman, Kingston

"Some Pentagon officials believe that military drug and alcohol use is also contributing to the increase in suicides. Growing numbers of soldiers take anti-anxiety medication like Prozac and Xanax after they return to the US, and some commanders worry that the combination of drugs and alcohol is upsetting many soldiers' emotional states.

"The poor economy also adds to the strains facing many soldiers and their loved ones. Foreclosures in towns with large military facilities are rising at several times the national average, and hundreds of military families have lost their homes in recent months. The civilian spouses in many families are also struggling to find work, adding to the financial pressures facing modestly paid military personnel."

"Army officials acknowledge that many soldiers are reluctant to seek help because of the stigma around mental health issues. A survey last year by the American Psychiatric Association found that 75% of military personnel felt that asking assistance would reduce their chances for promotion. Others fear about appearing weak in the eyes of their peers. Gen. Graham fell in love with Carol Shroat when they were both students at Murray State University in Kentucky. The couple married young. Neither came from a military family and Gen. Graham says he initially planned to spend only a few years in the Army.

"Instead, he served in the first Gulf War and directed the military evacuation of New Orleans in 2005 after civilian authorities stumbled in their response to Hurricane Katrina. He won several military commendations for his work. He now commands Fort Carson, one of the largest Army bases in the world, and also oversees the training of reserve and National Guard soldiers in the Western US.

"In 2003, then-Col. Graham was serving as the executive officer to the senior US Commander in South Korea. He and Mrs. Graham lived in Seoul, while their three children shared an apartment at the University of Kentucky. Kevin and his older brother were both ROTC cadets, hoping to follow their father into the military.

"Kevin was quiet and reserved. He wanted to be a military doctor. His older brother, Jeff by contrast, was gregarious and outgoing and wanted to lead troops into combat.

"At the University of Kentucky, Kevin was the only ROTC cadet chosen for elite airborne training. He had been tabbed to command other cadets, and seemed des-

tinued for a successful military career, according to two officers who participated in the ROTC program alongside Kevin.

"Gen. and Mrs. Graham say the program's rigorous workload and unrelenting pressure started getting to Kevin. He was diagnosed with depression, they say, and doctors in Kentucky put him on Prozac. Gen. Graham says he encouraged Kevin to take time off from the ROTC program and offered to pay back his scholarship. Kevin told his father he didn't want to be a quitter.

"Jeff meanwhile graduated from the University of Kentucky in the summer of 2003 and was immediately commissioned as an Army lieutenant. After the ceremony, Kevin, beaming posed for a picture with his brother and sister. It is the last photo that the Grahams have of their three children together.

"On June 21, 2003, Kevin made plans to play a few rounds of golf with his brother, but he failed to show up. Jeff dispatched their sister to look for him. She found Kevin hanging from a ceiling fan in his bedroom.

"Gen. Graham, like many military figures, preferred not to discuss his son's suicide at first. Mrs. Graham went to the other extreme, believing she had a duty to talk about the dangers of depression and mental illness, she says.

"We felt like the absolute worst parents in the world, like we had somehow not loved our child enough," she recalls.

"A few months later, Second Lt. Jeff Graham deployed to Iraq. He left on November 15, Kevin's birthday.

"On February 19, 2004, Jeff was leading a foot patrol in Khaldiyah, a volatile city near the insurgent stronghold of Fallujah, according to the family and military records. He spotted something suspicious attached to the guardrail of a nearby bridge. He halted his soldiers and was about to radio back to the rest of the unit when the bomb detonated. The explosion killed Jeff, 24, and Spc. Roger Ling, 20.

"That morning, Mrs. Graham work up just after 5 am in her home at Oklahoma's Fort Sill and read a news report online about two soldiers being killed in Khaldiyah. Worried for her son, she went to the base's small chapel to pray for his safety. When she got back to the house, Gen. Graham was sitting quietly with his boss. Mrs. Graham says that she immediately knew they had lost a second son. I really believe that when the bomb went off, Kevin was right there to catch it."■

Doubt about President Obama's Certainties

It certainly must have been a crucial emergency for the *National Post* (19/03, "US Fed to Buy \$300B of Debt – A Good Start – Surprise move sends stock markets surging" by Janet Whitman). For the central bank to buy government bonds is, of course, a rather expensive way – in direct costs but far, far more in the depressive effect of not immediately using the central bank for a major part of the government's financing, rather than going to the trouble and expense of incurring further government debt by a bond issue.

Even so, in the US where the Federal Reserve is still owned by private banks, a good part of its profits still revert to the government. But not as much as would if the US central bank were government – owned as is the Bank of Canada. And note well, it was the US rather than the Canadian central bank that took this step, and a Canadian business publication, the *National Post*, apparently did not dare point out the significance of the move: it is equivalent of the government doing its borrowing directly from the central bank, that is creating more currency. That was done to a great degree in Canada's brilliant financing of the Second war and for financing much of the capital catch-up projects neglected during the Depression and then of World War II.

In short it has taken an economic crisis that has driven our governments out of their wits, bailing out the unbailable swaps insurance on bank debt, which is literally the taking out insurance against the mathematical equivalent of the atom bomb. That resulted because of the ability of the banks – with the repeal of the *Glass-Steagall Act* passed under Roosevelt and repealed in the late 1990s – after having been increasingly disregarded long before then. That disregard and later formal repeal of the ban on banks acquiring an interest in the other (i.e., non-banking) pillars, allowed the banks to buy stock brokerages, insurance, and mortgage companies, and more recently credit-card companies, and take over the cash reserves of these non-banking businesses. These were used as cash basis on which to apply the "bank multiplier." The "bank multiplier" used to be explained in any university textbook on economics up to the 1970s, but today is never mentioned in economics

courses at most universities. Originally it was limited to 10 to 1, but with the disregard and finally the formal repeal of the *Glass-Steagall* that ration grew to as much as 400 to 1 by the end of the millennium. That fingers the similarity between the deregulated growth of the supposed capital of our banks with the exponential rate of growth which is the math of the atomic bomb. That progression can be described as an infinite series of which the *rate of growth of the increase* always equals the actual value previously attained when the variable was an integer lower.

The first term of the exponential series is the constant 1. That becomes zero because constants don't grow. Not to worry, because the second term that is x becomes one since x grows at the identical rate that all other x 's grow that is at rate "1." And the third term of the series becomes an expression containing x squared. The total effect is that the series with every further differentiation moves a step further east (as it were), but as an infinite series it keeps on reproducing itself but always at the rate of growth equal to the value already attained by the variables in the series itself.¹ But the coordinates – the constant terms resulting from the higher rank of differentiation that each successive power of the variable undergoes.

Society's View of its Own Structures Mimics Its Technology

Integration is the reverse of differentiation. So beginning with differentiation – as did Newton and Leibniz who independently – one in England the other in Germany – developed infinitesimal calculus from the relative disappearance of every higher power of a higher degree, as the variable or variables approached the infinitesimal – i.e., infinitely small and growing ever smaller. Taking the simplest example $(x+dx)$ squared written out gives us $x^2 + 2dx + dx^2$. The basic gimmick of differentiation or its reverse, integration, is the recognition that as the variable approaches zero the rate of growth is carefully retained, but the second degree of smallness can be ignored since *in the limit* it is ever approaching value zero.

But there is a key point that must not be ignored – the process of differentiation produces a new series of constant coordinates

that applied to objects moving in space will determine the direction they take. Just as the simple equation $ax+by=0$ will have the direction of a line determined by the constants a and b . The different degrees of the variable are retained as they all move to a higher power – as each is lost at the linear power on the left, a corresponding power is picked up with the next term and of course the whole infinite series is endless and unchanging *as far as the variables are concerned*.¹

But not as far as the constant coordinates are. These will also grow at an infinite rate, unless they given special attention. That is done by neutralizing the constants of derivation – e.g., going from the second to third term of the series. In one form or another that must have been the essence of the technology of the atom bomb. Otherwise it would hit the crews who launched it, or Vladivostok, or even Washington. This could only have been achieved by carefully providing "constant coordinates" with appropriate assortments of different uranium products to guarantee that the bomb was delivered to Hiroshima as planned.

What President Obama is wasting his talents on is this: by shutting his eyes to the close correspondence between an economy in which all equivalents of the *Glass-Steagall* law has been wiped out – both from the law-books and practice – he has no control over the exponential growth of deregulated banking that must grow at an ever greater speed in order not to collapse.

All societies tend to mimic their reigning technologies. Even Karl Marx, born into the railway-building ago – was not immune to this relationship. We sense it with the predetermined social structures, climaxing in the grand climax the terminal – where everybody gets off with a beatific smile on his face.

William Krehm

1. A note on interpreting exponential growth progressions: You have to distinguish between the algebraic portion of the expression which is where the sinister effect is embedded – whether it be the atomic bomb or speculative credit disconnected from social need, while the arithmetic portion is simple distributive mathematics. The essence of the exponential series is that the arithmetic coordinate always return to their previous value which directs the destructive growth exactly as was intended. That is achieved by controlling the arithmetic coordinates of the infinite series.

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China is Having Both Subways and Autos for Its Giant Cities

In the US, New York is the city of subways, as Los Angeles is of the automobile.

It is not so long ago that China moved on bikes. Now it is looking to transport for the exploding population of its giant cities both to subways and cars.

The New York Times (27/03, "Digging a Hole Through China" by Keith Bradsher) tells us a giant story about some giant transportation steps taken in a giant land. The city of Guangzhou, close enough in South-eastern China from which Western industry started much of its leakage into China that has since become a roar. The hero of much of this tale is Chan Shao Zhang.

"After four decades of false starts, Mr. Chan, a 67-year-old engineer, is supervising an army of workers operating on gargantuan tunneling machines beneath this metropolis. They are building one of the world's largest and most advanced subway systems.

"The question is whether the burrowing machines can outrace China's growing love affair with the automobile – car sales have soared nine fold since 2000. Or are a hundred Los Angeles destined to bloom?

"And even as Mr. Chan labors to bind Guangzhou together with an underground of steel, the city is spreading out rapidly above ground, like a drop of ink on a paper towel.

"The Guangzhou Metro is just part of a much broader surge in mass transit construction across China. At least 15 cities are building subway lines and a dozen more are planning them.

"The pace of construction will only accelerate now that Beijing is pushing local and provincial governments to step up their infrastructure spending to offset lost revenue from slumping exports.

"'Nobody is building as they are,' said Shomik Mehndiratta, a World Bank specialist in urban transport. 'The center of construction is really China.'

"Western mass transit experts applaud China for investing billions in systems that will put less stress on the environment and on cities. But they warn that other Chinese policies, like allowing real estate development to build sprawling new subways, undermine the benefits of the mass transit boom.

"They wind up no better than if they

did nothing, but it costs them a fortune,' said Lee Schipper, a specialist at Stanford in urban transport.

"Mr. Chan defended Guangzhou's combination of cars and subways, saying that the city built a subway line to a new Toyota assembly plant to help employees and suppliers reach it.

"Subways have been most competitive in cities like New York that have high prices for parking, and tolls for bridges and tunnels, discouraging car use.

"Few Chinese cities have been willing to follow suit, other than Shanghai which charges a fee of several thousand dollars for each license plate.

"The cost and physical limitations of subways have discouraged most cities from building new ones. For instance, only Tokyo has a subway system that carries more people than its buses. The buses are cheaper and able to serve far more streets, but move more slowly, pollute more and contribute to traffic congestion."

The Pros and Cons of Bus and Subway

"China has reason to worry. It surpassed the US in total vehicle sales for the first time in January, although the US remained slightly ahead in car sales. But in February China overtook the US both, in part because the global downturn has hurt auto sales much more in the US than in China.

"Guangzhou, a city of 12 million that is also the fastest growing center of auto manufacturing in China, shows both the promises and obstacles of China's subway extravaganza.

"Mr. Chan helped set up Guangzhou's subway planning office in 1965, when he was straight out of college. Digging started the next year. But the miners gave up after less than 10 feet when they hit granite.

"After that, Mao personally sent China's finest mining and underground construction experts to oversee the digging. But further excavations efforts failed in 1970, 1971, 1974 and 1979. During and immediately after the Cultural Revolution, Communist dogma, poverty and nationalism forced a reliance on inadequate Chinese equipment.

"At that point it was still mostly bicycles

and people walking,' Mr. Chan said. Then, 'in the 21st century, the Guangzhou economy really took off.'

"Today, Guangzhou has 71 miles of subway lines, most of them opened in the last three years, and yet large areas of the ever-expanding city are still distant from the nearest subway stop.

"The city plans to open an additional 83 miles by the end of next year – and an underground tram system and a high-speed commuter rail system. A long-term plan calls for at least 500 miles of subway and light rail routes, and there are discussions on expanding beyond that.

"China now produces much of the equipment to build modern subways, but the country's infrastructure spending is drawing in imports as well. Most of the tunneling machines here were made by Herrenknecht of Germany IBM announced on Wednesday that it had signed a consulting contract for computer tracking of Guangzhou Metro's nearly \$3 billion in assets, including convenience stores in subway stations and lighting systems.

"The digging in Guangzhou proceeds around the clock, every day. Men like Wang Jiangka, a profusely perspiring engineer in charge of one of the steamy tunnels, endure sweltering temperatures at the tunneling site, where workers put in five 12-hour shifts a week.

"'If they don't want to do overtime, we get other workers,' Mr. Wang said, standing in a red hard hat next to a Herrenknecht tunneling machine that chewed through rock more than a one-mile walk from the nearest daylight.

"Inexpensive labor – less than \$400 a month – and the economies of scale created by completing 30 miles of subway lines a year have driven down costs.

"Mr. Chan said that it cost about \$100 million a mile to build a subway line in Guangzhou, including land acquisition costs for ventilation shafts and station entrances.

"By contrast, New York City officials hope to build 1.7 miles of the long-delayed Second-Avenue line in eight years at a cost of \$3.99 billion, or \$2.4 billion a mile. The city plans to use a single tunneling machine.

"Owners of land needed for subway construction in Guangzhou have few rights compared with those in New York."

It is as though Henry George had been to China.

W.K.