

COMER

\$3.95

Vol. 22, No. 2 • FEBRUARY 2010

CONTENTS

- 4 Correspondence
- 5 Wind — The First Born of the Heat of the Sun
- 7 Is Advertising Come-on Reducing Print Media to Mere Allures for Commercial Promotion?
- 8 Haitians Need jobs!
- 9 Perroux Brought Back to Life
- 11 Could Our Dogs be Trying to Save Us by Force of Example?
- 13 Managing Growth and Creating an Economy to Serve People
- 14 Difficult Decisions in End-of-life Care
- 15 Is Bad Accounting Costing the US Its Lead in Higher Physics?
- 17 Correspondence
- 18 While Obama Talks Reining in Financial Gambles, Split-second Derivative Trading is Achieving Outer Space Patterns

Publications Mail Agreement No. 41796016

Some Neighbourly Advice to President Obama

The New York Times (21/01, “Obama Trying to Turn Around His Presidency” by Peter Baker) reports the belated attempt to retrieve what has been a wasted year of the Obama presidency: “Washington – Chastened and bruised, President Obama on Wednesday began the daunting process of trying to turn around his presidency in a drastically altered political environment that will test his leadership, his instincts and his dexterity as never before.

“With the loss of his party’s unilateral control of the Senate, Mr. Obama pivoted to acknowledge the deep public anger on display in Tuesday’s special election in Massachusetts, offering limited regrets for losing touch and signaling that he may scale back some of the sweeping ambitions he brought into office just a year ago to the day.

“But he and his advisers were still reeling from the Republican victory in Massachusetts that cost them the filibuster-proof majority they had used to advance his priorities. Inside the White House, a debate ensued about what lessons to draw. Did the president try to enact too much or not enough? Was he too liberal or too close to financial institutions? Should he tack to the center or more aggressively push a progressive agenda?

“In an interview with ABC News, Mr. Obama indicated he would not give up his signature health care initiative but suggested paring it down to its ‘core elements.’ He maintained that he heard the message of an election that handed the late Senator Edward M. Kennedy’s seat to a Republican but cast it as an echo of the public discontent that vaulted him to the White House.

“Here’s my assessment of not just the vote in Massachusetts but the mood around the country – the same thing that swept Scott

Brown into office swept me into office,’ Mr. Obama said. ‘People are angry and they are frustrated. Not just because of what’s in the last year or two years, but what’s happened over the last eight years....’

“That, of course, was a way of putting at least some of the blame on former President George W. Bush. For himself, Mr. Obama sided with those who saw a failure of communications rather than a flawed policy agenda.

“If there’s one thing that I regret this year, it’s that we were so busy just getting stuff done and dealing with the immediate crises that were in front of us, that I think we lost some of that sense of speaking directly to the American people about what their core values are and why we have to make sure those institutions are matching up with those values,’ he said. ‘And that I do think is a mistake of mine.’

“The president alluded to his own reputation for emotional distance from voters suffering from a troubled economy. ‘What they have ended up seeing is this feeling of remoteness and detachment where, you know, there’s these technocrats up here, these folks who are making decisions,’ he said.

“That Mr. Obama made these observations to the ABC anchor George Stephanopoulos may have been fitting, given that Mr. Stephanopoulos was a White House adviser to President Clinton when Democrats lost the Congress in 1994. The loss of a single Senate seat in Massachusetts does not quite match the political tectonic shift 15 years ago, but Clinton veterans close to the Obama White House experience an uncomfortable sense of déjà vu.

“That defeat was followed by weeks of debate between some like Mr. Stephanopoulos

Continued on page 2



FOUNDING EDITOR
John Hotson 1930–1996

PUBLISHER–EDITOR
William Krehm
(comerpub@rogers.com)

CARTOONIST
Allen Good

INFORMATION SECRETARY
Herb Wiseman (herbwise@cogeco.ca)

WEBMASTER
John Riddell

Economic Reform (ER)
(ISSN 1187–080X) is published monthly
by COMER Publications
27 Sherbourne Street North, Suite 1
Toronto, Ontario M4W 2T3 Canada
Tel: 416-924-3964, Fax: 416-466-5827
Email: comerpub@rogers.com
Website: www.comer.org

COMER Membership: Annual dues
(includes *ER* on request plus 1 book or
video of your choice): CDN\$50

Economic Reform Subscription only:
One year, 12 monthly issues, in Canada
CDN\$30, Foreign CDN\$40

Send request and payment to:
COMER Publications
27 Sherbourne Street North, Suite 1
Toronto, ON M4W 2T3

ER Back Issues: CDN/US\$4, includes
postage; additional copies same
issue, \$2; additional issue same order,
\$3. Send requests for back issues to
Herb Wiseman, 56 Robinson Street,
Peterborough ON K9H 1E8.

**Copyright © 2010
COMER Publications
All rights reserved**

Permission to reproduce is granted
if accompanied by:
“Copyright © 2010 COMER Publications.
Reproduced by permission of
COMER Publications”

Postmaster, please send address
corrections to:
COMER Publications
27 Sherbourne Street North, Suite 1
Toronto, Ontario M4W 2T3

LAYOUT
Tony Koch (comer@pagecraft.org)
Pagecraft Computer Services

PRINTING AND DISTRIBUTION
Watt Solutions Inc., London

Printed in Canada on recycled paper.



Advice from page 1

ulos who advocated more liberal populism and others like Rahm Emanuel (now Mr. Obama’s White House chief of staff) who favored tacking to the political center. Ultimately, Mr. Clinton moved to the middle on issues like welfare and the deficit and declared ‘the era of big government is over.’

“Clinton took the ’94 results as an affirmation to govern the way he campaigned, to not being the president Congress wanted him to be but to be the president the people had elected him to be,” said Bruce Reed, a Clinton adviser in the centrist camp. Mr. Obama can use this as an opportunity to focus on ‘results, not ideology,’ and make government better, not bigger.

“Indeed administration officials, who did not want to be identified discussing strategy, said Mr. Obama would put more emphasis on issues like deficit reduction and job creation. He already was assembling a bipartisan budget commission and officials acknowledged that some proposals would probably take a back seat now, like a market-based cap on greenhouse gas emissions and liberalized immigration rules.

“Still, Mr. Obama is loath to follow Mr. Clinton’s example too much. His senior adviser, David Axelrod, made clear in media appearances Wednesday that the president would eschew the incremental, small-bore initiatives Mr. Clinton favored – populist language about standing up to banks and insurers.

“But that, too, has its tradeoffs. Mr. Obama has proposed a tax on banks to recover taxpayer money from the bailout, but even some officials who support the policy worry that the rhetoric fuels the image of an anti-business administration at a time when creating jobs is the top priority.

“Mr. Obama has often confronted moments of challenge with a major speech, as he did during a race controversy in the 2008 primaries and again when health care seemed in trouble last fall. With the State of the Union now scheduled for Wednesday, he has another such opportunity. Aides said he will use it to re-frame his record and aspirations.

“When these things hit, it’s like a football team that’s losing – you’ve got to get back to fundamentals – blocking and tackling and running the ball said Dan Bartlett, a top adviser to Mr. Bush, who lost control of the Senate when a Republican bolted from the party in the middle of 2001. ‘They have to hone in, be more disciplined, focus on one or two issues and be relentless in driving

them home.’”

Another article in the same issue of the *Times* (“After GOP Senate Win, Obama Willing to Consider Scaled-Back Health Bill” by Sheryl Gay Stolberg and David M. Herszenhorn) takes a more pessimistic view of Obama’s prospects: “Democrats also wrestled with the implications of losing their 60-vote majority for their wide legislative agenda, including efforts to tighten regulation of the financial system and combat global warming, even as they sensed a new urgency to turn their attention to creating jobs and improving the economy.

“Democratic efforts to pass a bill on energy and global warming were in trouble even before the special election; administration officials and Senate Democratic leaders have been quietly negotiating a scaled-back package focusing more on job-creating technologies than on limits for climate-altering pollution.

“Even the president’s new proposal to tax big banks for the government’s bailout losses, which Republicans privately conceded was a political winner, given widespread anti-Wall Street sentiment, suddenly did not look like such a sure thing. Industry lobbyists noted that Mr. Brown publicly opposed the bank tax and that Mr. Obama had spotlighted that opposition during a campaign in Massachusetts on Sunday – to no avail.

“But the outcome might put further impetus behind efforts to bring down the budget deficit, a topic the White House has addressed more visibly in recent days. On Tuesday, the administration and Congressional Democrats agreed to create a commission to attack the deficit and the national debt.

“At a news conference at the Capitol, the Senate majority leader, Harry Reid of Nevada, sought to minimize health care as compared with jobs and the economy. But he made clear that Democrats did not see a clear path forward.

“‘The election in Massachusetts changes the maths in the Senate,’ Mr. Reid said. But it doesn’t change the fact that people are hurting.’ Pressed about the health care legislation, Mr. Reid said, ‘The problems out there – it’s certainly more than health care.’ Pressed again, he said, ‘No decision has been made.’”

In short the Obama miracle is frittering into incoherence.

Significant, too, is that in neither of these article the *Times* fails to note that it took something like ten months before President Obama got around to mention-

ing the repeal of the *Glass-Steagall* law. That law barred commercial banks from acquiring interests in other “financial pillars” to prevent them from using the cash reserves that brokerages, and insurance and mortgage companies maintain for their own businesses and using these reserves as a basis for their own bank-credit-creation. This process, repeated from one non-banking “financial pillar” to the next, attained skyscraper-heights with elevators ever speeding upward, never downward. It will not escape readers that those three non-banking pillars underlay the original sub-prime mortgage disasters. Since then those first ingredients were joined by umpteen varieties of credit cards, insurance of the non-insurable, and split second – trading with advance peeks at the still unfilled orders available at a price.

I used to track the multiplier of credit creation involved in this process. By 1989 it had approached 400, and I gave up for a good enough reason. To find a denominator for that growth ratio I had to preempt the cash in the tellers’ drawers and the banks’ ATMs. But without such change, the banks would not be able to function. So I stopped my calculations, which had ceased to make sense. They were heading to a de facto infinity for lack of a relevant denominator.

William Krehm

“Investment in Human Capital” in Kiker, B.F. (Ed.) (1971). *Human Capital*, p. 51. Columbia: University of South Carolina press.

President Barack Obama
The White House
Washington DC

Dear Mr. President:

Our only remaining recourse, as well-wishers of your efforts, is to emphasize how close to the edge of a policy precipice you have come.

Today, the large banks, made whole once more with government funds, have resumed their old game, and most respectfully I must say that you appear to be under endless and contradictory pressures to honor your campaign promises. As a Canadian citizen I have no wish to intrude into American politics. If I seem to be doing that, Mr. President, it is only because you aroused great hopes and expectations throughout the world and certainly not least in Canada. To allay any suspicions that I may be crossing an invisible line in this respect, I will confine myself to references to the work of two very great American thinkers in the areas involved, and avoid citing French or Canadian or those of other nationality on this matter that most

decidedly do exist.

After WWII hundreds of economists were sent by Washington to Japan and Germany to examine the extent of the wartime destruction. In 1961, one of these, Theodore Schultz of the University of Chicago, wrote a paper, concluding how “wide of the mark” he and his colleagues had been. This he traced to their having concentrated on the physical destruction of the war, overlooking the importance of the fact that the highly skilled and dedicated human resources of these great trading nations had come through the struggle virtually intact. From this he concluded that investment in human education, and hence in human health and skills, is the most productive investment a country can make. Schultz was feted, decorated with a Bank of Sweden Nobel prize and then completely forgotten. COMER is possibly the only organization that seems to remember his great conclusion – undoubtedly the most important lesson to come out of WWII.

The Crucial Importance of Accrual Accountancy

To appreciate such matters we must refer to the accountancy that The Knights Templar, a Crusading Order, brought back to Europe from the Holy Land. This was a system of double-entry or “accrual accountancy” that the Muslims had developed to control the impiety of lenders charging interest – unless they had legitimized such charges by having shared the risks of the trader to whom they had made a loan. If the lender failed that test – in the event of a recurrence – the penalty in the Muslim after-world was being thrust into endless flames for all eternity.

The order prospered and the spread of accrual accountancy made possible the hazardous voyages that led to the rounding of the Cape of Good Hope and the discovery of the Americas. It also helped finance the wars that led to the consolidation of small principalities throughout Europe into modern nations.

Accrual accountancy enters every investment into the ledgers of government or entrepreneurs twice. The cost of the investment is *amortized*, i.e., paid down according to a preset schedule to its extinction according to the expected period of usefulness of the physical investment. The value of the physical investment is *depreciated* – its price recorded as its market value moves up or down.

This accrual accountancy enabled Venice

to trade with Islamic nations. So well did the Venetian Republic do that it was able to grow wealthy trading with Jews and Muslims whom it sheltered instead of burning.

The other great American thinker who could help us keep, or find, our bearings is an economic historian, Douglass North, who in 1993 was awarded the Nobel prize for economics for a paper on the political consequences of a fundamental shift in the distribution of the national income. He showed that the latter can undermine the dominant political alliances based on the previous income distribution. The end of the statutory reserves had supplemented the manipulation of interest rates to keep prices level. These reserves had required the banks to deposit a portion of the lending they did with the central bank on such deposits and on that deposit they were paid no interest. To offset excessive lending, the rate of the statutory reserve could be increased to reduce the multiple of its reserves remaining for the banks to lend out. The end of the statutory reserves put our chartered banks in the direct line of succession of our ancestral monarchs in the creation of money. It allotted power to banks beyond anything decided at the ballot box.

This has an immense relevance to the problems that you are wrestling with, and hence I will pursue the matter a bit farther. The Conservative regime headed by Brian Mulroney in Canada during the 1970s was too servile to the banks even in the eyes of its own parliamentary caucus, and that led to the end of influence of his historic party. Something similar may be underway with the Liberal party in Canada today. Likewise, the decline of the Tory party in the United Kingdom by the time Margaret Thatcher had had her way with it. And the end of the influence the Partido Revolucionario Institucional in Mexico after the ultra-corrupt Salinas government even witnessed a revival of the old Mexican system of civil war and the assassination of high officials of the parties who have outlived their time.

The program of renewed social promise that you espoused before your election, by the doctrine of Douglass North, entailed a drastic redistribution of the nation’s revenues, and hence would require new political personnel and structures to be realized. You, however, have chosen high officials of the old banking bureaucracy as your guides and “technicians.” The work of Douglass North could and should have warned that this could not possibly make sense. You can still save the great legacy that you offered

your nation and the world by undoing that mis-step.

One of the great achievements of US statesmanship in our age was the introduction of accrual accountancy covering the

Correspondence

Hi, Richard [Priestman]:

No problem – feel free to forward my messages/statements to Bill Krehm – I greatly respect his free-ranging intellect, and ability to “connect-dots” that are seemingly very distant from each other.

And I look forward to reading more of your articles and letters in both *ER* and the CCPA's *Monitor*.

Best regards, Bob Mathews

Hello, Bob Matthews:

Thank you for your encouraging letter and thanks to Ed Finn for encouraging more coverage of monetary issues. Do you mind if I forward your responses to Bill Krehm? I'm sure he'd like to hear that you have been reading *ER* for the past 15 years.

Regarding being curious about why I did not answer the questions: “Who is running this ship; who is pulling the strings? Why do political leaders appear to be afraid to even talk about using the Bank to finance public debt? Why aren't more economists talking about it? What are they afraid of? Why aren't unions demanding that the Bank be used to finance massive public infrastructure development and investment in education, health and social services?”

I would only be surmising if I attempted to answer the questions. It is up to political leaders, economists, unions, heads of social action groups and community organizations to explain their position. Perhaps you could write to some of these people and ask them to explain? If enough did this, we might see some significant change.

Richard Priestman

Dear Mr. Priestman:

As you can read below, I got your email address from Ed Finn at the CCPA. Also, I have been a COMER *ER* subscriber for almost 15 years now (and an occasional donation), and have actually read almost every issue.

Thanks so much for your excellent October 2009 article in CCPA's *Monitor* on the proper use of the Bank of Canada – very purposeful, clear, well-thought-out,

US government's physical investments in 1991-3 by President Clinton. Prior to that, governments had carefully “amortized” their investment in physical capital according to a preset schedule roughly based on the

concise.

Regarding my December 13 comments to Ed Finn below, I suspect you were/are one of the people requesting CCPA *Monitor* coverage of monetary issues in a meaningful way, which since very recently we now have – thanks for your persistence on that. I, too, had been very disappointed by the CCPA's refusal to effectively cover monetary issues for several years in the middle of the 2000s.

Question: re your October 2009 article, page 42 top-right: “We have to ask, who is running this ship; who is pulling the strings? Why? Why? What? Why?” Is the answer to those questions contained in the 1st paragraph of same article: “Broadly speaking, a division exists.” But even if that's so, I'm curious why you did not answer those questions more specifically?

Thanks and best regards,

Bob Mathews

Hi, Bob [Mathews]:

Thanks for your complimentary email on our recent monetary policy articles in the CCPA *Monitor*. I'll ask our layout specialist, Susan Purtell, to send you a pdf of the Ford/Edison interviews, which you're free to send to anyone you wish.

With your permission, I'd like to run a shortened version of your email as a letter to the editor (Memos from Our Members).

Best wishes for the holiday season.

Cheers,

Ed Finn

Hi, Ed [Finn]:

Thanks for, once again, publishing articles by COMER people/associates – this is a *major* upgrade to the *Monitor*, in my opinion, from “best” to “optimized” newsletter! It was a CCPA *Monitor* article, back in the mid-1990s that first introduced me to COMER/Bill Krehm – I have been subscribing ever since to their *ER* newsletter. Reading all the recent economic crisis stuff, over the past year in the *Monitor*, I have really felt the absence of monetary analysis – until now.

Bob Mathews

likely usefulness of the investment. But on the other side of the ledger they had written off the actual physical assets in a single year. The resulting fictitious debt served to drive up interest rates, which, of course, was a bonanza supposedly required to fight a deficit that was really not there. That also made it possible to sell government assets to well-connected investors for a tiny fraction of their real value.

We note with shock and sadness that you should be promising to address a “deficit” that is wholly due to bad bookkeeping. To handle such a crisis, President Clinton in the early 1990s introduced accrual accountancy as far as physical capital was concerned, coming up with an unrecognized \$1.5 trillion dollars. That forestalled a major world financial crisis, and fed the economic revival that finally brought on the technocratic bust of the late 1990s. Unfortunately, the \$1.5 trillion dollars of assets that had been “discovered” was called “savings” to hide what was actually being done. But “savings” implies cash or near-cash assets and the government assets in question consisted of highways, century-old bridges and roads, and even raw land.

What was left undone was to apply the great suppressed legacy of Theodore Schultz – undoubtedly the greatest lesson to come out of World War II. Were that recognized in governments' vast investment in human capital as Clinton did in the case of physical capital, it would appear that the deficit said to exist on our governments' books is not really there. For government investment in human capital is not a debt but an investment.

The children of educated parents tend to be easier to educate, healthier and adjust better to the contemporary world. Spending such assets wisely partakes of the character of a reinvestment rather than of a simple investment. Whatever the English town of Stratford-on-Avon may have spent teaching a young Billy Shakespeare the marvels of the English tongue and of the folly of governments is still bringing in revenue to Britain today.

Mr. President, it would amount to a global tragedy if the high hopes that your election aroused should crumble into highly censored bumbling to re-establish a death grip on your great message. For you to have been battered into describing investment in human capital – education, health, creativity – as mere “debt” is a degradation of your mission beyond description. Nobody moving from a town of 20,000 to New York City

is naive enough to expect his living costs to remain the same. How then can governments expect prices to remain flat when all humanity is making just such a move? The population of Greater Mexico City has reached 30 million, and the number of cities of over 5 million people has become like the stars in the firmament. It is a destructive distortion to treat the resulting price rise as

“inflation” to be suppressed by higher interest rates.

You will find further details of COMER’s message at www.comer.org. But I am available to help you pursue this line of reasoning based on the great work of the two great American thinkers. You can track the logic of the above under my name or at the COMER website, but I am available in

complete confidence either in Toronto or Washington to answer your uncertainties on the relevance of these two great American thinkers to the original programs that you have undertaken.

Most respectfully,
William Krehm
Chair, Committee on Monetary and Economic Reform (COMER)

Wind — The First Born of the Heat of the Sun

Wind is created where two areas adjacent to each other progress to be at different temperatures. For example, a lake and ploughed black fields just on the shore. Here on a cloudless spring or summer dawn both areas may very well be at the same temperature with little or no wind. However as the morning progresses the black soil will heat up much faster than the lake water. As a result the air above the black soil will also heat up rapidly. And as the heating continues the hot air will rise decreasing its own density. This allows the heavier air from over the lake to push on to the land simply because its heavier to the area of lighter air and this is wind. A cloud covered area adjacent to a cloudless area over land or ocean will have the same effect. Yes, in all these cases the higher the temperature the greater the temperature difference, therefore the stronger the wind created.

What happens to this system depends not only on its own wind-generating size and capacity but also what is happening in adjacent areas all around it, in buttressing areas and even seemingly as far removed as in and with the jet stream. The combined mass may become a big or even huge system with winds within it that push and/or hold off against oncoming “normal” weather systems. This creates a prolonged hot or cold spell during summer or winter in a place where such stationary air masses were small and short-lived or nonexistent before global warming progressed to where it is today.

A good example of such a heated stationary air mass was the prolonged severe July 09 summer in British Columbia. That massive hot air reached into Western Alberta, the Yukon and Alaska, as well as down into the lower 48. That weather system with strong winds within it was so massive that oncoming “normal” winds could not move it. However, eventually it was pushed out of British Columbia into Alberta and Saskatchewan. There it established similarly

unheard of high temperatures which persisted through later summer. In many places high temperature records were established one day only to be exceeded the next day. That summer in nine counties in Alberta, the drought was declared more severe than in the 1930s dust bowl years. In British Columbia during that very hot dry period, the forest fires fanned by winds were big, very numerous, persistent, highly destructive and very, very costly. On the other hand the pumpkin growing weather was superb. It was “so good” that the pumpkins matured six weeks earlier than normal creating apprehension with the farmers. They wondered if the pumpkins would be mostly rotten when Halloween arrived.

Manitoba gets its precipitation from two directions. It comes from the Pacific pushed by winds over the British Columbia mountains, over Alberta and Saskatchewan then on into Manitoba. Here it collides with much stronger winds from the Gulf of Mexico. From both directions the clouds are bigger and the winds stronger depositing more rain (and snow) in Manitoba over the last several years than was common before noticeable global warming. Manitoba is swamped with unheard of levels of water and mosquitoes.

Seemingly Opposite Effects of Global Warming

Canada’s East Coast gets precipitation from two directions as well. These west to east clouds pushed by strong winds travel over the US Rockies towards the Great Lakes area. Sometimes this mass of clouds travels through Southern Ontario and sometimes just south of the Great Lakes, but in both cases on to the East Coast. Here over the US New England states or just off shore they collide with the now much stronger winds and heavily moisture laden clouds coming up the US East Coast. The winds push this mass on to Nova Scotia, New

Brunswick and Prince Edwards Island and then to Newfoundland and Labrador. This combination labelled a nor-eastern has been increasing in size and strength and it in turn creates a low pressure area in its midst to such a degree that a few years ago the term “weather bomb” was applied as an appropriate description. And since then these bombs are increasing in size and frequency. Now our east coast gets bomb after a bomb after a bomb, in both summer and winter. Both systems delivering moisture to Manitoba and Canada’s East Coast have not changed much in pattern and direction but have increased very noticeably in frequency with moisture carrying and dumping capacity.

In the meanwhile Southern Ontario endured a much cooler 09 summer than normal. This prompted a newscaster (not a weather forecaster) to comment that the summer of ’09 added up to a grand total of seven days in August. However, September weather was back to near “normal” and this prompted a weather forecaster to say, “There, we’ve returned to a normal beautiful September like we forecasted based on the history of past patterns.” They ignored the possibility and probability that this September ’09 weather could have been created by a very changed set of wind patterns.

There was a single statement made on TV that Southern Ontario’s ’09 cool summer was due to the ice in Hudson Bay. This left the question – was Hudson Bay covered with ice longer than usual? Or was it that the winds blowing from Hudson Bay to Southern Ontario were stronger and more prolonged than normal? Either or both could be the result of global warming. Global warming can and does create opposite than expected effects or seemingly opposite than expected effects in many isolated areas for brief periods causing the narrow-visioned amongst us to discount global warming. For example a winter storm coming into Southern Ontario, in past years, could be

at approximately -8°C. Today a comparable storm will be bigger with stronger winds, more moisture and at approximately -6°C due to global warming. The result is hardly noticeable warmer temperature but a lot more snow because the air is warmer and contains more moisture. So the current storms are more severe than previous storms. Since global warming is changing and will continue to change the up-to-now stable weather patterns, we can expect weather diversions like the cool '09 southern Ontario summer and Canada's western province's excessive heat and periodically more snow in winter. A hot summer in Canada's west does not predicate a cold or warm following winter, just like Ontario's very cool summer does not predicate future weather. Such events may be followed by a warm winter or a cold winter, even with heavy snowfall almost worldwide and maybe more ice in Hudson Bay.

Global warming is causing increasingly stronger winds and the resulting climate changes are a world-wide occurrence. So we need to search many other places for such news, not just in Canada, because similar occurrences are happening all over our globe and seldom reported as headlines. Weather stories compete with all other news items and must be sensational to receive any mention. They are falling more and more as "back page" news items. However here are some current outstanding weather happenings supporting the advance of global warming.

- The Mississippi river valley drought which was so severe that all boat traffic stopped along that river. This mighty river that carries so much freight did not have enough water to support even little boats.

- The Mississippi river valley flood that destroyed a lot of crops, farmland and homes.

- The Philippines hit with 4 hurricanes in one month in '09 while the Atlantic hurricane season was quite subdued.

- Haiti hit by four hurricanes in the summer of '08.

- The Southeastern US '09 drought followed by rain so sudden and abundant that a newscaster was prompted to state that Georgia received more water from that one storm than from any single hurricane.

- The 1993 spring heat in Southern Ontario was so strong that in the first half

of April every day the temp rose above 33°C (91°F). The second half of that month was almost the same. This was a dramatic mid-summer heat wave in early spring.

- Winds exceeding hurricane force without the presence of a hurricane.

- The 2003 European heat wave that killed 35,000 people,

- The monsoon winds hitting India and other southeast Asian countries, in some cases, shifted so that areas normally receiving rain were bypassed, or the rain arrived late, thus crops could not be planted, or were destroyed by the excess rain or drought.

- The massive very destructive Quebec 1998 freezing rain episode described as the worst ice storm ever anywhere.

- The 1984 famine in Ethiopia and the massive world wide attention it received then affected approximately 8 million people. That drought area has now expanded to include over 20 million people, so that many journalists are struggling and failing to draw attention to the present much greater disaster. Yes, politicians and wars have increased the plight of these people, but how can we tell if the fighting is not for farmland and food production, making it really just one problem – changed wind patterns and the resulting crop failures.

- A recent snow storm in China's Outer Mongolia province that stopped a passenger train. It was so severe that rescue crews needed 24 hours just to reach the train.

The outstanding Mississippi events, the April '09 southern Ontario heat wave, the Quebec freezing rain and the 1984 Ethiopia events seem distant to us but in the scope of world scale global warming they are very current, almost concurrent. Also current is some new terminology developed and applied to wind like:

- Micro-bursts are now becoming macro-bursts.

- Wind shear is stronger and more frequent. Airplane pilots can tell you all about that.

- A sudden downpour of 10 cm (4 inches) of rain in just 20 minutes becoming common in many places.

- Tornadoes, hurricanes (typhoons), down-bursts, weather bombs, super cells, micro-bursts, macro-bursts and wind shears each a form of wind, are getting bigger, stronger and more frequent.

- Jet stream excursions drastically from expected patterns and the resulting push and "distortion" of weather systems at ground level.

- Climatic imbalances are happening in

many locations around our planet, like high heat in British Columbia and cool temperatures in Southern Ontario at the same time, during the summer of '09.

- Prolonged drought in many places including Australia enduring the worst fires ever.

Futile Search for Past Patterns

Global warming marches on as our leading meteorologists, forecasters, weather observers and reporters keep looking for things to go back to "normal" anxious to base their prognostication on those past patterns and records. They are mostly ignoring global warming and the new climatic patterns developing before their eyes. Yes it is true that we cannot separate the impact of man's mostly unnecessary massive pollution from the ever-changing climate due to climatic cycles. Some of the changes in the wind could be due to a temperature rise in adherence to some obvious or obscure cycle and there are many, many climatic cycles. The 1984 drought, the Quebec ice storm, the 1993 high spring heat in Ontario and the 2009 and other events could be at least partially in adherence to the multi-faceted el Nino cycle, the other part being at least partially due to our pollution. This does not diminish the changes delivered to us to Planet Earth. We know that pollution is wrong, that it is harming everybody and everything in and on this planet. We know it is part of the current global warming, we also know that a great volume of our industrial pollutants can be captured, processed and materials reused, many with some small profit. But world governments are complacent and the big companies want and exploit primarily those businesses that produce big profits. For example, if an industrial plant just dumps byproducts that bring in a small or no profit, that increases the profit of the main products. The dumping can be into the atmosphere, soil, rivers, lakes, retention ponds which eventually leak into our environment or onto ships which then dump it into the ocean, in locations like off the east coast of North Africa. The way we are going is self-destructive and if we continue many scientists and ordinary people will realize this one day, probably when it's too late.

A major problem already facing humanity is food production. It continues to deteriorate because of global warming and changing wind patterns aggravated by genetic food plant engineering which is pushed primarily for profit. It could be that a given area will have several consecutive

RENEW TODAY!
(SEE PAGE 2)

good or very good crop years followed by several very poor crop years. This is very disruptive to the residents who are just surviving during “normal” conditions and this is very difficult to predict because the new changed weather history is very short or nonexistent. There will probably be several such areas on our planet at the same time. Some will be in unison with each other and others in opposition. The key to this problem is that a lot of land currently producing food will become too dry or too wet, too cold or too hot and it is turning that way faster than potential “new” productive land can be identified, developed and used to produce good natural food. These changes are basically unpredictable.

The most outstanding revelation in our

global warming climate dilemma is that so many of our concerned scientists with PhDs and masters degrees failed to realize until just recently that the melting of the arctic ice is more in line with an exponential pattern rather than with a linear one. Isn't it obvious that arctic ice is being melted and washed away by the now warmer gulf stream water from underneath as well as directly by the hotter solar rays from above? We must also add to this equation the relationship of total heat input into the arctic, with the total ice remaining and the fact that the warmer weather actually increases the melting period affecting arctic ice. When you add just these obvious components how can you get a straight line relationship. Just how did they develop the model predicting arctic

ice melting? Yes scientists must focus on the particular problem studied but there always has to be a moment of pause, to take a step back and try to look at the whole picture. This also begs the question, “What other observations are being distorted because our scientists fail to look at the broader picture?” Then there is also the question of the accuracy and scope delivered to us by the news media.

There is a possibility of a little consolation coming to us ordinary people. It is that maybe the rich will learn that they cannot simply buy anything and everything they want and that they will finally have to learn the difference between want and need.

Andrew Dwornik

Retired Instrumentation Engineer

Is Advertising Come-on Reducing Print Media to Mere Allures for Commercial Promotion?

It is for some time now that our minds have been chewing on a particularly stubborn cud. Why at the very time that when the sweep of high finance had brought scandal to the very gates of heaven, are yet more refined techniques of insuring the uninsurable, and peddling what verges on the criminal being devised? The number of internet “hits” is elbowing out the very notion of ideals or principles that can pass more rigid tests than the “money test.” By this, those who end up with ever greater increasing financial might, have a quasi-divine right for ignoring whatever stands in their way.

We have already experienced a shocking instance of the this modern version of “the end justifies the means,” in the split-second brokerage established by the New York stock exchange to in New Jersey and London, England, that for a consideration also provides information of what otherwise unpublicized trading has been underway. That this should have come to pass at the very time that President Obama was being installed to provide a prettier and more just world should have prepared us for even ruder awakenings.

Certainly those who direct these happenings seem confident of what they are up to. Listen to *The Globe and Mail's* take on the future of print media. The implications of this for the printed word and the whole tradition of other standards of good government are simply being gagged out of existence.

Our quotation is from the *G&M's* “Re-

port on Business,” “The Future of The Magazine” by Susan Krasinsky (18/12): “Robert Downey Jr. is on the cover of a magazine, and he is talking to you.

“At least, he is if you've picked up the December issue of *Esquire*, thanks to a technology called ‘augmented reality.’ The reader holds the magazine in front of a webcam. An encoded black-and-white square communicates with software, and the actor leaps from the page with a robust holler. ‘Boo-yah! In your face!’ Mr. Downey Junior then gives you a tour of the issue's extra. This, he says, is ‘easily the most remarkable way to experience a magazine.’

“*Esquire's* editor-in-chief, David Granger, hopes so. ‘Whatever digital philosophy I have, that's it – to use terminology to actually get people excited about things that are in the magazine,’ he says. Without a print copy of *Esquire* and the square icons on its pages, the technology won't come to life.

“Magazines are hardly leaping out at media buyers these days. The industry has been walloped by falling sales. In the first nine months of 2009, magazine ad pages in the US dropped 27 per cent from the same period, last year, and revenues were down 20%, according to the Publishers Information Bureau. The Canadian magazine industry fared slightly better, but ad pages still dropped 21% from January to September of this year, according to Nielsen LNA.

“This decline in ads, which represented about 60% of US magazine revenues in 2007, leaves publishers more reliant on

subscriptions and newsstand sales. But in a climate where many recessionary readers would rather troll the Internet for free than curl up with yet another discretionary expense, magazines have to reckon with the digital age, and make it profitable.

“Last week, five the largest magazine publishers in the US announced they were joining forces to create a ‘digital store-front’ to make it easier for consumers to buy issues of their magazines for download onto laptop computers, smart phones and e-readers. The venture includes Conde Nast, Meredith Corp., News Corp., Time Inc., and Hearst Corp., which publishes *Esquire*.

“It is the latest example of the flurry of experimentation going on in the magazine trade, as publishing companies try to figure out what works and what doesn't. At *Esquire*, Mr. Granger attends meetings every week to discuss the next best thing to bring in readers.

“Yeah, they're gimmicks, Mr. Granger says. But when *Vanity Fair* put Demi Moore naked and pregnant on the cover, that was a gimmick as well. What gimmicks do is they cause people to come and experience your magazine. The last thing I want to do is create a magazine that nobody looks at or reads.

“Magazine readership is far from dead. But circulation numbers tell a discouraging story in the first six months of 2009, of the nearly 600 consumer magazines in US to report such figures, 67% saw their paid circulation drop from the same period

last year, according to the Audit Bureau of Circulations.

“Even the most successful magazines are struggling. Of the top as US titles, 60% per cent were down this year. A similar proportion of top Canadian magazines saw declines.

“‘The market is so much more fragmented,’ says Kaan Yigit, a Toronto-based new media analyst. ‘The internet is this vast sea of free content. What used to be the domain of magazines is already there.’

“In a study just released by Mr. Yigit’s company, Solutions Research Group Inc., less than one in five of the Canadians polled said they would pay for magazine content online. Still, magazines have to go digital, or risk losing their relevance. There are 78% more web-sites in existence now than there were in 2005, according to Magazine Publishers of America.

“‘It’s difficult to find any magazine publisher across North America that would say their print product is the only thing that is really part of their stable,’ says Claude Galipeau, senior vice-president of Rogers Digital Media, part of the media group that publishes 70 magazines, including *Maclean’s*, *Chatelaine*, and *Flare*. It’s no longer just the glossy product à la Anna Wintour.

“Rogers won’t disclose the revenue from its magazine websites, which are all free to access, but it’s unlikely online sales account for much, says Edward Atorino, an analyst with Benchmark Co. in New York. Some magazines have succeeded at charging for online content. But at Meredith Corp., for example, which publishes popular US *Better Homes and Gardens* and *Ladies’ Home Journal*, that revenue ‘pales in comparison with what they get from the magazines,’ he says. The industry faces the same question as most print media. Not ‘Can we go digital,’ but ‘Can we make money doing it?’”

Reeling in Digital Revenue

“Her brown hair is tousled and shiny. Her bee-stung lips are in full pout. And she’s wearing nothing but a leather bustler and heels. For \$3 (US), any presumably dapper *GQ* reader with an iPhone or iPod Touch can have TV *Gossip Girl* star Leighton Meester at his finger-tips – along with the rest of the December issue of the magazine.

“*GQ* launched its iPhone application in November, the first such attempt by publisher Conde Nast to sell a magazine through Apple Inc.’s popular device. When the user holds the device horizontally, it displays an exact replica of the printed product

to flip through – ads included. Because the digital issue is so close to the original, ABC made *GQ* the first consumer magazine to include digital sales in its rate base (the minimum circulation a magazine guarantees to advertisers).

“Advertisers can pay extra for digital features, such as a tag the user taps to get to the product website or to watch a video ad. Out of approximately 180 ad pages in the December *GQ*, more than three quarters included one of these extras.

“Conde Nast’s strategy is for broad digital expansion – with one notable exception. Amazon.com Inc.’s Kindle e-reader, with its white plastic nubbins and its inky screen, is without glamour. That magazine will not appear on the Kindle or the Sony Reader, and neither will any Conde Nast title except the *New Yorker*. No *Detail*, No *Vogue*. No *Vanity Fair* or *Wired*.

“‘There’s no color, and there’s no advertising. We want to have our magazines replicated,’ Mr. Wallace wants every title eventually to have a digital version counted in the rate base.

“The *GQ* app gives Conde Nast an Apple-compatible reader; the company also inked a deal with Adobe Systems Inc., to get *Wired* magazine ready for tablets that run on Windows, Linux and other programs. Mr. Wallace expects such e-reader tablets to come out by late 2010.

“The e-reader offers one option for making the digital magazine pay. Another is a payment site similar to what iTunes did for music that allows readers to buy individual magazines or articles.

“Still many magazines are not counting on a pay model. Instead, they have been aggressive about hiring bloggers and pushing their brands on-line to drive subscriptions and online advertising.

“‘Not only do you have to become a daily, you have to become an hourly or a minutely if you’re going to get the kind of traffic that’s going to make you competitive,’ says Sarah Fulford, editor-in-chief of *Toronto Life*. The magazine maintains a local focus online with restaurant listings, shopping tips and neighborhood guides to attract ‘a huge amount of traffic,’ Ms. Fulford said, which has translated into a 23-per-cent rise in online revenue this year.

“And even though most magazines say their business is depth and insight, not breaking news, gossip rags use their websites to drive juicy celebrity news between issues. When the Tiger Woods scandal broke, *US Weekly* got its hands on the audio of

an alleged voice mail Mr. Woods left for a mistress. The content was reported by major news organizations, which helped promote the title and encourages visits to the *US Weekly* site.

“Magazines are trying to integrate technology, without losing the spirit of what makes them unique – including the heavy emphasis on color photography and design.

“‘I don’t think any other medium has marshaled the forces of art and design to entice people into the experience and keep them there,’ *Esquire’s* David Granger says. ‘It’s missing from any other digital experience. There’s something momentous about magazines.’”

What we are witnessing is the building-up of commercial exploitation of internet technology to the point where content on stage, screen or wherever is only the means to an end that has been proclaimed more sacrosanct. That is not a comforting perspective when the electorate has already lost all control of where and what may keep our world society in functioning condition.

W.K.

Haitians Need jobs!

To: Scott MP Conservative Reid

Machete-wielding, roving bands of young toughs are upset that the aid is not coming quickly enough. They are stealing what they can. Their excuse is that they are desperate.

Giving people something for nothing is very unhealthy. Giving people jobs to do when there is so much to be done is good for their pride.

Yes, care for the sick and wounded now, but getting the people working for themselves is essential.

Bringing justice to the corrupt officials who allowed those buildings to be built that could not withstand an earthquake in an earthquake zone is of primary importance. This disaster will keep repeating itself if the corruption is not stopped.

Giving money is the easy part. Setting up a system that puts the people to work is a little harder but much more rewarding for all concerned.

Please do not donate to any agency until the agency has a plan for getting the people back to work.

Socialists lend a helping hand. They do not deny a people their dignity.

*Hugh Jenney
Stella, Ontario*

Perroux Brought Back to Life

COMER has made great use of works of the late great economist, François Perroux. Our readers may remember our repeated references to his concept of the “dominant revenue.” He held that at every stage of economic development, the income of those in the saddle is treated as a reliable index of the welfare of society as a whole. When the social sector in power changes, so does the dominant revenue – very often with considerable violence. Thus before the steam power was brought into British factories, the dominant revenue had been the income of large landowners in both towns and the countryside, maintained high behind a high-tariff for foodstuffs that drove down living standards of workers ever further.

With the introduction of James Watt’s steam engines, the dominant revenue shifted to the industrialists, since it permitted them full advantage of their pioneering monopoly at home and abroad, while cheap food imports left them with yet greater profit margins.

But the most spectacular instance of Perroux’s dominant revenue came when British factory workers, first due to efforts of philanthropists, but eventually through public schools learned to read. Up to then the economic doctrines of most economists, had been based in one way or another on the theory that the value of a product was determined by the amount of “average” labour that went into its production. However, once the workers became literate, that became a potentially dangerous doctrine. Accordingly, in at least three European capitals, quite independently, the dominant value theory was shifted from the workshop to the fashionable retail galleries, and came to be determined by the amount of enjoyment the customer derived from consuming his purchases.

Spiced up with a bit of misapplied calculus, that is what has led our governments to turn their backs on what we should have learned from history.

But that is only single example of the rich and deliberately buried legacy of François Perroux. In this article I quote some powerful instances of other key insights from a book of his published by Unesco in French in 1981 (p. 29): “The world-wide redistribution of power since the last world war gave rise to chain-effects that call for a revision of the established ways of think-

ing about our economy, society and the relations between nations. The doctrines coming out of Europe and long resented, are bound to be challenged as powerful dogma, while more universal aspirations, long suppressed, are finding their voice.

“For these to be realized, my personal conviction is that it will require radical revision both to our economic theory and even to the instruments of analysis. This brings us to consider anew the nature of humans, of human societies, and their obvious drive to develop. Once this is grasped, you must allow further evolution directed by the successive value changes taking place in the ongoing transition in their conduct and achievement.”

The appeal to further development is taking place when the world’s record in this sense has not provided as much as was expected. If the first decade of development was positive, the second has not achieved its goals: neither in a growth rate of 6%, nor in the amount of public assistance (1% of the global gross product of developed countries for total social assistance and 0.7% for public assistance). Nor have such interventions been effective.

The *new* pattern of “development” claims to be “global,” “integrated,” “endogenous.” But each of these terms has several distinct meanings and comparing them hardly leads to a single interpretation. Moreover, the diversity of interests affected leads to contradictory results.

It is good to note these difficulties before trying to analyze them more closely.

“Global” refers to an overview of the entire human phenomenon and the diversity of the various aspects that will have to be recognized in their various relations, quite beyond specific analyses.

“Endogenous” refers in terms of current mathematics, to variables that make up the equations being dealt with. These differ from the “exogenous” which must be considered given and subjected to a very different logical treatment. However, in the vocabulary of international organizations, the epithet suggests forces and internal resources of a specific nation, which would have to be treated quite differently than for another.

Accordingly starting from very different premises, cannot possibly lead to identical results. The guile of reasoning and of history in international negotiations has led to in-

terpretations quite opposed to one another. Thus world development suffers from the use of econometrics accustomed to its own measurements of growth and of deflation. As for the advocates of development, some in a given group will insist more on external conditions, others on internal ones. When we talk about essential needs, some will become alarmed that we are proposing reconstructing the under-developed world with “gifts,” others, will object that in refusing a legitimate extension of the “gift” economy, we will fail to assign to each human being the means for his survival; they will denounce the destruction of potential energies either by pleading impossibility or by fidelity to an abusive interpretation of liberalism.

On Growth

“Growth is the increase of the dimension of a single unit, usually of the entire nation, expressed roughly by the total product of goods and services during a given period adequately amortized and referring to the number of inhabitants involved. Whereas expansion is considered over a short time span, growth is usually taken over a longer period (say four five-year plans). Such long-term growth is a useful concept, but an obscure one, that owes its success to the convenience – entirely relative and even illusory – of expressing it by a single number. Governments often translate the goal of their economic policy by a growth rate compared to that of other states. That is a comfortable procedure, but leads to entangled thinking.

“Thanks to the statistical work conducted on a world-wide scale by Simon Kuznets, we are informed of the imperfections of such quantitative appraisals of ‘growth.’ They are related both to the statistical material and to the accounting procedures of individual countries.

“Such statistics have been compiled for purposes very different than to study growth rates. They *limit* the descriptive and analytical investigation. It would have been slow and costly to transform these available statistics into useful tools. As it is, we know little about the real worth of Research Development and its effects on education and professional training, and on the changes in the quality of populations and the rates of growth.

“The demand for analytical study is blocked by shortcomings in the national accountancies. For example, the production function of Cobb-Douglas ($P = T K$) relates the quantities of two factors assumed

homogenous (labour (T) and capital (K)), quite apart from completely ignoring the 40% to 60% of the income of developed countries that cannot be attributed to either capital or labour. And that should still not be confused with the technical progress that involves the best allocation of resources, the higher quality of factors, technical education and the various forms of innovation.

“To attempt to evaluate of the influence one sector (I) over another (II), you would have to consider two distinct functions.

“Not everything referred to as ‘national’ has to do with decisions made by the ‘national’ players. Today the expansion of direct investments, the transnational corporations and the transfer of techniques along with their specialized personnel creates a massive dimension of difference when a developed country and one in the process of being developed. come into contact. All this escapes the attention of the current evaluation of the economic influence of one country on another...

“Then there still remains the question of growth for what purpose? And for whom? Is it in the interest for certain members of the community, or for the entire community? How can we answer such questions when we are confined to influences that have been put together as though they were exactly identical?”

Pareto's Pure and Static Economics Make People Superfluous

“Nobody is unaware that the growth of global production may actually tend to impoverish many societies or the world population as such – something that should be summed up as ‘human amortization.’ In this way a specialty that we might call the ‘mechanics’ of growth – corresponding to the mechanics of general equilibrium of Walras-Pareto takes over.

“V. Pareto, in his *pure and static* economics constructs indifference curves between two types of commodities (or between a commodity and a currency). Reference to a person or to people thus becomes superfluous. There is no way of appraising the results of such an approach...

“In countries still in the process of development, admitting the very existence and assuming the usefulness of this system of *mechanics* has to be still more damaging than for countries of advanced capitalism. Developing countries are living proof that what is needed is not a misleading system of mechanics that pastes over irrelevant figures a self-balancing illusion, but the means of

actually raising the quality of life.

“Development assumes some activity of humans involving the exchange not only of goods and services, but *by the exchange of information and symbols.*

“On an economic level this can take place on three different levels.

“A. *Articulating the relationship of the parties involved in its entirety.* These parties are structured sub-assemblies: branches, industries, regions. Each sub-assembly has a specific dimension and place in the specified networks of price, of transfers of goods to physical structure – the significance and value of which cannot be identified with mere physical support. These networks rest on a basis of material and intellectual transfers originating with the organizing group.

B. *The action and reaction of the sectors amongst themselves,* direct or indirect, consist of a dialectic of structure. In systems terminology, such actions and the feedbacks responding to them is called a ‘regulation.’ It is the officials, those with the power and initiative who originate such operations, though they do not necessarily respect the original purposes of the relationships, and may in fact even breach them. Economic structuring can thus get entangled with mental and social groupings. And, of course, there are reciprocal interactions.

“C. Human resources, in all forms, have some possibility of gaining effectiveness through such evolving structuring. The economic and social apparatus, becoming more influential and complex produces economic and intellectual results of greater reach and refinement. To attain these, growing input by the individual into the apparatus and vice versa are required, in a cumulative process.

“The counter-proof of the previous description can be observed in countries in the process of development with any of the following features:

“A. The faulty articulation of the parts within the entire structure. The communication network is inadequate and overloaded to the point of failing to reach certain regions. Markets are thus severely localized. Excluded are tribes, races, speaking distinct languages. The coastal economy may be shut off from the interior. Economies may develop side by side without managing to connect.

“B. Contact between such economies and the developed economies can then exist in a state of inequality and asymmetry, that can be lessened only through great effort. The less developed economies end up dominated by the developed ones. This will affect the terms on which the underde-

veloped areas will be required to exchange merchandise, services, and information with the more developed areas.

“C. The waste of human resources. Physical misery is likely to result in a higher death rate among a significant part of the isolated population before it has made a contribution to less accessible parts of society.

“The basic feature of any development policy – must consist in:

“1. Favoring the dynamics of development which, however, is still only a aspect of the human potential for development in all fields – the quality of life, technical progress, invention and innovation, the constant renovation of human institutions, whether these affect the family or the unity of norms of production and of institutions such as those having to do with property, policing of the market, and rules governing the distribution of society's wealth;

“2. Organizing the means of communication both of economic and informational value.”

Such positions along with the social results were adopted clearly and without ambiguity by the French Schools some thirty years ago. It is reassuring to see them essentially adopted by international organizations such as the ONU and Unesco in first-class international documents: “In the RIO report (‘Reshaping International Order’), you will find in very explicit terms, the distinction between growth and development, between harmonized growth and growth balanced more less spontaneously. One will find, too, the analysis of structures, of inequalities and the domination of international exchanges. The phenomena of power are considered and the inadequate coverage of the cost of the human state (the ‘cost of man,’ if you wish). For the human resource is celebrated as the ‘resource of all resources.’ Can one dare hope that the official economy is ready to adopt what has long since been condemned as a dangerous deviation?”

This was written and published by Unesco, in the dying days of hopes aroused by new era that for a couple of decades followed the Allied victory in WWII. François Perroux who had been one of the outstanding spirits among French, and indeed international economists, was being published not only by Unesco, but by other French and international organizations. I brought him to a meeting at the University of Waterloo organized by John Hotson. In France, economists were tracking down and reassessing every opening promising to bring in a better world.

William Krehm

Could Our Dogs be Trying to Save Us by Force of Example?

At a time when more and more of what shapes our world seems to depend on the commercial exploitation of the internet, could it be that our devoted dogs are trying to remind us that of some more basic needs of common humanity? We quote from *The Toronto Star* (10/01, "Best Friends" by Mary Ormsby): "The family dog is more family than you think.

"When Angel, a golden retriever, attacked a wild cougar who'd been stalking her young master in British Columbia, she wasn't just acting on primal animal instinct – in her mind, she likely felt that she was protecting a sibling, experts say.

"The reason dogs are willing to put themselves in jeopardy is because it's a family affair,' said Stanley Coren, as University of British Columbia psychology professor and author of *Why Does My Dog Act that Way?*

"What you have to recognize is the number of times dogs tend to rescue people or help them to safety every year is very, very large and the vast majority are not reported.

"One that was reported around the world was Angel's courage.

"Last weekend, 11-year-old Austin Forman was collecting firewood about 5.30 p.m. outside his family's Boston Bar, BC, home in the Fraser Valley. His 18-month-old dog began barking as Austin pushed the log-filled wheelbarrow back to the house. He said he was almost at the door when, horrified, he saw Angel intercept a charging cougar.

"As the animals fought, rolling under the porch, and with Austin safely inside, his mother called 911. RCMP Const. Chad Gravelle – who was less than a kilometer away – raced over in his cruiser then ran to the back of the house. Flashlight in one hand, gun in the other, Gravelle looked under the porch at the entwined combatants, the cougar gnawing at Angel's bleeding neck.

"Coren said dogs have been bred by humans through domestication to have dual bondings to their own pack and to human families. He's studied more than 1,000 reported cases of canine rescue and grouped them into four categories:

"Alerting the family. It's the most com-

mon act in which the dog barks as an alarm, like when the home filled with smoke. This accounted for about 35% of the cases.

"Finding help. The dog recognizes a problem, seeks another human, then barks and runs in the direction they want the person to follow.

"Physical ones. This is when a dog will grab, push or pull as person to safety or out of harm's way.

"Physical intervention. This is Angel's category, in which a dog risks its life to protect a human. Coren said this is the least frequent (18% of the examples he studied) but the most dramatic in illustrating how strongly dogs are bound to people.

"A sensible dog is not going to take on a cougar, but dogs aren't going to do a risk assessment when sensing peril,' Coren said.

"The cougar weighs almost as much as a dog, but in addition to jaws, it has claws. It is a better killing machine than a dog, which is essentially as running machine. But when a dog goes into that intervention mode, it doesn't seem to make any difference."

Humanity Goes to the Dogs

"Vancouver veterinarian Michael Goldberg said properly trained dogs are taught 'bite inhibition' skills that prevent it from piercing human skin with their teeth. But when a hazard approaches, which they sniff out with remarkable acumen through noses hundreds of times more sensitive than a human's, they bolt like lightning to fight with their jaws.

"If a dog wanted to bite, the speed and ferocity with which they will attack in certain situations is extremely quick,' Goldberg said. '(Angel was) a gutsy, gutsy dog.'

"Certified dog trainer Caroline Applebee said not only do dogs feel part of a human family, they recognize the different relationships in it.

"The dog will know who knows how to work the can opener, who opens the back door; they figure out who's important for what,' said the McGill grad, who operates her Toronto-based Raising Rover business.

"But with kids, very often, they're almost like siblings or litter mates. I'm not sure it's a question of loyalty, or more like a bond."

It is most portentous that Fido's family concerns and his empathy for his Forman

family should have come up when such functions and responsibilities held by our politicians are rapidly weakening to the point of disappearance.

Thus during the depth of the Great Depression of the 1930s, some 38% of the US banks had shut their doors, by time President Franklin Roosevelt was inaugurated, one of the first things he did was to declare a bank moratorium. It lasted a whole month during which not a bank was open. When they were allowed to reopen their doors, they were not allowed to acquire interests in non-banking "financial pillars."

The reason? A clear one. If the banks acquired an interest in stock brokerages, insurance or mortgage firms, they would scoop up the cash and near reserves needed by such firms for their own business and use it as cash basis for creating their own bank credit.

In this way when the *Glass-Steagall* restrictions were disregarded and eventually repealed, bank-created credit from a mere multiple of 10% of its cash holdings approached a ratio of 400 to one. So long as it was in force, the banks had to deposit with the Federal Reserve in the US a portion of their loan portfolio on an interest-free basis. That gave the central banks an alternative to raising interest rates if the economy seemed overheated. Instead it could raise the statutory reserves that drained off the surplus bank credit into the central bank on an interest-free basis.

The neglect and finally the outright repeal of the statutory reserves left higher interest rates the only means of slowing down the rise of the price level that came to be regarded as always due to just "more inflation."

The great French social historian Fernand Braudel, in his research on the shift of the economy from the countryside to the towns, emphasized that a whole set of new costs and services entered the picture. With the towns taking over, town walls and town fairs that allowed the merchants credits for long periods – often until next year's fair. Prices eventually rose to cover these and other social changes – for example an increasing degree of literacy – to follow the variety of interest rates.

At least two French economists checked the differences in recent rates and reached the conclusion that there was no clear relationship between the rise in the price level and the demand for more financing.

It was at that point that I developed my theory of social lien that held that although

BookStore

Available from COMER Publications
27 Sherbourne Street North, Suite 1
Toronto, ON M4W 2T3

Price EXcludes postage and handling.

Hazel Henderson

- *Building a Win-Win World — Life Beyond Global Warfare*, \$15
- *The United Nations: Policy and Financing Alternatives: Innovative Proposals by Visionary Leaders*, Editors Harlan Cleveland, Hazel Henderson, Inge Kaul, \$10

W.F. Hixson

- *It's Your Money*, \$10

William Krehm

- *Towards a Non-Autistic Economy — A Place at the Table for Society*, \$10
- *Babel's Tower: The Dynamics of Economic Breakdown*, \$10
- *The Bank of Canada: A Power Unto Itself*, \$5
- *Democracies and Tyrannies of the Caribbean*, second English and third Spanish editions available, \$15
- *Meltdown: Money, Debt and the Wealth of Nations — Volume 1*, ER from 1988–1998, \$25
- *Meltdown: Money, Debt and the Wealth of Nations — Volume 2* ER from 1999–2001, \$30
- *Meltdown: Money, Debt and the Wealth of Nations — Volume 3* ER from 2002–2003, \$30
- *Price in a Mixed Economy — Our Record of Disaster*, \$15

COMBO OFFERS:

- One volume of *Meltdown* plus either *The Bank of Canada* or *It's Your Money*, \$35
- One volume of *Meltdown* plus *Democracies* (English or Spanish), *Price in a Mixed Economy*, *Babel's Tower*, *The Bank of Canada* and *Towards a Non-Autistic Economy — A Place at the Table for Society*, \$90

a lack of supply over demand could be the cause of a rise in prices, it was not necessarily so. Very often it could be traced back to the development of urban centers that called for new services essential for urban living. This required greater literacy, fortifications, schools, and universities. Having nothing to do with “inflation” that could be identified through its causes and remedies by raising interest rates.

My manuscript, sent out to 30 economic journals throughout the world, was purchased by the leading French economic journal at the time *La Revue Économique* of May, 1970, and reviewed with praise in the *Economic Journal* of Cambridge University and another half-dozen economic journals throughout the world. Today, *La Revue Économique* no longer exists. The statutory reserves have long been abolished or – in the US weakened to the point of near-irrelevance. Economic theory as taught in most universities almost anywhere in the world identifies all rise in prices with inflation, and recognizes as the sole means of fighting it higher interest rates.

Nothing that might stand in the way of the power of the banks to utilize their control of the sole hard-knuckled tool of high interest rates for keeping prices flat or near flat – identified with “licking inflation.” Our own economic history has been the first victim.

At the end of WWII, Washington sent hundreds upon hundreds of economists to Japan and Germany to assess the damage inflicted by the war and to predict how long it would take for these great trading powers to resume such roles in the future. Sixteen years later one of these Theodore Schultz published a book explaining how wrong they had been, and attributing it by their having concentrated on the physical damage of the war, and ignoring the significance of the high disciplined, and educated personnel having come through the war practically intact. From that he drew a stunningly important conclusion: human capital is the most profitable investment governments can make.

For a few years Schultz and his momentous conclusion were celebrated. He was decorated and applauded. But then completely forgotten. I would like to be contradicted, but I have the impression that nobody but COMER utters his name.

Instead of distinguishing between rising prices due to an excess of demand over supply, and higher prices because the government is spending much more educating and

re-educating the population including the unemployed to equip them for a positive role in our society, yet higher prices per se are identified with inflation, to which the one recognized response has become higher interest rates.

Nor does the great memory-eraser stop there. Investment in human capital by governments has features that makes their very *spending* an investment. The children of educated parents are more easily educated. Moreover, that capital has been prepaid in advance. All that our governments must do is to recognize this in its accountancy.

It was in 1996 that Washington reworked its books to recognize the prepaid physical capital investments of governments. Doing it for the already prepaid but still ignored human capital requires remembering rather than just ignoring. For it was probably the greatest lesson to come out of the Second World War.

Closely connected with that is the importance of bringing in accrual accountancy into the ledgers of our governments. It was a Crusader order – the Knights Templar – who brought it back from Arab lands. It involved keeping track of both the cash or short-term investment in an enterprise and *amortizing* it over the approximate period of usefulness according to a preset schedule, of the physical investment.

The Physical investment in turn is *depreciated* – its value on the books adjusted to the current market value of the investment. The introduction of accrual accountancy made possible the costly exploratory enterprises that led to the Portuguese rounding the Cape of Good Hope to reach India, China and other Asiatic areas. It also made possible the discovery of the Americas and the plunder of gold taken by the Spaniards and Portuguese from the natives, to be relieved of much of it in turn by the British on the high seas.

But all that has been forgotten and bypassed to make a case for not being able to finance the re-education of the unemployed, or the adequate schooling for the young. And this feigned lack of funds in turn is based on a disregard for what had already been recognized by the work and celebration of Ted Schultz.

That brings our proud society in need of a government with as much of a sensitivity with his human family as the faithful dog Guardian Angel shows for his human family. Is that asking too much of our government?

W. Krehm

Managing Growth and Creating an Economy to Serve People

“It is not the economy that determines how much energy we need. It is the availability of energy that determines the kind of economy we can have” (Victor, Peter A. (2008). *Managing without Growth. Slower by Design not Disaster*, p. 33).

“Simple, cheap, concentrated power [coal, oil, gas] lies at the heart of our modern economies” (McKibben, Bill (2007). *The Wealth of Communities and the Durable Future*, p. 15).

McKibben and Victor both move from the topic of peak oil (and peak water, and peak food) to consider what might equally be called “peak” growth. “Of all the defining characteristics of Post-War II capitalism, the centrality of economic growth as the overarching policy objective is perhaps the most important,” Victor concedes, quoting Jonathan Porritt (*Capitalism as if the World Matters*, 2005, p. 45 V p. 191).

But both Victor and McKibben are in challenge mode. Current rates of economic growth in the developed nations, they agree, cannot be sustained in the rest of the world. Victor says, “So as we start to think about managing without growth we must remember that, if the biophysical constraints ... take hold, our economy will change whether we like it or not” (V p. 34). “Do the math,” says McGibben, and the math is impressive, enough, surely, to convince even the most self-blinkered global-warming deniers.

These are admirable books. Both tellingly summarize the evidence that “More Stuff” has not produced more happiness for, particularly, the people of the developed world. Moreover, for developing economies, beyond a certain low income threshold, (one study suggests perhaps a \$10,000 annual income) more stuff will not bring more happiness. Both convincingly make the case that “business (and growth) as usual” cannot be sustained on the planet.

McKibben, challenges the prevailing political and economic orthodoxy that big is efficient and efficient is good. He also takes his shot at conventional economists, quoting English critic Richard Douthwaite: “orthodox economists.... are forced to ignore the possibility that irrationality, prejudice, love, community solidarity, idealism, up-bringing and even enlightened self-interest might help explain the way people behave...

because if they abandoned their twin simplifying assumptions of rationality and pure self-interest, the world would be so complicated they would have nothing to say.” More positively, McKibben supplies many examples of successful community initiatives which do relate to real human behaviour and needs, and also face forward as possible future alternatives to economic growth.

Victor reviews the literature of attempts to devise measures of the human factors, such as the GPI (Genuine Progress Indicator), and the HDI (Human Development Indicator), devised in recent years as alternatives to offset the exclusive use of GDP as the sole measure of human progress. In the same context he does supply the tools of a trained economist, in models for projecting various growth-related future scenarios. One scenario, for example, concludes that: if HIC's (high income countries) manage no-growth GDP and no population increase and continue reduction of energy/GDP and CO₂/energy ratios at 1992-2002 rates, their total emissions will decline by 40% over 50 years (p. 120). His book's aim, he says, quite candidly is “to present a case for rich countries to manage without growth” (p. 123).

Both authors make the proposal, unthinkable to current Canadian policy-makers heading to Copenhagen, but quite reasonable nonetheless, that the developed countries take the big sacrifice, reducing their growth so as to leave room for the poorer countries to grow until they catch up on the well-being scale. “The excess CO₂ in the atmosphere today comes largely from the accumulated CO₂ emissions from past economic growth in the high income countries,” argues Victor, “so, with considerable justification, middle and low income countries expect the high income countries to take the lead in reducing CO₂ emissions” (p. 117). Hard to refute the logic, but, be sure, learned attempts to do so will be made by HIC think tanks and indentured economists.

McKibben and Victor are impressive contributors to the rethink-economic-theory literature. Their books come at a strategic time when the prevailing economic orthodoxy has been discredited and the world brought to economic near-disaster, and when human-induced global warming has finally had to be recognized as an undesir-

able guest who will not go away. McKibben's attack on the long-held assumption that all economic growth is unequivocally a good thing follows three lines: (1) growth as we now create it is producing more inequality than prosperity, more insecurity than progress; (2) we do not have the energy to maintain the growth and cope with the pollution it creates; and (3) growth is no longer making us happy (McK p. 11).

One essential gap in the analysis of both books, however, is what to do with the growth imperative built into our monetary system. Victor ignores the topic entirely. His only reference to money supply is as one of several variables in his mathematical models. He seems to assume at one point (172) that the Bank of Canada regulates the money supply. If only it did fulfill that mandate using all the tools legally at its disposal, we might well have more prosperity and less debt-fed growth in Canada.

McKibben does acknowledge the nub of the monetary problem. In a section on local money systems, he says, “Even the apparently simple question of where money comes from is hard to answer. It's not the government printing press; money really originates when banks make loans. And since they charge interest for those loans, part of the endless-economic-growth model is in place right from the beginnings – without the growth, you can't pay off the interest” (162).

Without the growth, you can't pay off the interest. Call that the “growth imperative.” It trumps all of both authors' proposals for surmounting the coming human catastrophe brought on by resource depletion and global warming.

Though McKibben states the money problem so clearly, he does not seriously address it. His major theme is how to replace with better alternatives the current economic model of “More-is-Good,” which has meant consolidation, centralization, “efficiency” and long distance transportation. As alternatives, he emphasizes local initiatives and community involvement, and goes on to explore such examples as small farm marketing vs. the agro-giants, and local entertainment – music and stage performances – vs. wide corporate electronic distribution of a few well-paid performers (pp. 166-7). On the monetary front, his theme comes out in some exploration of the 4,000 “complementary currencies” around the world, also called LETS (Local Exchange Token Systems). They are not presented, however, as serious competitors for bank-created debt-

money. That is realistic. Only if national and world currencies completely implode, might LETS save a few local communities from a devastating money shortage. Still, it is a good idea in the context of his grassroots alternative to the existing economic system. However, unless the no-growth argument takes into account the growth imperative of our existing national and international debt

money systems, it has no legs. The program must devise a system in which money is largely a medium of exchange and not a commodity to be rented, and explain how to manage the changeover.

This is the nettle which must be grasped. What would be helpful in the debate now is a thoughtful technical study of the steps to displacing a national or international mon-

etary system (or systems), with one which does not have a built-in growth imperative. Without that blueprint, to speculate on what such a system would look like is merely an incitement to biased contradiction. The new monetary architecture, of course is not going to build itself.

So who will grasp the nettle? The very profitable private financial system will not

Difficult Decisions in End-of-life Care

At a time when bankruptcies and cutting down all spending has become a way of life, it is almost inevitable that impassioned debates should arise about medical spending to prolong the lives of the gravely ill. Here once again the shadow of bankruptcy may be being exploited to discourage “unnecessary spending.”

We quote from *The New York Times* (23/12, “Weighing the Medical Costs of End-of-Life Care” by Reed Abelson): “Los Angeles – The Ronald Reagan Medical Center, one of the nation’s most highly regarded academic hospitals, has earned a reputation as a place where doctors will go to virtually any length and expense to try to save a patient’s life.

“If you come into this hospital, we’re not going to let you die,” said Dr. David T. Feinberg, the hospital chief executive.

“Yet that ethos has made the medical center a prime target for critics of the Obama administration who talk about how much money the nation wastes on needless tests and futile procedures. They like to note that UCLA is perennially near the top of widely cited data, compiled by researchers at Dartmouth, ranking medical centers that spend the most on end-of-life care but seem to have no better results than hospitals spending much less.”

Obviously with many in the nation uncertain where their next meal is coming from, there is bound to be a readiness to criticize spending money for those at death’s door.

“Listening to the critics, Dr. J. Thomas Rosenthal, the chief medical officer of the UCLA Health System, says his hospital has started re-examining its high-intensity approach to medicine. But the more UCLA’s doctors study the issue, the more they recognize a difficult truth: it can be hard, sometimes impossible, to know which critically ill patients will benefit and which will not.

“That distinction tends to get lost in the Dartmouth end-of-life analysis, which

considers only the costs of treating patients who have died. Remarkably, it pays no attention to the ones who have survived. It can be hard, sometimes impossible, to know which critically ill patients will benefit and which will not.

“Take the case of Salah Putrus, who at age 71 had a long history of heart failure. After repeated visits to his local hospital near Burbank, CA, Mr. Putrus was referred to UCLA to be evaluated for a heart transplant.

“Some other medical centers might have considered Mr. Putrus too old for the surgery. But UCLA’s attitude was ‘let’s see what we can do for him,’ said his physician there, Dr. Tamara Horwich.

“Indeed, Mr. Putrus recalled, Dr. Horwich and her colleagues ‘did every test.’ They changed his medicines to reduce the amount of water he was retaining. They even removed some teeth that could be a source of infection.

“His condition improved so much that more than six months later, Mr. Putrus has remained out of the hospital and is no longer considered in active need of a transplant.

“Because Dartmouth’s analysis focuses solely on patients who have died, a case like Mr. Putrus’s would not show up in its data. That is why critics say Dartmouth’s approach takes an overly pessimistic view of medicine: if you consider only the patients who die, there is really no way of knowing whether it makes sense to spend more on one case than another.”

That medical people who must have gone through considerable scientific training could overlook a logical blunder of this order must to a considerable extent reflect the nasty distractions resulting from government disregarding expenditure for human capital that must be considered but still is not. We refer to investment in crucial investment already made but disregarded in our governments’ budgeting.

“By contrast, the figure is about \$25,000

at the Mayo Clinic in Rochester, Minn., where doctors closely coordinate care, and are slow to bring in specialists to avoid expensive treatments that offer little or no benefit to a patient.

“One of them costs twice as much as the other, and I can tell you that we have no idea what we’re getting in exchange for the extra \$25,000 a year at UCLA Medical, Peter R. Orszag, the White House budget director and a disciple of the Dartmouth data, has noted. ‘We can no longer afford an overall health care system in which the thought is more is always better, because it’s not.’

“By some estimates, the country could save \$700 billion a year if hospitals like UCLA behaved more like Mayo. High medical bills for Medicare patients’ final year of life account for about a quarter of the program’s total spending.

“Under the House health care legislation pending in Congress, the Institute of Medicine would conduct a study of the regional variations in Medicare spending to try to determine how to reward hospitals like Mayo for providing more cost-effective care. Hospitals identified as high-cost centers might even be penalized, perhaps receiving lower payments from the government. The Senate bill calls only for studies of Medicare spending variations, so it will be up to House-Senate negotiators to resolve the matter in the final legislation.

“That prospect worries Dr. Rosenthal and his UCLA colleagues, who say that unless the distinction can be clearly drawn between excellence and excess in medical care, efforts to cut wasteful spending could be little more than blunt rationing.

“Indeed, UCLA and five other big California medical centers recently published their own research results with a striking conclusion: for heart failure patients, the hospitals that spend the most seem to save the most lives.”

W.K.

volunteer its own demise. Individual consumer or community action and local activists generating LETS, as we have said, can only go so far. There remains government, which can still claim the right to manage the money supply by right of seigniorage. Armed with a well-researched (and popularly comprehensible) program, a government might choose to start changing the monetary structure of its society incrementally. This might be easiest for Canada and the UK because both governments “own” their national banks. Or, faced with a major monetary meltdown of the old system, such as we faced in 2008-2009, a government (or governments), might even undertake a drastic rebuilding on a different foundation, if the blueprint existed.

The research to develop the blueprint could be divided among a band of scholars and researchers. Some particular areas that come to mind:

1. Replacing private creation of the money supply and making banking a public service, financing people- and planet-friendly enterprises. (How about providing home mortgages at cost?)

2. Redefining the public good to replace the current GDP measure of progress.

3. Redirecting the use of labour and resources to the production of goods and services designed with a view to restoring the balance between the destruction and the regeneration of the planet’s natural resources and services (energy, forests, fisheries, water, waste management, consumption, and agri-

cultural land management, for example);

4. Finally, a vast reconstruction of the advertising and propaganda paradigm from their current function of promoting growth, to one of persuading the world’s populations and governments to see the necessity of the new economic earthscape. Specifically, the higher income countries would have to be persuaded to adopt a new version of Franklin Roosevelt’s happy phrase and act seriously to improve the economic health of “the forgotten ‘countries’ at the bottom of the economic pyramid.”

Every great enterprise must begin with an idea. Crises beget ideas. Is the economics establishment up to this one? Probably not, but Victor and McGibben are pointing the way.

Gordon Coggins

Is Bad Accounting Costing the US Its Lead in Higher Physics?

The New York Times (10/12, “With a Mighty Smash, Europe Seizes the Lead in Big Physics” by Dennis Overbye) reports: “Tiny spit fires of energy blossomed under the countryside outside late Tuesday night, heralding the arrival of a new European particle collider as the biggest, baddest physics machine in the world.

“Scientists said that the new Large Hadron Collider, a 17-mile loop beneath the Swiss-French border, had accelerated protons to energies of 1.2 trillion electron volts apiece and then crashed them together, eclipsing a record for collisions held by an American machine, the Tevatron, at the Fermi National Acceleration Laboratory in Illinois.

“Officials at CERN, the European Center for Nuclear Research, which built the collider, said that the collisions lasted just a few minutes as a byproduct of testing, and that the champagne was still on the ice in Geneva. But in conjunction with recent successes, those tiny fireballs displaced American physicists as the leaders in the art of banging subatomic particles together to see what nature is made of.

“The collider first boosted a beam of protons to the new energy record of 1.2 trillion electron volts on November 29 without making collisions; CERN hopes to be having sustained collisions at that energy within a week. In the future, as the collider ramps up to seven trillion electron volts, the deadline for physics will be Geneva, not Batavia, NY, the home of Fermilab.

“That future, physicists say, includes not only the sheen of announcing exotic particles and strange dimensions, but also the ancillary rewards of increased technological competence and innovation that spring from the pursuit of esoteric knowledge. The World Wide Web, lest anyone forget, was invented by particle physicists at CERN. Detectors developed for physics experiments are now used in medical devices like PET scans, and ‘it was the industrial-scale production of superconducting magnets for the Tevatron that made commercial magnetic resonance imagers possible,’ said Young-Kee Kim, deputy director at Fermilab.

“It is all very well to worry about the value of the dollar. But what is the value of the proton?

“‘Particle accelerators and detectors (initially with bold and innovative ideas and technologies) have touched our lives in many ways, and I have no doubt that this will continue,’ wrote Dr. Kim in an e-mail message.

“‘Those spinoffs now will invigorate the careers and labs of Europe, not the US, pointed out Steven Weinberg, a physicist at the University of Texas in Austin, who won the Nobel prize for work that will be tested in the new collider. Americans will work at CERN, but not as leaders,’ he said in an e-mail interview.

“‘There is also a depressing symbolism,’ he added, ‘in the fact that the hottest results in fundamental physics will for decades not be coming from our country.’

“This moment has been inevitable since fall 1993, when Congress canceled a behemoth project in Texas known as the Superconducting Supercollider, after estimated costs rose to \$11 billion. That accelerator, designed at 54 miles and 20 trillion electron volts, would have been working by now and would have had an even greater reach for new physics than Europe’s machine. American physicists have reacted to the Large Hadron Collider with a mixture of excitement, good sportsmanship and wistfulness.”

US Goof on Human Investment Causes Loss of Lead in Physics

“The United States has not exactly been shut out of the action at the new collider, as Dr. Kim pointed out. It contributed \$531 million to the project, and about 1,700 of the 10,000 scientists who work on the giant particle detectors in the collider tunnel are Americans, the largest of any national group. (Italians are next).

“Thanks in part to delays with the CERN collider and other problems that will keep it from performing up to snuff for the next couple of years, she said, Fermilab’s Tevatron is still in the lead in the hunt for one of the collider’s main quarries, the Higgs boson, a particle that is thought to imbue other particles with mass.

“In the meantime, Fermilab is investing \$53 million from the federal stimulus package in a ‘Project X’ to make more intense proton beams, which in turn could be used

to make beams of the strange ghostlike particles called neutrinos. The lab is also going into cosmology. Other physics labs, like Brookhaven on Long Island and the Stanford Linear Accelerator Center, have converted their accelerators into powerful X-ray sources, which can be used to plumb the properties and structures of molecules in work that led to this year's Nobel Prize in chemistry.

"For CERN, the Fermilab-topping collisions will be only the end of the beginning of a 15-year, \$10 billion quest to recreate laws and particles that prevailed just after the Big Bang, when the universe was less than a trillionth of a second old.

"Particle colliders get their magic from Einstein's equation of mass and energy. The more energy that these machines can pack into their little fireballs, in effect the farther back in time they can go and the smaller and smaller things that they can see.

"The first modern accelerator, the cyclotron built by Ernest Lawrence at the University of California, Berkeley, in 1932, was a foot in diameter and boosted protons to just 1.25 million electron volts.

"CERN, a 29-nation consortium, grew from the ashes of World War II and has provided a template for other pan-European organizations like the European Space Agency and the European Southern Observatory. With a budget and dues set by treaty CERN enjoys a long-term stability that is the envy of American labs. For decades, CERN and Fermilab leapfrogged each other building bigger and bigger machines, but the game ended when the supercollider was canceled.

"Despite the lack of competition, CERN's collider has not had a bump-free ride. In 2007 the housing around one magnet exploded during a pressure test, necessitating the removal and redesign of nine 80-foot magnet assemblies. In September 2008, the junction between two magnets vaporized, shutting down the project for a year.

"Testing revealed that the collider is riddled with thousands of defective electrical joints and dozens of underperforming magnets that will keep it from reaching its full potential until an overhaul scheduled for 2011. When it starts doing real physics after the holidays, the collider will be running at half-power.

"The collider was designed to investigate what happens at energies and temperatures so high that the reigning theory of particle physics called the Standard Model breaks down. In effect, the new machine's job is to 'break' the Standard Model and give physi-

cists as glimpse of something deeper and more profound.

"The future of particle physics could depend on whether the Large Hadron Collider finds anything.

"If it yields nothing, in the words of CERN physicist John Ellis, it would mean that theorists have been talking rubbish for the last 35 years. Actually, he used a stronger word."

Not using that word calls for a bit of heroic resistance when you consider that the suppression of the Texas Superconducting Super Collider was could have been avoided had Washington introduced serious accountability into its books and recognized its cost as a capital investment rather than just an "expenditure."

In such accounting the cash required for a government to make an investment is written off according to a schedule predetermined by the likely period of the useful life of the investment. And on the other side of the sheet the current market value of the investment is entered and depreciated to show the current market value of the investment.

It was the introduction of accrual accountability in Europe made possible the financing of the great explorative voyages that led to the discovery of the sea route to Eastern and Southern Asia and the Americas.

It would also provide with governments with the necessary perspective of considering basic scientific research as an investment rather than a deficit that we cannot afford.

It would retrieve some dearly bought lessons from our history – specifically how President Roosevelt pulled the US out of the Great Depression, financed its World War II, and financed the migration of millions of penniless Europeans to the New World.

When F.D. Roosevelt was inaugurated in January 1933, 38% of the banks had already shut their doors, and one of the new president's first acts was to proclaim a bank holiday that lasted a month. At the end of it with *Glass-Steagall* law that had been brought in, commercial banks were obliged to stick to banking, and were forbidden to acquire interests in "non-banking financial pillars" – to wit at the time, brokerages, insurance and mortgage companies. The reason? Such acquisitions would give the banks access to the cash and near-cash reserves that these "other financial pillars" needed for their own business. With this in their hands, the banks would use these cash reserves as capital base for their own credit creation. What resulted was a skyscraper of speculation in which the banks' acquisitions were piled one on

top of the other, served by elevators obliged to move only upward at ever quicker pace. Never, ever downward – for the heights attained and upward speed attained defined their market values, until they shot through the roof in the present economic meltdown. For since that growth was constantly capitalized into further credit-creation, even a slowing down of the process brought on a crash. This in fact happened – repeatedly on an ever disastrous scale.

To accelerate the swindle, sort of off-book roguery was resorted to. Banks put together packaged combinations of portions of sub-prime house mortgages with bits and pieces of sounder investments and sold these. And for greater security for their own hides insured these – with insurance companies – to cover their own risk. What they hoped to be insuring behind the backs of the purchaser of their packages gives you the extent of the swindle.

What is Wrong is Not Just Risky — It's Uninsurable

This part of the program was, of course, unknown to the innocent buyers of such investment packages. But in the excitement of ever greater returns, the banks and our governments lost sight of a detail. Insurance, if the premium is driven high enough, can cover any degree of *risk*. But what it cannot cover is what is not risky but *wrong*. Thus $2 + 2 = 5$ is not *risky* but *wrong*. Insure that and both the insurer and the insured will be ruined. With a flurry of misunderstood infinitesimal calculus, the bank economists who planned these programs felt reassured by their dogma of the "self-balancing market."

Several banks lost heavily in fact when AIG – the great insurance conglomerate that kept its activities off the stock market – did go bankrupt and brought down several banks with it.

These swindles were made possible by the blind confidence in derivatives – dealing not in actual arithmetical figures but in their rates of growth up to infinite degree. In essence what they were applying blindly was the mathematics of the atomic bomb. Notably the subject of derivatives was kept off the programs of discussion at conferences of some of the world's greatest universities. Moreover, as bank greed directed, the derivative market did not operate necessarily through the official stock markets even though the stock brokers were members of these. In recent years the New York Stock Exchange's direct activities has fallen to some 40% of its previous volume. What it

depends upon more and more are the trades in ever tinier fractions shares handled by new ultra-rapid recording techniques. These complete transactions in a tiny fraction of seconds, and often in an officially unrecorded way. Moreover for a special payment it will permit clients an off-record glance of what the still non-transacted bids and offers on given stocks are, so that they can step in and do their trading with some foreknowledge not available to the mass of traders. Mass work is under way in New Jersey and London England in constructing two huge processing centers for the handling of this new ultra-fast trading centers.

Notably this goes on at the very time that the Obama government is supposedly devoting itself to restraining Wall Street. Beyond a doubt, it confirms that technology left to its own resources will determine how and in whose interest the economy is run.

To grasp the tricks that are being played on society in the current economic collapse and the unusual roles being assigned to the very high officials who got the world into its present difficulties. To help us grasp what is afoot in this strange assignment to some of the very high economic officials key roles in the alleged efforts to get the economy operating again, we must for help go to the work of Douglass North, an American economic historian who was awarded a Nobel Prize for Economics on the political consequences of as fundamental shift in the distribution of the national income. He showed that the latter can undermine the dominant political alliances based on the previous income distribution. The end of the statutory reserves put our chartered banks in the direct lines of succession of our ancestral monarchs in the creation of money. That spells power beyond anything decided at the ballot box. That was at once evident in the further deregulation of our banks shortly after their unpublicized bailout in 1993. This empowered them to acquire stock brokerages, insurance and mortgage companies – activities that the *Glass-Steagall* law had forbidden and, indeed, featured in the house-market disaster. In Mexico, the shift of its banking into foreign hands resulted the free trade arrangement with the US and Canada. That even brought back the old Mexican custom of assassinating presidential candidates and even presidents.

In the light of this the choice of Tim Geithner with a high banking background appears under a new light. It appears as a quite brazen effort to frustrate the Douglass North law. That, alongside the takeover of

the new more fragmented and sped – up split-second trading, some of it unrecorded, falls into the same category. However, it hardly enhances the prospect of getting the economy operating to providing jobs and security. And in all this the fact that spending on human capital is not an extravagance, but what was proved by Theodore Schultz in the early 1960s as the most productive investment our government can make. Elsewhere I have told how this was proved to be the most productive experiment that a government can make – the greatest lesson to come out of World War II.

Correspondence

Dear Bill:

I thought I would write back since I'd spoken to you last year by phone.

You had requested I try to arrange for you to speak again at the University of Waterloo. I left messages with two of the profs who had helped me on my major paper since I wanted letters of reference from them anyway. I didn't hear back from them and didn't get a chance to try reaching them again since I had a bad bout of mental illness and was institutionalized later in November. I have given up my plans to get into a PhD program at Tilburg University for the time being.

I had also promised to write an article for COMER, but so far I have not been able to get to that.

I have gotten back to reading COMER.org though and naturally support your efforts at reform.

Paul Hellyer sent me a nice email yesterday with a small request for help finding data. He also outlined what he is up to, some things relating to the G20. This reminded me also that I should write back to you even though at the moment I have not been able to accomplish very much yet in getting involved in the reform movement again myself.

I hope you are doing well, keep up the good work!

Kind regards,
Matt Willems

Hi, Bill:

It was lovely getting in touch with you after so long. I remember visiting your impressive apartment also a long time ago.

Before I get going on my article, I want to introduce a few caveats:

To treat the price rise as just “inflation” as is stubbornly being done, is blinding us to the fact that it is reinvesting *what has already been earned*. We have written about this too frequently to repeat our position in this piece. But to understand the frailties and ambiguities of Obama's course requires that the lessons of our history be heeded. Failing that the prospect is for ongoing economic disasters. While physicists are exploring the origins of matter, our officially dumbed-down economists are perfecting the extirpation of the human race as we know it.

William Krehm

I am planning to enroll in the Banking and Finance Program at the Katholieke Universiteit van Brabant. I hope they have a PhD, I haven't got that far.

I'm looking for a change again in life. I was out of work (besides the volunteer work I was doing) for 5 years after being laid off at ASML back in 2003. Slowly I am regaining my ambition. Not that I didn't enjoy the stories I heard from a very nice old gentleman, Mr. Wanninck, who would be around 93 by now. He had some interesting stories, among others, about being transported to Germany and then sneaking off to the Philips branch in Hamburg since he had worked at Philips in Eindhoven. So he got to continue in a better provided for environment. He had almost completely lost his short term memory though, but we could talk about the past.

So that's why I'm also just writing a bit so you have some reference if you need it yourself.

I studied under John Hotson and Bob Needham. And not all the pie in the sky model builders were that bad. My major paper, based on some work done by Bernanke and Gertler, was handed to me on a silver plate by a certain Tony Wirjanto at U. of W. of course. I would be open to publishing it on the Comer site if there was interest. I did have to explain to Tony the kind of scenario I was looking for to express in the model. It is called An Essay on Credit Markets. Highly mathematical, but still, it may provide insight or display what can be done with all that calculus. And besides, I wouldn't have to write another article from scratch.

The other problem is that Lords of Finance is on back order at the place I do my shopping, Play.com. That search into

personalities of Central Bankers interests me so I thought I might try to put what Ahmed Liaquat writes in my own words and sprinkle a bit of something on top.

I also really want to read *Fools' Gold* by Gillian Tett of the *FT*, and writing a review would be an incentive to actually read it. It is collecting dust at the moment. Too many books!

So I don't want to disappoint you in the time it takes to turn around an article for www.comer.org. I have a lot on my plate these days too, including figuring out relationship issues. But a little poke here or there almost certainly will inspire me.

I really like the contact I have had with you over the years, watching you present etc. And as far as languages go, in most of the 10 languages or so that I dabble in, I only know some of the essentials. Others are a bit better. However, I consider you a far superior wordsmith than I, you even reminded me that Nout Wellink's name could mean something in the vein of "opwelling." My wordplay is perhaps a bit severe.

So Bill, I hope you enjoy the tidbits I send you. I still need that personal contact with people to keep me going on these things myself. I'm not sure which publication you thought you might send me, but I have a whole set of bounded photocopies in honour of John Hotson.

I also do not expect you to write me back in volumes, you still write so many articles for the serial and probably prefer playing piano.

Kind regards,
Matt Willems

Dear Matt:

You know, if you could transmit the degree of freedom of discussion that existed at Waterloo under Hotson and Needham and the toleration of the political authorities of the day. We were able to hold our conferences at the U. of Waterloo. We were invited to Ottawa by the Finance Committee of the Commons, repeated to and listened too.

That changed. Hotson received early retirement that – I am convinced broke his heart – and brought on his early demise. It is the old timers like you and me, that can keep alive what universities are for and have long ceased to be. Just start writing and your recollections with flourish, and I if necessary may add my recollections if they help yours. It is an important trench in our war plan, I know that you can and will be an important help.

All best,
Bill Krehm

While Obama Talks Reining in Financial Gambles, Split-second Derivative Trading is Achieving Outer Space Patterns

It could be taking place on a different planet than the one on which President Obama is finally promising to put a halter on our gambling banks.

The Globe and Mail's "Report on Business" of February tells an incredible tale in "The New Rules. The Most Important Investing Ideas of the Decades. (So far)." "Look," says Sergei Tchtvertnykh, pointing to a flashing spreadsheet on his desktop's screen. "I just made \$82,000 in one second."

The name in Ukrainian is an ordinal referring to the "Fourth" as it might relate to a monarch of more limited powers.

"The co-CEO of the Toronto-based electronic-trading firm Infinium Group isn't exaggerating. A second is now a very long time unit on financial markets, thanks to computer algorithms – trading patterns that reveal undeclared motivations that can be detected by studying the patterns of trades still unmade. Traders can intercept and interpret market data, and buy or sell market securities in response in milliseconds (thousandths of a second) in a world where it took President Obama a good nine ten months of his presidency even to utter the name of the *Glass-Steagall* law that under Roosevelt had put a bridle on the gaming banks.

"Not every second is that successful, of course. On a typical day, Infinium, with offices in Toronto, San Francisco, London and Barbados executes between 500,000 and one million trades of stocks, options, currencies and other financial instruments worldwide. Measured by volume of shares, it is often the largest single trader of major companies listed on the Toronto Stock Exchange.

"The paradox is that Infinium is still very small and very young, with 70-odd employees in its second-floor headquarters in a block of 19th-century buildings near Toronto's historic St. Lawrence market. (The other three offices account for another 40 staff.) Tchtvertnykh and co-CEO Alan Grujic, who are both 42, founded the firm in 2002. Unlike old-style investment dealers, Infinium trades only with its own money, none for clients.

"As a specialist in high-frequency trading,

Infinium, is one of a handful of cutting-edge firms in Canada, alongside the dozens more based in the US and Europe, that have overwhelmed and revolutionized markets over the past few years. By some industry estimates, these hotshot dealers – along with Goldman Sachs and some other established firms that have also jumped into the high-frequency game – now account for about one quarter of daily stock-trading volume in Canada, and as much as 60% south of the border.

"Some strategies used by the high-frequency traders are traditional, such as arbitrage. If, say, Barrick Gold is trading at \$40.04 a share in Toronto and \$40.05 in New York, the high-frequency firm quickly buys in Toronto and sells in New York before the gap closes.

"Such speed and volume is scaring the daylight out of many regulators and traditional investment dealers, who think this wave threatens to swamp the very foundations of financial capitalism. In November, Paul Myners, financial services secretary to the UK Treasury Department told an interviewer that 'the danger is that nobody really seems to think of themselves as owners.' How can management be accountable to investors who change every few seconds?

"High-frequency traders say that what they are doing is very safe and useful. If they buy and sell almost simultaneously at virtually the same price, the risk of massive losses is very tiny. Moreover, they argue that huge benefits accrue to average investors in particular. More liquidity means anyone can get an order filled almost immediately at market price.

"In those days, the Toronto Stock Exchange still had a trading floor, and the New York Stock Exchange (NYSE) accounted for more than 80% of all trading in the US.

"Of course, even Tchtvertnykh and Grujic had little idea of what the future of the markets would be when they got acquainted in 1992. The meeting place was in the CAMI automotive factory in Ingersoll, Ontario. Grulic, who had graduated from the University of Toronto in 1990 with a bachelor's degree in electrical engineering,

was programming and monitoring robots on the plant's assembly line.

"But he decided to go to University of British Columbia for an MBA, and was helping management look for his successor. One candidate was Tchetvertnykh, who had graduated from the Kiev Polytechnic with a degree in cybernetics in 1990, and had come to Canada to enroll in the MBA program at the University of Western Ontario's Richard Ivey School of Business.

"The two hit it off right away. Tchetvertnykh's father was a physicist and his mother an accountant. Grujic was born in Toronto, but his parents were from the former Yugoslavia – his father an electrical engineer who founded his own consulting firm, and his mother a PhD in psychology. But the duo realized that finance was the place to make big money in North America.

"Tchetvertnykh graduated from Western's Ivey School in 1994, and found a job in corporate finance with Credit Suisse First Boston in New York. Grujic also graduated in 1994, but UBC wasn't on Wall Street recruiters' radar screen then, so he opted for a job in bond trading with TD Securities.

"[At the time] markets around the world were on a roll and the tech boom was in full swing; investment banks were experimenting with the new mathematically based trading strategies and starting to deal in more complex options and derivatives.

"Tchetvertnykh specialized in international mergers and acquisitions, which inevitably meant a lot of travel. In 1997, he returned to Ukraine briefly to head Credit Suisse's new banking division in Kiev, before joining Bermuda-based Apollo Fund Management Ltd. in 1998 as director of private equity. In 2000, he jumped to Merrill Lynch, working first in London, then moved back to Toronto in 2001 to establish a technology group.

"Grujic also landed plum international assignments. After training in bond trading in Toronto, TD Securities posted him to London in 1998. The job gave him the chance to trade more elaborate products, such as swaptions which are options that allow parties to exchange a fixed interest rate security or obligation for a variable one. Grujic and his colleagues also developed computer models for bond pricing. Most bond trading was still done over the phone in those days, but models could instantly compare the price of, say, a five-year bond with the prices at several different points at the yield curve (from one to 30 years) and determine if the five-year bond was rich or

cheap. Hob-nobbing was an education, too. 'You learn to have dinner with people who've made a billion dollars,' Grujic says. In 2000, TD moved Grujic to Tokyo, where he traded even more complex options and derivatives, essentially creating new products.

"1998 was also a pivotal year for electronic trading. The US Securities and Exchange Commission gave the green light to online communication networks, also called alternative trading systems (ATS), to become full-fledged stock exchanges. The enfranchisement of Instinet, Island, Archipelago, and Brut meant for NYSE a fast technologically advanced [rivalry]. It allowed just about any sizable trader to place orders directly in the market, rather than route them through investment dealers on the NYSE. Today, only about 25% of all American stock trading goes through the NYSE.

"The other change that opened the door even wider for a geek invasion came in April, 2001, when North American stock exchanges completed the switch from traditional fractional pricing to decimalized pricing. Under fractional pricing the smallest spread between price on a stock (the highest a seller is willing to take) was one 16th of a dollar, or 6.25%. Capturing the spread (\$125 on even a small retail order of 2,000 shares) had been a reliable source of profit for traditional brokerage firms for decades, and for a mini-invasion of individual day-traders in the 1990s. But with the decimalization, bid-ask spreads shrank to less than a penny overnight.

"Decimalization was a serendipitous development for Tchetvertnykh and Grujic. Through all their early postings, the two men stayed in touch, and talked a lot about launching their own business together someday. That someday came in 2001 when Merrill Lynch sold almost all of its operations in Canada to CIBC. Tchetvertnykh didn't want to work for a bank, and Grujic was getting restless in Tokyo. As well, both men had recently married, and they didn't want to raise families in hectic international financial capitals. 'It was inevitable, so why put it off?' says Grujic of their collaboration.

"The duo still weren't sure exactly what their business would be, however. At first they thought of opening a boutique brokerage firm, like Toronto-based GMP Capital, but 'the proprietary-trading business model became the most exciting,' says Grujic. Although the advent of wafer-thin spreads knocked traditional brokerages for a loop, and wiped out day traders, Tchetvertnykh and Grujic figured here were lucrative niches in the market for new proprietary trad-

ing firms. 'Banks cannot compete with an innovative, nimble company,' says Tchetvertnykh.

"So, in 2002, he and Grujic founded Infinium with \$1 million of their own money. Off-the-shelf computer hardware was readily available. The hard part was writing the software from scratch – even for two engineers with a decade of high-level experience in global markets.

"First, there were automated trading strategies to consider. A lot of them were based on traditional arbitrage between markets, as well as increasingly sophisticated trend-based arbitrage – buying or selling if the prices of a security had drifted too far below a long-term trend line. There's also arbitrage between the prices of stocks and the prices of futures, options, swaps, index funds and other derivatives based on them, which may take a while to adjust when prices move.

"High-frequency traders have started to take over the role of the traditional market makers as well. In the days of stock exchange trading floors, market makers were individual traders designated by industry regulatory organizations to provide liquidity and maintain an orderly market in specified stocks – if trading sagged and buyers or sellers couldn't find someone who'd accept their order, the market maker was supposed to buy or sell near the latest bid-or-ask prices.

"In the modern variation, exchanges and ATSs charge so-called liquidity takers a fee, and give liquidity providers a rebate. In practice this means that a high-frequency firm might continuously offer to buy or sell a stock. If, say a traditional brokerage comes in and accepts that offer, it pays a fee. The fees and rebates are tiny – say, 0.003 cents a share for liquidity takers and a rebate of 0.002 cents per share to the liquidity provider (which means the exchange covers its costs). But if you can collect rebates on a few million shares a day, they do add up. The same goes for capturing bid-ask spreads, which have been whittled down to fractions of a cent on major stocks, but still can be realized.

"Gaming, in the mathematical sense, is also very much a part of high-frequency trading. Other traders, whether they're human beings or algorithms, often trade in patterns. Spot the pattern, and you might be able to trade against them. Of course, everyone in the market is trying to do that, which means continual updates to software are part of the game. Infinium runs about a dozen broad strategies at any given time. 'Some might last a week, some might last a

year,' says Tchetvernykh. 'Our budget is \$3 million this year.'

"Before Infinium could get its systems running, Tchetvernykh and Grujic had to spend months programming in risk controls, record-keeping functions and tests for compliance with regulations. On any one trade, says Tchetvernykh, there are dozens of automatic checks within about 20 microseconds.

"Speed is so essential that high-frequency trading firms and traditional investment dealers have located computer servers a few feet away from stock exchange trading platforms: one near Alpha Trading Systems Ltd.'s platform in Toronto, and the other near a TSX platform in the suburb of Markham (the exchange has another platform downtown). Transmission time for an order: less than a millisecond.

"Yet Tchetvernykh says 'human control' also remains a key component. There are some patterns and anomalies that only savvy traders who monitor the algorithms can spot. One Infinium trader in Toronto who specializes in European stocks and currencies watches 22 computer screens throughout her working day.

"At the beginning, however, Infinium was basically just Tchetvernykh and Grujic and two other staffers. In 2003, however, the firm's first full year of operations, revenue totaled just \$818,696. Because the US market is so much bigger and more advanced than Canada's, the duo figures they had to expand the business there as soon as possible. Infinium opened a US subsidiary in 2005, and Grujic moved to Marin County, north of Silicon Valley. Good call. Revenue climbed to \$13 million that year,

"Tchetvernykh says revenue for 2009 will likely reach \$100 million. That's still small. The full-service investment banking divisions of several Big Five Canadian banks each generate more than one billion dollars a year in revenue. And privately owned Geteo I.I.C., one of the largest US high-frequency firms, employs more than 200 traders, and earned an estimated profit of \$400 million (US) in 2008.

"Grujic and Tchetvernykh say Infinium's next step is further geographic expansion. The London office, which opened in 2008, gives them a beachhead in Europe, and they're looking at other countries throughout the world.

"Yet they aren't certain how big Infinium will get. Grujic says that '2,000 employees seems to be a natural place we could go,' Tchetvernykh says he'd at least consider go-

ing public. 'It would give us equity to bring in the best people.' He'd also consider selling out – he points out that Citigroup paid \$680 million (US) for South-Carolina-based Automated Trading Desk LLC in 2007.

"Meanwhile, regulators and traditional investment dealers are struggling to assess what high-frequency traders already have done. At a conference in late October, SEC chairman Mary Schapiro said that new rules may be needed 'to address new types of market professionals whose activities may not be sufficiently regulated.'

"High-frequency traders argue that regulators first have to find problems, and so far, there don't appear to be any. In a study of high-frequency trading in Canada published in September, New York-based Investment Technology Group Inc. made the same argument and share-price volatility in Canadian markets is down over the past two years, and order depth – which measures share availability – is up.

"Even bank-owned dealers agree with some of that. In October CIBC published a white paper by six of its senior traders on high-frequency trading and the TSX's rebate program which was introduced in 2008. Much of its impact has been 'faster-moving quotes, more bids and offers, more volume, and in some cases, frustration.' The CIBC traders also say that they believe high-frequency traders 'are not predatory, simply very fast and very good at what they do.'

"But critics like Thomas Caldwell say that overall numbers don't tell the whole story. They question whether high-frequency traders are providing 'real liquidity' to the market. In fact, argues Caldwell, high-frequency traders are also removing it. How? Large institutional investors know that if they start trying to push through a large block of shares at a certain price – even if the block is broken into many small trades on several ATSs and markets – they can trigger a flood of high-frequency orders that immediately move market prices to the institution's disadvantage. (This is the source of the 'frustration' mentioned in the paper by the CIBC traders.)

"That's why institutions have flocked to so-called dark pools operated by ATSs such as Instinet, and individual dealers like Goldman Sachs. The pools allow traders to offer prices without publicly revealing their identities and tipping their hand. Caldwell says the best markets for all participants and for regulators are 'central, open and transparent auction markets,' like the old stock exchanges. But the dark pools mean all the

big orders are now sitting somewhere else.

"Risk is also a complex question. The high-frequency traders' supercharged computers haven't blown up markets – yet – but Caldwell says they have blown up individual stocks. Exhibit A: the investment bank Bear, Stearns, which folded after its share price plummeted in March 2008, even though then-SEC chairman Christopher Cox assured the markets that the firm was sound. 'Bear Stearns did not commit suicide,' says Caldwell. 'It was murdered.'

"Gripes like Caldwell's make Grujic chuckle a bit. 'When you listen to vested interest complaining about something, it must be good.'"

But there are other areas of doubts and questionings that ATSs by-pass. At the very time that President Obama finally got around to mentioning the *Glass-Steagall* legislation that served F.D. Roosevelt to get the commercial banks' sticky hands off the cash reserves that "non-banking financial pillars" like brokerages, insurance and mortgage companies needed for their own businesses, ATS were concentrating on skimming profits from wildly geared up financial transactions with no curiosity about how those profits were made. Was it by peddling sub-prime collateralized mortgage debt? Or selling stolen wares, or whatever? So long as it was a transaction of ATS's. Or was it an insurance company like AIG insuring not just what was "risky" but what was "wrong." For example $2 + 2 = 5$ is not *risky*, but *wrong*. Insure what is plain *wrong* and both the insurer and/or the insured will go bust. But for the new morality of ATS – taking piled up commissions on transactions it makes no difference. And the hundreds of millions of dollars that the ATS manages to collect from such transactions just means that accumulated profits on questionable transactions must leave the real economy in ever more perilous exposure. There is certainly no way of working the socially vital recognition of human investment – the most important lesson to come out of World War II – into this gaming confined to any trading commissions. no matter what their origin and wherever they might be directing society. Profits levied on unquestioned transactions can only hasten the day of collapse and social destruction that gave rise to the all-important volume of transactions. That the pertinent transactions have not even been questioned from this angle provides the measure of the trouble that the world is in.

W.K.