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CONTENTS

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In the Whole Universe, There Is Only One Equivalent of Life — Let's Take Care of It

It is fascinating to note that a series of Greek philosophers, from about 600 BCE, dismissed mythological explanations for the origin of the universe and of life. They basically invented materialism, and approach that tried (and still tries) to find a unified concept of matter from which the whole universe is built. For example, Anasimander of Miletus hypothesized that the cosmos originated from a primordial substance that he called *apeiron* (meaning indefinite).

This model is reminiscent of another Hindu interpretation, in which everything originated from *prakrit*, a kind o f primitive matter, containing the essence of all things to come. Some other ancient Greek attempts to explain the origin of life had strange premises (such as Empedocles' idea that life forms first originated from haphazard combinations of preformed organs), but the view of one of these philosopher-scientists, Democritus, still resonates today. According to him, the universe consists of atoms and void moreover everything existing in the universe is the fruit of chance and necessity. Presumably, Democritus meant that the universe never was a preordained thing (it thus came about by chance). Presumably.

Many scientists think today that this is indeed the case. Democritus may well be the greatest visionary of all time.

The scientific method is the descendant of the type of thinking that the ancient Greeks invented. Like them, modern science takes a materialist view of nature and does not rely on magical, mystical, mythological, or theistic principles. That is not to say that all scientists are virulent atheists. Indeed, many have been and are deeply religious. Simply as the great French mathematician Laplace once told Napoleon Bonaparte, "Sire, God is a hypothesis I do not need."

This being so, it is cheeky to treat Greece's great legacy as a mere stock market item. The heritage enriched by revelation in Greece's tremendously impressive reconstruction of the physical locale of humanity's cultural cradle enriches humanity at large. Greece's most impressive transformation of the physical cradle of much the common heritage of all humanity rather than a matter of stock market appraisal. It is months since COMER tried making the point and argued for a recognition of the Greek budget represents the cost of saving the site of this immense cultural heritage of all humanity.

We also emphasized the obvious solution: have the Greek government make more available to non-Greeks throughout the world access to the tremendous physical reminders of this common heritage. How? Simply by offering access to it to non-Greeks at drastically cut-rate prices – say, at half present market rates, but payable in strong foreign currencies.

Now that a new government is being put in place, we hope to make a special effort to convince the new regime to rethink the entire problem. COMER offered the previous Athenian government its help at no cost to it, in explaining and organizing this necessary vision shift on Greek finances. We will renew that offer to the new regime as soon as it acquires its sense of the necessary.

Sitzfleisch.

William Krehm

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An Evolutionary Dead-end

The widespread reality that humanity has come to live in money-dominated societies is the consequence of its evolutionary past. There is now mounting evidence, including the ambience driving the "occupy" movements, that this path is but a dead-end, a failed evolutionary branch from which we need to extricate ourselves. The reason we are yet unable to do so is because first, we overwhelmingly accept a philosophic error of the first magnitude, and second, because we are ignorant of three basic economic facts or their implications.

We homo sapiens are an evolving species. In the past, our evolutionary progress was driven by individual genetic mutations that enhanced our ability to survive. Today this is no longer true. Each of us now depends primarily for our survival needs and wellbeing on the anonymous labors, past and present, of enormous numbers of our fellow beings. We, with obvious exceptions, make a contribution through employment in the workplace and satisfy our needs and wants through the purchase mechanism. Evolutionary progress is now determined by how well we organize our societies and our economies to maximize the survival and wellbeing opportunities of our citizens. The primary vehicle today for the production and distribution of goods and services in the economy are groupings of individuals called "businesses." So clearly the purpose of any business in an evolutionary sense is to provide ever improving quality products at best prices to maximize the purchase opportunities that determine the welfare of our species. The by-product of success earns the business the wherewithal to continue its endeavors.

Despite this obvious philosophic reality, we overwhelmingly accept that the purpose of a business is to make money. This is the pervasive philosophic error that accounts for much of the economic malaise that we periodically experience.

Our economy functions not in accordance with any laws of nature, but as a result of how we humans choose to organize its operations. Today we do so largely oblivious to three economic facts.

First is the fact that there is a necessary connection between a nation's GNP and the money supply needed to support that level of activity. This relationship is intuitively apparent and has been demonstrated over the past 150 years as an inevitable correlation whereby GNP increases are always attended by a comparable money supply increase, and GNP contractions always by a comparable money supply contraction. In other words the goal for the organization of any economy is that the money supply should be controlled as close as possible to that which is necessary to support the maximum feasible productive exchange possible in the society at each moment in time. Obviously that is not anywhere close to the way our economies function.

Second, it is a fact that banks, authorized by the Federal government, create 95% or so of the new money needed to increase the money supply. They do so by creating deposits out of thin air as customer loans in accordance with the rules of the fractional reserve system. This means that the money supply correlates with the total debt of the nation and that when this debt declines through repayment or bankruptcy, so also does the money supply. This tight connection of debt to the money supply is why the economic ups and downs known as the business cycle occur.

Third, although everyone says government spending can only be financed either by taxation or by commercial borrowing, it is a fact that the Federal government has the constitutional authority to itself directly create the increasing amounts of money to meet the needs of the expanding economy. The government can spend into existence these funds, directly or by borrowing from its central bank, in support of government programs. An advantage to creating money in this fashion is that such money is unconnected to commercial debt. It doesn't disappear when debt is reduced. This means that the only way the government can possibly escape from its current servitude to the financial sector is to take back the money creating function. Money that needs to be created anyway to support the economy can be created by the federal government rather than by the financial system. It is the arrogance of ignorance that will proclaim that money needed by a healthy economy and created by government is necessarily inflationary while the same amount of money created by banks is not.

Correcting the philosophic error and exploiting these three economic facts will

Continued on page 7

What do Banks Actually DO? Teach-In for Occupy Toronto

By Jim Stanford, The Progressive Economics Forum, November 6, 2011

What do banks actually DO? Create credit out of thin air. Were Canadian banks bailed-out? Absolutely, to the tune of $200 billion. And they are still protected and subsidized more than any other sector of the economy. What must be done with these banks? Tax them, control them, and ultimately take them back.

Those are the "take-aways" from a short talk on the banking system that I was honoured to give as part of an Occupy Toronto rally last weekend at the corner of King and Bay in downtown Toronto. Several folks have asked for the written version of my speech, which is posted below.

Well, here we are on Bay Street again, amidst all these gleaming towers, and all this luxury, and power, and affluence. And what an amazing community we have formed here.

On behalf of the CAW and the CCPA, let me begin by thanking all of you for what you are doing. What you are building. The political and moral space you have opened up through the Occupy movement these past few weeks.

There's no better place than right here to talk about what's gone so terribly wrong in our society. About the enormous and immoral contrast between what we see here on Bay Street, and what things are like where most Canadians live and work.

You already know that, that's why you're here. All this nonsense I've heard in the last two weeks about the Occupiers being naïve and confused, is so wrong. I have a PhD in economics, and I can assure you that the people in this crowd today know more about economics – more about *real* economics – than all the stock brokers in these tall towers put together.

You know about work. About production. About sharing. And about sustaining.

They stand around throwing darts at the dartboard, to pick the next stock they're going to buy. Proving every day that while government may or may not be able to pick winners, they can't be any worse at it than the stock market is!

Work. Production. Sharing. Sustaining. That's the basis of real economics, the real job of improving living standards and protecting the environment. Not throwing darts. Not rolling dice. Not placing bets.

I often think about what goes on inside these towers. The plush offices, the oak paneling, the fine art on the walls, the private dining areas, the clubs and bars. Not everyone down here works like that, of course. Most of the real work is done by hard-working office workers, who work hard for not much money.

But the ones who call the shots down here, and call the shots for our whole economy, they do very well. Every now and then I get to step inside one of those towers, in the course of my job. Into one of those investment banks. Those private dining areas. Those boardrooms. The meals, the furnishings. And of course the compensation. Immoral, offensive compensation. All of it tax-deductible.

Then I compare all that to the generally shoddy state of public institutions and facilities in this city. Like the rec centre in my neighbourhood, out in Parkdale. Or the public schools where my kids go to school. Underfunded and dingy, to be sure.

Rob Ford said he went to City Hall to stop the gravy train. When I compare public institutions in this city, to these towers here on Bay Street, I know that Rob Ford missed his target by about 3 blocks. He was 3 blocks too far north. Want to stop the gravy train, Rob Ford? A gravy train that's funded with the proceeds of what, ultimately, is just gambling.

Ever since the Occupy movement came to Canada – even before that, actually – there's been an enormous myth propagated that these guys here on Bay Street – the Canadian banks – did nothing wrong. Our banks are strong and safe, they say. They were prudent. And they weren't bailed out. They pat us on the head, and they say: "Go to Wall Street to have your little protest. But don't bother protesting here. Because we didn't do anything wrong." Well that's simply a refutable lie. In the first place, Canadian banks *were* bailed out – and in a big way. Check the record:

At the end of 2008, and the beginning of 2009, Finance Minister Jim Flaherty and other federal officials moved heaven and earth to help Canada's banks. Flaherty implemented a new program called the Extraordinary Financing Framework. Or "EFF" for short. You know, I could think of another meaning for the acronym "EFF." Elitist Friggin' Financiers!

It consisted of many different ways to help the banks – these powerful, prudent banks – during their hour of need.

Buying back mortgages to inject cash into the banks' coffers. Providing huge loans, at near-zero interest rates, from the Bank of Canada, when commercial lenders wouldn't dare. Providing other lines of credit, including in US dollars. And backing the whole thing up with very weird forms of collateral – or sometimes with no collateral at all.

For example, the Bank of Canada was willing to accept asset-backed commercial paper, or ABCP, from the banks to back up some of these emergency loans. Remember the ABCP debacle in Canada? That sophisticated, but highly unstable market totally froze up in Canada, even before the global meltdown. If you owned ABCP as an individual, you couldn't spend it. It was just paper in your pocket. But the banks held ABCP, and they were able to convert it into cold hard cash, courtesy of the Bank of Canada, when they needed it.

In total, various federal agencies offered the banks up to $200 billion in cash and short term ultra-low-interest loans, at a point in time when the banks could not attain this financing from normal commercial sources because of the global crisis. They needed it. They got it. It was a bail-out, pure and simple. It was a smart thing to do. The banks have paid the money back, with interest in some cases. (Not much interest, since the interest rates were near zero.)

So for the banks and their executives to lecture Canadians, and our governments, about the need to be prudent and fiscally responsible and tighten our belts, is the most offensive thing we could possibly hear. If it weren't for Canadian governments and taxpayers, they would quite possibly be out of business. We're in this together. Let's start acting that way!

So the banks *were* bailed out, pure and simple. And moreover, they *continue* to be coddled and protected and subsidized by the state. Our government is indeed a "nanny state," where high finance is concerned.

They are protected against foreign takeovers. Tell me, if we can protect our banks against foreign takeovers, why can't we protect our land, and our resources, and our factories, and our jobs against foreign takeovers? Why is it protectionist to protect people, but not protectionist to protect banks?

They are protected against crises of confidence by an extensive public deposit guarantee system, and a public mortgage insurance program that eliminates most of the risk of their lending.

And they receive enormous subsidies delivered through Canada's distorted tax system. Here's just one example. Capital gains taxation. If you make money by buying and selling an asset, your speculative profit is called a "capital gain." In Canada, you only have to declare *half* your capital gains income on your tax return. It's called "partial inclusion."

If you flip hamburgers in a hot, greasy fast food restaurant all day, you have to declare every penny of your hard-earned income on your tax return. But if you flip stocks and bonds all day in one of these towers, you only declare half. That's immoral. It's inefficient, because it encourages gambling over real production.

Same goes for across-the-board corporate tax cuts. The federal CIT rate has been cut almost in half since 2000, from 29% to 15%. Tell me, have any of you had your tax rates cut in half since 2000? I didn't think so. But these banks have. Those cumulative tax cuts (along with provincial rate cuts) have saved the financial sector over $10 billion per year. Just the new tax cuts that the Harper government implemented since 2006 alone (cutting the federal rate from 21% to 15%), put another $3 billion per year into the pockets of the banks.

Tell me, looking around Canada today, and all the problems we face. Is further enhancing the after-tax profits of the financial industry really the top priority? Really the most important thing for Canada to spend $3 billion on per year? Of course not. But in our society, it's not priority that determines where money is spent. It's power.

So banks are protected and subsidized, and bailed out when needed. But what do banks actually *do*, in return for all that money? What is their actual economic function?

Let's cut through the mystification of high finance, and ask that simple question: What do banks *do*? What do bankers actually *produce*? The practical answer, in concrete terms, is simple: nothing. They produce nothing. In that, the banks are different from the real economy, where hard-working people like you and me produce actual, concrete goods and services that are useful.

Banks, and the financial sector more generally, don't produce goods and services that are useful in their own right. They produce paper. And then they buy and sell paper, for a profit. Here's a little economic lesson. You can't live off paper. You need food, clothing, and shelter to survive – not paper. And since we are human beings, not animals, we need more: we need education, and culture, and recreation, and entertainment, and security, and meaning. Those are the fundamentals of economic life. Not paper.

What is paper actually good for? You can wallpaper your house with it. You can line your birdcage with it. In a pinch, you can wipe your butt with it. But other than that, paper is just paper. It is not concretely useful in its own right.

How do banks create that paper? Let me put it bluntly again: They create it out of thin air. It is not an economic exaggeration to state that the private banking system has the power to create money out of thin air. Not *cash*. Not *currency*. Only the government can produce that.

But most money in our economy – over 95% of money in our economy – is not currency. Most money consists of entries in electronic accounts. Savings accounts. Chequing accounts. Lines of credit. Credit card balances. Investment accounts. In that electronic system, new money is created, not by printing currency, but through creating credit. Every time a bank issues someone a new loan, they are creating new money.

It's like a big magic machine, creating money out of thin air. And it's called the private credit system. One of my favourite economists, John Kenneth Galbraith, put it this way: "The process by which private banks create money is so simple that the mind is repelled."

How do they do it? They start out with some capital. Let's say a billion dollars. Then they lend it out. Then they lend it out again. And again. And again and again, 10 or 20 or 50 times over. Each new loan, is new money. The economy needs that money, let's be clear. Without new money, we wouldn't be able to pay for the stuff we make. So we'd stop making it, and we'd be in a depression.

So the creation of new money (or credit) is an essential function for the whole economy. It's like a *utility*. But we've *outsourced* that crucial task to private banks. We've given them a legal license to print money – and the freedom and power to do it on their own terms. Their goal is not providing the economy with a sensible, sustainable supply of the credit we need. Their goal is using their unique power to create money out of thin air, to maximize the profits of the banks, and the wealth of the shareholders.

How does this system work, creating money out of thin air? It only works if: *Number 1:* Not everyone comes to the bank to withdraw all this imaginary money, in the form of real cash, at the same time. And if… *Number 2:* The banks keep lending to *each other*, which is essential to make sure each one has the cash it needs for withdrawals.

We can immediately see that this system is inherently fragile. Banks create new loans many times larger than their capital, profiting off the interest they earn. But the money was created out of thin air. It's not actually there, if people want it at the same time, and if the banks won't help each other out.

So Canada's banks are fragile, too. True, our banks only lent their capital out 20 times over, not 50 times like the Europeans did. That's because Canadian regulations capped the leverage at 20. But they've still got 20 times more loans out there, than they actually have money in the bank. Confidence is essential to the stability of the whole system. But confidence is intangible and impossible to predict. If confidence went south, Canadian banks would collapse as surely as Lehman Brothers or Dexia did.

Now, what do the banks do with all that money they created out of thin air? They lend it out. Some of it flows into the real economy, to pay for homes and cars and capital equipment. But not enough goes there. That's why our real economy is stuck. That's why there are 2 million Canadians unemployed, official and unofficial.

What about the money that *doesn't* flow into the real economy? Unfortunately, the banks use enormous amounts of it to place bets, enormous bets, buying and selling the paper assets that are created and traded in these towers. It's gambling, not production. It's legalized, subsidized gambling, all protected by the state.

The interaction of the private credit system, together with the speculative motive, that creates such turmoil and destruction, with each successive financial bubble. Without massive injections of new credit, the asset bubble could never expand so far – whether it's sub-prime derivatives, dot-com stocks, or rare earth futures.

If speculators had to spend their own money on these asset bubbles, the prices could never rise to such precarious and destructive levels. Now, there are *two key problems* with the operation of this private credit system, and its interaction with speculation, that we must understand to fight for change.

First, the flow of credit – created out of thin air by these banks – is like a roller-coaster, all depending on the mood swings of the bankers. When their greed overwhelms their fear, they will lend to anyone with a pulse. But when their fear overwhelms their greed, they pull back loans even from their most reliable customers. This roller-coaster, called the "bankers' cycle," is an inherent and destabilizing feature of the private credit system. And since the whole economy depends on the flow of new money, the flow of new credit, we are forced to follow the same roller-coaster.

The *second* problem is that there's nothing underpinning the paper valuations of financial assets, when they've been pumped up by the combination of speculation and irresponsible credit creation. Quoting Galbraith again, "A popped balloon never deflates in an orderly manner." And then we *all* pay the price for a crisis we didn't cause. And we all suffer the hangover from a party we weren't invited to.

This cycle of paper expansion and contraction, euphoria and panic, is hard-wired into the DNA of the deregulated private financial system. The cycle has happened before. And it will happen again. The current crisis was no unfortunate accident, no "perfect storm." This crisis is simply par for the course, for a system that values speculation over production – and that gives the private credit system free reign to throw gasoline on the fire, through unlimited, unregulated credit creation.

So what do we do?

First, *tax them*. That's the idea behind the Robin Hood Tax, that we are fighting for today. Make them pay a little bit, with every pointless, unproductive transaction, to help clean up the mess they left behind. A transactions tax alone won't solve the problem. It won't stop the process. But at least it will support the public services that we need, all the more so in the wake of each financial meltdown.

Same goes for corporate tax cuts. Let's reverse them. Put the federal rate back to 18% for the financial sector alone, and we'd raise $1.5 billion per year for essential public services. Taxing the banks is important. But taxing the banks is not enough.

So, second, we must *control them*. Put in place rules that require them to use this immense power, the power to create money out of thin air, to use it sensibly and productively. Prohibit the gambling. Make sure loans are aimed at sustainable, productive purposes. We need more powerful restrictions.

And friends, even controlling the banks is not enough.

What we ultimately have to do is *take them back*. There's nothing magical about creating credit out of thin air. There's no special technology or knowledge needed. Just the legal power. We can create credit out of thin air, just as well as any private bank can. Ultimately, we need a public, democratic, accountable banking system. One that serves the Canadian economy, not the wealth of those who own banks.

If we can create money out of thin air to buy and sell sub-prime mortgage bonds, then by god we can create money out of thin air to pay for affordable housing that could end homelessness.

If we can create money out of thin air to speculate on international currencies, we can create money out of thin air to buy needed medicines to prevent hundreds of millions of needless deaths from disease in the Third World.

There's no magic to it. These ideas are prudent and rational and economically sound. It is work and production and sharing and sustaining that supports our real economy. Not gambling with paper.

These towers look powerful. But ultimately they are built on paper.

We've got the real power, with our ability to work and produce and share and sustain. We've got the power to replace these towers with a system that works.

And that's exactly what we've started to do with this movement. Thank you for what you are doing! And let's get on with the job.

❧ ❧ ❧

Editor: We can applaud the open-air oratory, but it would have helped educate the public which is kept on a chain of ignorance, by introducing it to a single crucial fact or two of our history. For example, that the Bank of Canada, the government's own bank, is perfectly capable of financing legitimate credit of the federal government itself, but it has been decades since it has been used for that purpose.

Nor is there any good reason for besmirching the reputation of "paper," which is essential for education and even the best-oriented use of our government itself on behalf of society. For example, could our good friend not have worked in the single crucial detail of this scandalous suppression of our crucial and highly relevant history that the Bank of Canada is still wholly owned by our federal government, and can and should be used to finance our society's crucial needs?

W.K.

The Tragedy of Teen Suicide: Can Schools Stop It?

Niamh Scallan and Chantaie Allick, The Toronto Star, October 23, 2011

Thin-faced, unsmiling, slightly hunched over and ears akimbo, Akash Wadhwa stares out from the last available photo of him. A young boy, bullied, troubled and suicidal who turned to his best friend for support. He told Kiran Nijjar he wanted to kill himself and she tried to get him help.

In the end, on Sept. 16, he succeeded in killing them both, a murder-suicide that now has friends and family asking whether the school system could have done more.

According to kids at Mississauga Secondary, where both teens were students, the school was aware of Wadhwa's suicide threats. Some accuse teachers and principals of not doing more to prevent the Friday morning tragedy.

Paramjit Nijjar, Kiran's father, said she told him Wadhwa had gone to a guidance counsellor for help.

"If someone knew something, they should have done something," he told the *Star* in an interview. "If the school knew, if anyone else knew…. If his friends knew he would do something like this, they should have helped to avoid this."

Wadhwa's death, along with the murder of his friend, is one among a recent string of teen suicides in Ontario: Daron Richardson, 14, daughter of Ottawa Senators' assistant coach Luke Richardson, a year ago; Mitchell Wilson, 11, in Pickering last month; and more recently, Jamie Hubley, the 15-year-old Ottawa teen who was bullied for being gay.

Youth Suicide: Warning Signs

- Sudden change in behaviour
- Withdrawal from friends and activities
- Increased use of alcohol and other drugs
- Recent loss of a friend, family member or parent, especially if they died by suicide
- Conflicting feelings or a sense of shame about being gay or straight
- Mood swings, emotional outbursts, high level of irritability or aggression
- Feelings of hopelessness
- Writing or drawing about suicide
- Making a plan or increased risk taking

Information provided by the Canadian Mental Health Association

Before his death, Hubley chronicled his battle with depression on his Tumblr blog.

"I'm tired of life really. It's so hard, I'm sorry, I can't take it anymore," he wrote. It was the final message in a long series of notes related to suicide and cutting.

The deaths, seen by some as preventable, call into question the school system's role in dealing with the mental health of its young charges.

In Ontario, the Ministries of Education, Health, and Child and Youth Services, as well as various community partners, all share the responsibility for child and youth mental health. But studies and government-backed strategies introduced in recent years have focused more specifically on the school system's role.

In December 2008, the family of Jordan Gallant filed a $2.45-million lawsuit against the Thames Valley District school board and a teacher for negligence after the 17-year-old committed suicide earlier that year. According to the family, less than two weeks before his death Gallant submitted a short story to his Grade 12 teacher that said he was distraught over a breakup and wanted to kill himself.

The board and teacher deny the allegations, which have not been proven in court.

Jim Van Buskirk, chief social worker for the Peel District School Board, said schools are required to contact a student's parent or guardian when a threat to commit suicide is made. The student would then be referred to a mental health facility if the threat was deemed serious.

In Wadhwa's case, the school abided by the Peel board's protocols when Wadhwa's troubles became known, officials said. (Wadhwa's family could not be reached for comment.)

"There was nothing else this school could have possibly done," said board spokesperson Brian Woodland. "Everything that could be done was done."

Most other Mississauga Secondary students were in class when Wadhwa signed onto Facebook and wrote his goodbye message.

"My one main reason I did this is that life let me down way too much…to all my haters, are you happy now?" he wrote. He called the police before jumping from a bridge onto Highway 401.

Less than an hour later, Peel police would find Nijjar, 17, strangled to death in a nearby ravine. Police refused to confirm how she died but a source told the *Star* she was strangled. Wadhwa was rushed to hospital and died two days later.

As investigators continue to piece together details of the Friday morning incident, Paramjit Nijjar is left grappling with the loss of his only daughter at the hands of her troubled best friend.

"We are in sorrow for our loss," he said. "What happened, why it happened, I don't know nothing yet," he said. He described his daughter as a good person. "We know that she was brilliant and she would have contributed to society much more than the average person."

Suicide accounts for 24 per cent of all deaths of 15- to 24-years-olds in Canada – one of the highest youth suicide rates in the OECD. It is the second leading cause of death, after car accidents, for Canadians between the ages of 10 and 24.

Nearly half of Canadians' mental health problems are apparent by age 14 and the school system is seen as a critical player in early identification and prevention.

Teachers, because they are with students six hours a day, are "in a good position to… notice kids who may be in distress," said Kathy Short, a psychologist for the Hamilton-Wentworth District School Board.

But mental health is a "community responsibility" and teachers should not be the front-line workers, she said.

"We don't want teachers to have to become diagnosticians," agreed Van Buskirk, the Peel board's chief social worker. "That's not fair or appropriate for them. They have their plates full."

Canadian pediatrician Dr. Richard Goldbloom, in a 2006 Senate committee report on mental health, referred to schools as "the most underdeveloped site for effective health care of any in the country." He called for more mental health services in "children's natural habitat."

But schools suffer a lack of resources.

For example, the Peel board has one social worker for every four or five schools. Van Buskirk called it a big task for social workers, adding "we try and prioritize and provide services best we can."

Once a student is referred, it can take up to 18 months to get a mental health assessment in Ontario, said Steve Lurie, executive director of the Canadian Mental Health Association.

In response to calls for more resources, the province in June announced a $257-million investment that promises more nurses and mental health workers in publicly funded schools to help struggling youth.

Another challenge is training. A 2010 report on Ontario's publicly funded schools said "teachers are often the first people to whom youth turn for help" but "(they) have very low levels of knowledge about mental health issues, and mental health has not been a priority for professional development."

The *Ontario College of Teachers Act* does not require teachers to receive mental health training before entering the classroom. However, some boards are taking the initiative. Last week the Durham school boards announced a new curriculum to teach teachers about mental illness in youth, funded by the Ontario Shores Centre for Mental Health Sciences in Whitby.

"There's a sense of need and frustration that (teachers) could be better equipped," said Ian Manion, executive director at the Ontario Centre of Excellence for Child and Youth Mental Health.

Manion said the politics of school boards and ministries often impede progress, but he hopes that is changing. "There's an appreciation that we need to build systems better," he said. "Schools have huge potential…. It's a resource that has not been tapped to its fullest potential."

In the days following the Mississauga murder-suicide, students and teachers gathered near the ravine where Nijjar's body was found.

One friend who asked not to be named said Wadhwa had been struggling since the summer, but the friend didn't know what was causing his anguish. "He told me he would tell me, but he didn't end up telling me," the friend said. He insisted Wadhwa was a good kid, but "life just got the worse of him."

A family friend, who hosted Wadhwa – then a toddler – and his family for several years when they first moved to Montreal from India, said they went through major financial and personal turmoil in recent years.

The father had moved back to India a few years ago, "abandoning" Wadhwa and his mother, the family friend said. Wadhwa's mother filed for bankruptcy in 2010 and the pair moved from a house into a cramped basement apartment in Brampton.

Kiran's father, meanwhile, is still waiting for answers.

He has yet to be contacted by the school and is still waiting for details of what happened that Friday from police.

The only thing to do from here, he said, is let people know about what happened and inform them about issues like teen suicide.

"If a person is sick, he should be treated. Whatever the disease he has, he should be treated."

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Editor: What is missing in this report is the basic fact, for years recognized and celebrated as the most important positive result to come out of the Second World War: the recognition of that was for years celebrated as such. And this is how that arose: as soon as the surrender of Japan and Germany occurred, Washington sent to those two great trading nations hundreds of economists to study the wartime damage to predict how long it would take before they could resume their roles as great trading nations.

Sixteen years later one of these, Theodore Schultz of the University of Chicago wrote an essay in which he concluded the reason that he and his colleagues had missed the really relevant conclusion: they had concentrated on the physical destruction, but overlooked the fact that the human capital of the defeated great powers had come out of the conflict virtually intact. And then in a stroke of genius he deduced from that that human capital, is the greatest investment a country can make. For this he was celebrated, awarded a Nobel Prize, and then completely forgotten. Expenditure on education, health, not only comes prepaid, but continues to provide neglected prepaid resources for nations. The children of healthy parents tend to be healthier, of educated parents more readily educated. But if you treat it as mere debt – as our government has done to please Washington, the cost to society is made to roll uphill at ever more devastating social costs.

Consider the case of a government that has just decided to build a city subway. Knowing where the stations will be in advance, it can buy or lease properties near the future stations and rent those leases for profitable returns for decades ahead, but never sell them. This is precisely what the English aristocracy did with their land-holdings. Instead, today, governments are leasing their bridges, railway lines and much else, to private international corporations, the more important which are based in Spain and Australia. Canada's background should alert us to the folly of that since it has a publicly owned central bank authorized to finance the federal government's – and to an extent with the support of the federal government, provincial and even municipal projects. And even to an extent, with the collaboration of the federal and/or the provincial government, that of the municipalities.

Once the government sank to treating investment in human capital, money invested in human health and education and general well-being for what it is – the most important investment can make – rather than an expense, the power of the economy was surrendered to the gambols and gambles of international finance.

And yet Canada has a uniquely outstanding history of having nationalized its central bank before the Second World War, and of having been able to welcome millions of mostly penniless immigrants in the postwar. That has been expunged from official memory.

When you convert a prepaid public investment into a debt, you not only add doubly to the cost of your government debt, but you leave no room for safeguarding the lessons of our quite unique national history.

Your have in fact piddled and diddled away unique background – the initiative of the Mackenzie King government under pressure from the self-taught G.G. McGeer nationalized the Bank of Canada well enough before World War II to have contributed substantially to Canada opening its gates as no other nation did, to millions of penniless refugees from war-torn Europe. All that has been suppressed by our governments in recent years. That leaves no room for even the most elementary serious accountancy. Our governments, are in fact running their show blindfolded, with what can only be disastrous results. Governments with no accountancy are denied the blessing of the heavens. Let no one tell you otherwise.

W.K.

Dead-end *from page 2*

open up opportunities to better organize our societies and our economies to meet the evolutionary challenges to our species and by recognizing that money is merely the tool needed to accomplish the task and not the task itself, successfully redirect our evolutionary path from its current failure-doomed destination.

Wavell Cowan

"The Origins of Life and the Universe" by Paul F. Lurquin, Columbia University Press

By tracking the development of humanity from single-cell animals to the high technology wizards who may have lost control of their technology, it leaves you equipped to predict humanity's chances of survival whether some millions of years hence, or cut short by our own failure to restrain corporate greed. An excerpt.

For us humans, the phenomenon of life exists for certain in only one spot in the universe, here on the planet Earth. In spite of much speculation on the possible existence of life-forms on Mars and in other star systems, we still have no evidence that extraterrestrial life exists or has existed. We do not know for sure how life began on our planet, since no one was present when life first appeared, more than 3.5 billion years ago. How, then, can we even hope to tackle the problem of the origins of life? We do know with a great degree of certainty that living organisms, from simple bacteria to human beings, all function in very similar ways. We also known from fossil evidence that the oldest living cells were microorganisms (the descendants of which are still extant today) and that more complicated organisms appeared later…. Since the mechanisms are basically identical across all species, it is legitimate to assume…that all living creatures share a common ancestor…. The central question then is, what was this progenitor and how did it appear?…

However complicated the process of hypothesis may be, it must be followed by this simple rule: verification or rejection of the new hypothesis must proceed through experimental observations… A hypothesis is scientific only if experiments can be designed to support or refute it…. We will see that the concept of early RNA genes is a hypothesis amenable to experimental work….

In scientific terminology, a theory is an ensemble of verified hypotheses…. For most scientists, the Big Bang is no longer a hypothesis, but a respected theory….

Some theories are considered so complete and encompassing that they have earned the designation "law of nature." There are very few laws of nature, just to name one, the law of gravitation in both the Newtonian and Einsteinian interpretations has never been questioned.

What Is Life?

Erwin Schoedinger, one of the inventors of quantum mechanics and the 1933 Nobel laureate, published in 1945 a little book with exactly that title, "What is Life?" That was a courageous endeavor on the part of Schroedinger, the physicist, as he wrote: "A scientist…is usually expected not to write on any topic of which he is not a master." Far from making a fool of himself, Schroedinger asked and answered the following deep question: can life be accounted for by physics and chemistry? The answer (in 1944, when the book was written) was no; but Schroedinger went on to say that there is no reason to doubt that some day, physics and chemistry *will* be able to account for the events taking place in living cells.

Over half a century later, this day is very near, if not already here…. Geneticists have even been able to roughly estimate the minimum number of genes necessary for a microorganism to be considered a life-form. The number is about three hundred (human beings and other vertebrates, as well as higher plants, contain tens of thousands of genes). Life has yet not been created in the test-tube, but many reactions recurring in living cells can be duplicated in the laboratory. Furthermore, the old adage (all that is living originates from the living) is no longer tenable because there were no life-forms (cells). The origin of cells must therefore be found in inanimate non-living matter.

But then, what is life? In a nutshell, as the American astrophysicist Chaisson defines life, it is "an open, coherent, spacetime structure maintained far from thermodynamic equilibrium by a flow of energy through it – a carbon-based system operating in a water-based medium. with higher forms metabolizing oxygen." Life can further be characterized, in a more detailed but perhaps easier to understand way, by the following properties (in a list inspired by definitions provided by the Belgian biochemist Christian de Duvel):

• The cell is the unit of life. All life on Earth is based on cells – that is, envelopes that contain within their boundaries all the necessary machinery to effect growth and division. Many organisms are unicellular (bacteria. yeast, and even some marine algae that can grow to several feet long), while others are multi-cellular (sponges, mosquitoes, palm trees, and dogs to name a few).

• Cells must extract energy from their surroundings to carry out their life functions and power their metabolism. The ultimate source of energy is the Sun, whose photons of visible light are converted into chemical energy through plant photosynthesis mediated by chlorophyll. Among other things, photosynthesis generates the energy-rich molecule adenosine triphosphate (ATP) that is used as a helper in many metabolic reactions. Organisms unable to perform photosynthesis (and hence cannot use the Sun's energy directly) eat plant or other organisms that themselves depend on plant food.

• Cells must manufacture their constituents from available food. This process is called metabolism and consists of large numbers of chemical reactions taking place inside the cells.

• The metabolic machinery of cells must receive proper instructions to function in a coordinated, precise manner. These instructions are stated in genes, themselves made of DNA.

• Cells must regulate their metabolic activities to fit their environment. Regulatory mechanisms are very complicated and only partially understood. Some regulation takes place at the level of genes and some at the level of the metabolic reactions. Key elements here are interactions between regulatory proteins and DNA, and interactions between various proteins that make metabolism possible.

• Cells multiply – that is, they divide and produce more of themselves. That is possible thanks to the mechanism of DNA replication and the complicated reactions that drive cell division.

• Finally, cells must adapt to a changing environment (variations in the nature and amount of food, temperature, salinity, and so forth). They do this by mutating their genes at random, the best adapted mutations being selected by the environmental forces at work. Mutants not adapted to a new environment are destined to disappear.

Mutations are the raw material of evolution by natural selection. The randomness of this process is reminiscent of the concept of *chance* in the universe, as first stated by Democritus in the fourth century BCE.

Clearly, life is an extremely complex, integrated phenomenon. It is very unlikely that cellular life appeared all at once, given the astronomical odds against such an occurrence. And, indeed, the position of science, as we will see, is that it did not.

We know today that living organisms are composed of chemical elements found everywhere in the universe, even in intergalactic space. Two questions should be posed: (a) what is the origin of elements? and (b) how is it possible that these elements organized themselves into structures that obey rules that define life? The scientific answers to these two questions constitute the core of this book. But before getting into our scientific views of creation, let us examine some early interpretations of the origin of matter and life.

Foundations of the Universe

Two great scientists, Steven Weinberg, the physicist, Nobel Prize 1979, and Jacques Monod, biologist, Nobel Prize 1965, seem to speak in concert: there is no imperative for the universe to exist, nor is there one for the existence of life, including that of humans. Weinberg goes on, "But: if there is no solace in the fruits of our research, there is at least some consolation in the research itself." And Monod, writing about the transcendence of ideas and knowledge over ignorance, announces, "[Man's] destiny is nowhere spelled out, nor is his duty…."

These two men lay bare the stupefying yet exhilarating recognition that there is no design in the universe. There *is* a human imperative, but it does not originate outside of us; we have created this imperative ourselves. We must now complete our self-imposed search for the origin of the universe and that of life….

For thousands of years, humans have gazed at the night sky, the Sun, the planets, the surface of Earth, the plants and animals, and themselves. They have tried to make sense of what they saw and constructed explanations to justify the existence of the natural world. Most of these explanations have not passed the test of time. Today a set of interlocking scientific explanations that provide tentative answers to the origin of the universe and that of matter. These theories result from the melding of relativity and quantum physics into cosmology. To understand the current model for the creation of the universe, one must first know what the universe contains and understand the physical theories that made this model, the Big Bang, possible.

What Is the Universe?

As Carl Sagan, the famous American astronomer suggested, only the word billions can give us any idea of what the universe is about. Some wealthy people may own a few billion dollars, but even that number. as high as it may seem, is nothing in comparison to the number of stars in the known universe. In mathematical notation, 1 billion is 10^9, 1 followed by nine zeros. The universe contains 10^{11} (100 billion) galaxies, groups of stars, and each galaxy contains on average 10^{11} stars, for a grand total of 10^{22} stars. Therefore the estimated number of stars in the observable universe is 10^{13} times bigger than the number of one-dollar bills in a billionaire's wallet. This number has to humble us.

The size of the observable universe is 10^{23} kilometers (the distance from Seattle to Miami is about 5 x 10^3 km, while its age is 12 to 15 billion years. In our corner of our galaxy, the Milky Way, interstellar distances are huge as well. Since it is impractical to use numbers with such exponents, astronomers use light-years to express distances in the universe. In those units, Proxima Centauri is 4 light-years away from us. In other words, we now see this star as it was 4 years ago because it took that long for its light to reach Earth. To get a better idea of what this distance means, our Star, the Sun, is only 8 light-years away from Earth. The large neighboring galaxy Andromeda is a million light-years away from Earth. It is as large as the Milky Way, that is visible with the naked eye in the constellation of the same name between Triangulum and Cassiopedia. By peering at the cosmos with our most powerful telescopes, we see the most distant galaxies as they were some 10 billion years ago, since it took about 10 billion years for their light to reach Earth.

As we consider our solar system, numbers become less impressive. Only nine planets orbit the Sun and humans have sent spacecraft to eight of them. (Pluto has yet to be visited), with actual soft landings on two (Mars and Venus). We now believe that planets are probably common in the universe. In recent years, planets have been discovered in several dozens of nearby star systems. These planets have not yet been observed directly; rather, their presence has been inferred by measuring the wobble that their gravitational pull exerts on their star or by measuring the drop in their star's brightness as they transit in front of it…. As for planets that harbour life, we know of only one, our own.

Astronomers and cosmologists have calculated an age for the universe, about 12 to 15 billion years. This date of course implies that the universe had a beginning, now universally known as the Big Bang. Carl Sagan cleverly organized this time span into what he called the cosmic calendar. In this calendar the age of the universe is compressed into one single year, starting January 1 and ending December 31 at midnight. Here is an excerpt of this calendar:

January 1: Big Bang
May 1: Formation of our galaxy, the Milky Way
September 9: Formation of the solar system
September 14: Formation of Earth
September 25: Origin of life on Earth
October 9: Oldest known bacterial fossils were alive
November 12: First complex eukaryotic cells appeared
December 1: Earth's atmosphere is fully oxygenated
December 16: First worms
December 20: First land plants
December 22: First amphibians
December 24: First dinosaurs
December 29: First primates
December 31: First humans (at 10:30 pm)
December 31: Domestication of fire (at 11:46 pm)
December 31: Invention of the alphabet (at 11:59:51 pm)
December 31: Roman Empire (at 11:59:56 pm)
December 31: Renaissance in Europe (at 11:59:59 pm)
December 31: During the last second of the year, five centuries have elapsed and humans have engaged in space exploration.

As mentioned, the Big Bang model is rooted in theoretical physics, and in particular, in the convergence of relativity and quantum mechanics. Let us now review these theories to understand how scientists have pieced together an intellectually satisfying account of the birth of the universe.

Physics Holds One of the Clues to the Origins: Relativity

The first quarter of the twentieth century witnessed two great discoveries in physics. They were the realization that mass and energy are equivalent and that matter can be understood both as waves and as particles. The first discovery was made by Albert Einstein as he was developing the theory of special relativity. The second discovery was made by several scientists who founded quantum mechanics. This view of matter and energy later allowed cosmologists to put together a comprehensive model for the origin of matter as a direct consequence of the creation of the universe.

Albert Einstein's famous equation $E=mc^2$ (*E* is energy, *m* is mass, and *c* is the speed of light) derives directly from his and others' requestioning of the laws of motion that Galileo and Newton formulated centuries ago. This equation shows that mass is a form of energy. It was Einstein who came up with the concept of mass and energy equivalence in his special relativity theory. The term "relativity," as used here, deals with the measurement of physical phenomena taking place in frames of reference whose movements are relative to one another, at constant speeds. "Frame of reference" defines any location in space characterized by a set of coordinates {up, down, front, and back), while a "physical phenomenon" is anything that can be measured. For example you could throw a ball forward (a measurable phenomenon) while sitting in a moving bus (one frame of reference). For you the ball simply moves forward at a certain speed, but for your friend it also moves together with the bus. That is what Galileo and Newton had already described and understood.

Einstein, however, took the position that light behaves differently from anything else that moves. For him the speed of light is the *same* in all unaccelerating frames of reference. In that view, no matter how fast a frame of references is moving, the speed of light cannot be exceeded. For example, if you flash a laser pointer towards the front of a moving bus, the light, for your motionless friend on the sidewalk, *will not* move at its own speed *plus* that of the bus. The same concept applies to a laser pointing towards the back of the bus. The constancy of the speed of light has dramatic consequences for physics.

In classical (Newtonian) mechanics, by definition a constant force acting on an object for an infinite period of time will impart on the object an infinite velocity, would make a rocket go infinitely fast. Not so in relativistic mechanics; here an infinite velocity is impossible because nothing can go faster than light. Even in an infinite time, during which acceleration is occurring, the object will simply get closer and closer to the speed of light but will never reach it and certainly not exceed it. This principle has been verified experimentally many times.

Next, Einstein realized that time and space are intimately linked and that time is a fourth coordinate adding to the three familiar three dimensions of regular space. Thus in relativity one speaks of space-time…. According to Einstein's calculations, a clock (the time-measuring device) in a moving frame of reference runs slower than a clock inside a *motionless* frame of reference. And this is exactly what happens….

Now, since space-time is relative (as time measurements show), what about mass? In Newtonian mechanics, mass is a constant that does not depend on the speed of the object possessing the mass….

In relativistic mechanics, a constant force applied over time to an object will result in smaller and smaller velocity increments experienced by the object…. The body is thus seen as resisting acceleration.

The ability of an object to resist velocity changes is called inertia. Mass, is a measure of inertia…. The speed of light cannot be reached because at that speed, the mass of the object would be infinite and the force needed to move it is also infinite….

Again, this is not just the result of some complicated mathematical tricks: Subatomic particles such as protons and electrons have been accelerated in "atom smashers" (particle accelerators) to move at a rate close to the speed of light. As their velocity increases, it becomes ever more difficult to give them additional velocity because their masses increased, just as the equations predict, increasing the additional force needed to accelerate them. For example, in a synchronoton used to accelerate electrons, the magnetic field needed to deflect electrons moving close to the speed of light is 2,000 times greater than that predicted by Newton's theory. This is because at these relativistic speeds the electrons are 2,000 times more massive than at rest.

What has this got to do with the equivalence between mass and energy? Newton had demonstrated that the energy of a body by virtue of its velocity is $E = {}^1/_2mv^2$…. Newton regarded mass as a constant. For Einstein, mass is not a constant since it increases with the velocity. Thus mass should be considered a form of energy. But Einstein went further and made the bold assumption that the rest mass of an object increases with *v*. This mass should be considered a form of energy. Einstein was proven right with the detonation of the first atom bomb in 1945, which demonstrated the conversion of a plutonium mass into heat (a form of energy), electromagnetic energy (gamma rays) and nuclear fragments….

About 10 years after he formulated his special relativity theory, Einstein published his general theory, in which references frames were no longer assumed in steady motion relative to one another: they could also experience acceleration. Newton had already demonstrated that acceleration is involved in gravitational effects such as those experiences by planets orbiting a star. The general theory of relativity is then a theory of gravity. This theory involves mathematics much more sophisticated than used for the special theory. There Einstein demonstrated the equivalence between gravity and the warping of space. In other words gravity was no longer the property of massive bodies per se; these bodies (such as stars) deformed the fabric of space-time and led to the formation of gravity "wells" in which satellites such as planets would "fall" and orbit. Similarly starlight would be deflected by the gravity wells of other stars. This conclusion was quickly verified: massive objects like stars are indeed able to deform the straight path of light emanating from other stars because they warp space.

Einstein and Willem de Sitter applied the equations of Einstein's general theory to the universe as a whole, and the result had one important consequence: this universe cannot be stable; it must expand. Newton had already identified the problem of the stability of the universe. In the Einstein-de Sitter universe, on the other hand, expansion was predicted….

Now, Einstein's rigorous mathematical development was proven right when, in 1919, astronomers demonstrated that starlight can indeed be deflected by massive objects such as stars….

The expansion of the movement of galaxies in the cosmos provided the answer that space is indeed expanding….

For this, these astronomers decomposed the light of distant galaxies with prisms and other devices. When starlight is decomposed by a prism, we observe the different colors that combine to give white light (in the case of the Sun) and other stars. These dark lines are called an absorption spectrum. This is how helium was discovered in the nineteenth century by noting that some absorption lines in the Sun's spectrum did not correspond to any element known on Earth, but distinguishable in sunlight.

Careful observation of the movement of galaxies in the cosmos provided the answer that space itself is expanding. This was put on a firm footing by several astronomers in the 1920s who decomposed the light of distant galaxies with prisms.

It is a characteristic of science that, over time, the scope and depth of its explanations expand dramatically. Einstein's model of the universe (a twentieth century theory) is quite different from Newton's seventeenth century theory), but the Einsteinian universe is a generalization of the Newtonian universe and in fact encompasses it.

Here is an example from the life sciences: for about four decades, genes were thought to be made of protein, not deoxyribonucleic acid (DNA). In 1944, it was demonstrated that the protein hypothesis was wrong, and that the first genes, which came into existence billions of years ago, were made of ribonucleic acids (RNA), close cousins of DNA, but equipped with very different chemical properties. The revisiting of the two models just described (gravitation, and the nature of genetic material) occurred because scientists formulated new hypotheses to explain known or new phenomena. For a variety of reasons, these scientists were not satisfied with known or new explanations and created their own, new approaches. Often, these new hypotheses were counterintuitive, and as a rule of thumb, common sense intuition is not a very good guide for progress in the sciences.

Hypothesis building is the central process of science. Verification or rejection of the new hypothesis must proceed through experimental observations. A hypothesis, concept, or idea is not scientific if it cannot be tested experimentally. We will see that the concept of early RNA genes is a hypothesis amenable to experimental work. In scientific terminology, a theory is an ensemble of verified hypotheses. For most scientists the Big Bang is no longer a hypothesis – it is now a respected theory.

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Editor: Before brooding over the sad ultimate fate of the solar system and that of the universe, we humans should first set our own house in order, because it may not be the thermonuclear energy of a dying, inflating Sun, when all stars are dead, that will signify the end of our line. We have right now the capacity to ignite thousands of temporary Suns right here on our planet. We call them H bombs. If they are ever detonated in one of our customary wars, who cares that the Sun will stop shining a few billion years from now? The nuclear winter will have cast its dark shadow upon Earth and Earth will be lifeless.

There are still thousands of nuclear warheads waiting to be launched. Some may be used, with unforeseen consequences. If we do use these doomsday weapons, we will never learn the origin of life, and we will have reaped the fruits of our ultimate stupidity. We will all disappear without knowing what we really are. We can do better than that.

W.K.

Gupta Case Targets Insider Culture

By Michael Rothfeld, Susan Pulliam and S. Mitra Kalita, The Wall Street Journal, October 27, 2011

Rajat Gupta, once one of America's most-respected corporate directors, was indicted on six criminal counts in an insider trading case that prosecutors said was motivated not by quick profits but rather a lifestyle where inside tips are the currency of friendships and elite business relationships.

The US accused Mr. Gupta of passing along nonpublic information to disgraced hedge-fund titan Raj Rajaratnam, gleaned from Mr. Gupta's role as a director at Goldman Sachs Group Inc. and Procter & Gamble Co. Mr. Gupta and Mr. Rajaratnam, the billionaire trader sentenced this month to an 11-year prison term, were good friends whose regular discussions of business included the illegal tips, according to federal prosecutors, the Federal Bureau of Investigation and securities regulators.

The two also were partners in investing, supporting each other's funds with money, the government alleges. Authorities say their relationship was so close that Mr. Gupta passed along tips about corporate secrets almost as soon as he received them.

"His eagerness to pass along inside information to Rajaratnam is nowhere more starkly evident than in the two instances where a total of 39 seconds elapsed between his learning of crucial Goldman Sachs information and lavishing it on his good friend," Janice Fedarcyk, the FBI's assistant director in charge in New York, said Wednesday.

The accusations indicate a new twist in an insider-trading investigation that has so far focused primarily on those who profited directly from stock tips, but is now examining a culture where prosecutors say secrets are swapped freely among powerful business figures.

The 62-year-old Mr. Gupta, the former managing director of consulting firm McKinsey & Co., surrendered to the FBI on Wednesday and was arraigned in a New York federal court, wearing a dark suit and light-red tie.

He believed it was auspicious to surrender on Diwali, a major holiday popularly known as the "Indian festival of lights," according to childhood friend Anand "Bill" Julka, who said he has spoken recently with Mr. Gupta. "He believes he is innocent and the gods will protect him if humans fail," Mr. Julka said.

A representative for the Manhattan US attorney's office declined to comment on the timing of the charges.

Gary Naftalis, Mr. Gupta's lawyer, called the government allegations "totally baseless." He said Mr. Gupta "has always acted with honesty and integrity." Mr. Gupta "did not trade in any securities, did not tip Mr. Rajaratnam so he could trade, and did not share in any profits as part of any quid pro quo."

The charges come amid distrust of business and Wall Street, symbolized by the Occupy Wall Street movement that began blocks away from the federal courthouse where Mr. Gupta was arraigned.

"There is a lot of insider trading – and some of that goes to high places," said Charles Munger, vice chairman of Berkshire Hathaway Inc., whose investment in Goldman during the heat of the financial crisis in 2008 was the focus of one of Mr. Gupta's alleged leaks. The company had its own trading controversy this year after one of its top managers bought shares of a company in advance of an acquisition by Berkshire, though no charges have been brought.

The charges against Mr. Gupta represent a gamble for the government. Manhattan US Attorney Preet Bharara's office debated whether to bring charges, people familiar with the matter say. The government doesn't have wiretapped recordings of Mr. Gupta passing inside information about the trades at issue by Mr. Rajaratnam – making the case potentially more difficult for prosecutors. A loss at trial could detract from a run of victories against insider-trading defendants, lawyers say.

Mr. Gupta is the 56th person charged with insider trading by federal prosecutors in New York over the past two years; 51 have been convicted or pleaded guilty. Many of those resulted from the government's probe into the Galleon Group, which was founded and led by Mr. Rajaratnam.

Mr. Gupta's motives, and that he wasn't paid for any alleged tips, could be important if he goes to trial, because insider-trading law generally requires the government to prove that tippers received some benefit to prosecute them for leaking inside information.

But Jonathan S. Sack, a securities lawyer in New York, said based on Supreme Court case law, the Justice Department won't have to prove that the benefit Mr. Gupta received was direct or financial in nature. Prosecutors have indicated they will argue it was partially intangible.

"Gupta benefited and hoped to benefit from his friendship and business relationship with Rajaratnam in various ways, some of which were financial," prosecutors said in the indictment.

Mr. Gupta was charged with five counts of securities fraud and one count of conspiracy. He faces up to 20 years in prison on each fraud charge. Bail was set at $10 million, secured by his Westport, Conn., home. He was ordered to surrender his passport. A trial is scheduled for April 9, 2012, before US District Judge Jed S. Rakoff.

According to the indictment, Mr. Gupta allegedly called Mr. Rajaratnam 16 seconds after the end of a Goldman board meeting on September 23, 2008, where he learned about a $5 billion investment in the bank by Berkshire Hathaway. Galleon generated an $840,000 profit in subsequent trading, prosecutors said. The indictment says Mr. Gupta tipped Mr. Rajaratnam again on Oct. 23, 2008, roughly 23 seconds after a Goldman board meeting where he was told the investment bank would suffer its first quarterly loss as a public company, saving Galleon several million dollars in losses.

Mr. Gupta is also accused of calling Mr. Rajaratnam from Switzerland on Jan. 29, 2009, with information about P&G's coming earnings release. At the time, Mr. Gupta was in Davos at the summit for World Economic Forum, for which he was a board member, according to an online picture of him at the event. Goldman declined to comment. A P&G spokesman said the company "is not a party" to the charges and had cooperated with the investigation.

Mr. Gupta "became the illegal eyes and ears in the boardroom for his friend and business associate, Raj Rajaratnam," Mr. Bharara said in a statement.

The Securities and Exchange Commission – which had brought an administrative proceeding on insider-trading charges against Mr. Gupta in March but later dropped it – separately brought a new civil lawsuit against Mr. Gupta on Wednesday. Mr. Gupta hasn't responded to the SEC's complaint, but he previously denied the regulators' allegations in March.

The broad cases against Mr. Rajaratnam, Mr. Gupta and Anil Kumar – a former McKinsey partner who has pleaded guilty in the probe – also are an embarrassment for the global consulting giant, people familiar with the company say. Though not all of the charges involve information gleaned from McKinsey clients – those against Mr. Kumar did – the consulting firm prides itself on client confidentiality, and any concerns about the firm's discretion could create a risk for consulting contracts, the people say. Mr. Gupta led McKinsey from 1994 until 2003.

The insider-trading probe prompted the firm to tighten internal security involving confidential information, a former McKinsey official said. McKinsey declined to comment.

A Kolkata, India, native who later moved to Delhi, Mr. Gupta arrived in the US to attend Harvard Business School. His character was shaped by the death of his parents in his teenage years, said Mr. Julka, the childhood friend.

"Suddenly, he became the head of the family. It made him very compassionate," according to Mr. Julka, who owns an information-technology firm in Cleveland. "He was a lot more mature than all of us."

Mr. Gupta set up the American India Foundation and also was the founding chairman of the Indian School of Business in Hyderabad. He was viewed as a master networker, establishing relationships with former President Bill Clinton, Microsoft Corp. founder Bill Gates, and Hank Paulson, the former Goldman CEO and US Treasury secretary. Mr. Gupta and his wife were among the list of invited attendees to President Barack Obama's first state dinner, according to list released by the White House.

The ability to cultivate contacts, along with their South Asian heritage, was a quality he shared with Mr. Rajaratnam, 54, a Sri Lanka native. They shared a mutual friend in Mr. Kumar, a McKinsey consultant who later testified for the US in Mr. Rajaratnam's trial.

Messrs. Gupta and Rajaratnam had vastly different personal styles. The square-jawed Mr. Gupta was quiet and distinguished; the portly Mr. Rajaratnam was rougher around edges, and enjoyed practical jokes, people who know them said. Though Mr. Gupta had a more public persona, Mr. Rajaratnam was far richer, people familiar with the matter said.

They established a rapport, according to associates, and Mr. Gupta often would have lunch with Mr. Rajaratnam in the hedge-fund manager's office, ordering in Indian or Chinese food.

Mr. Gupta's stature and power in business circles far exceeded his personal wealth, which paled next to Mr. Rajaratnam's $1 billion net worth, people close to the situation say. Starting around 2003, he hoped to enter super-wealthy circles through his investments with Mr. Rajaratnam, people close to the situation say. He invested more than $2 million in two of Galleon's offshore hedge funds, one named "Captains" and the other named "Buccaneers," according to the SEC complaint.

Both Mr. Rajaratnam and Mr. Gupta invested "many millions" in the GB Voyager Multi-Strategy Fund, a master fund that invested in numerous Galleon hedge funds. Mr. Gupta saw the venture as a springboard for more business ventures with Mr. Rajaratnam, according to the SEC complaint.

The two formed another fund, the Voyager Special Opportunity Fund, and they signed up a number of South Asian business leaders to invest. They also organized Taj Capital Partners, later known as the New Silk Route fund.

It was in the ensuing years that Mr. Gupta allegedly leaked Mr. Rajaratnam inside information.

After the May conviction of Mr. Rajaratnam, friends say, Mr. Gupta seemed worried and nervous about his own future. "He was distraught. He seemed upset," recalled Mr. Julka.

In a visit to Mr. Gupta's home in August, Mr. Julka said he congratulated him on the SEC's decision at the time to drop its civil case.

Mr. Gupta told him it was "too early" for kudos, Mr. Julka said, adding that the US has "a right to indict me still."

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Editor: I have long held that our greatest economists let alone every day practitioners, thus Karl Marx's view of the economy reflected that he thought out the pattern of human relationships from having grown up when the first railways were being introduced. Hence his conviction that history was laid out along foreseeable lines, with definite stations and leading to the terminal where everybody leaved as per schedule with beatic smiles. Unconsciously, that provided Marx with the pattern of society. Reality proved very different; the rebellions that broke out across Europe were repressed in bloodshed and Marx found himself an exile in Soho. That disheartened him from doing anything wit the manuscript of Volume 2 and 3 of *Das Kapital*. He left it to his lifelong friend Friedrich Engels, who having worked for the family firm in Lancaster, had a more realistic picture of the world and its ways. He managed to issue Marx's Vol. 2 and 3 that he himself was unable to finish.

We are at a similar redefining point today. The internet with its technical witchery provides virtually irresponsibly pre-information of markets and marketers – through access of the most internal trading intentions, even before they have jelled. It is not only a temptation but a commanding technology quite parallel in its irresistibility to those pioneering railways.

It is practically inevitable that this should be reflected in the morality of traders who with but little effort can learn of other traders, intentions which come to be seen as the current format of the human courtesies rather than as crookedness to allow this new technology for knowing other traders' intentions in advance.

Being able to foretell the future is in itself an inducement to put, to let us say a gallant way of reeling off what is likely to happen before it does.

W.K.

Regulator Flagged SAC Stock Trades

By Jenny Strasburg and Jean Eaglesham, The Wall Street Journal, October 25, 2011

Wall Street regulators expressed mounting concern about SAC Capital Advisors' trading over a nine-year period, detailing in dozens of confidential reports suspicions that the hedge-fund firm might have profited from insider information.

The reports, submitted by the regulators to the Securities and Exchange Commission, don't allege wrongdoing by SAC, one of the world's best-known hedge-funds, which is overseen by billionaire founder Steven A. Cohen.

But investigators at the Financial Industry Regulatory Authority, a self-regulatory body for securities firms, described SAC's history of well-timed trades as unusually prescient and particularly profitable, according to more than 320 pages of documents reviewed by *The Wall Street Journal*.

"The staff is particularly concerned about the SAC account," the National Association of Securities Dealers, a predecessor of Finra, told the SEC in 2006.

The so-called referrals to the SEC offer a rare look at the process of how Wall Street's regulators try to spot potential suspicious trading activity, and how they act on their suspicions.

In the 18 referrals made by Finra and the NASD between 2002 and 2011 that were reviewed by the Journal, investigators said they were vexed by SAC's repeated appearance in routine screens of suspicious trading near mergers and acquisitions, earnings announcements and other market-moving news.

SAC in a statement said, "Every day our firm transacts in thousands of securities," adding that "it is not surprising that we would be included in a small percentage of Finra referrals."

The firm said the referrals are "based on limited information" and "are neither allegations nor findings of improper activity.

"We have experienced inquiries by the SEC over the years and cooperated fully, without any negative finding or charge," SAC added. "We remain highly confident in the actions and practices of the firm."

The SEC hasn't taken public action against SAC related to the referrals. As previously reported, US securities regulators have been examining whether SAC improperly benefited from two health-care takeovers. Those trades aren't mentioned in the 18 referrals reviewed by the *Journal*.

A spokesman for the SEC declined to comment on any specific referrals that may have resulted in enforcement actions. But the spokesman said that sometimes referrals about an individual or firm will increase because the SEC asks the self-regulatory organizations to "refer all suspicious activity by traders already under SEC investigation."

A Finra spokeswoman declined to comment.

Such referrals usually lack the persuasive evidence needed by the SEC to file a successful civil-enforcement action, let alone the proof required for a criminal conviction. In the two years that ended in September 2010, the SEC received 721 referrals about potential insider trading from self-regulatory organizations, including Finra. The SEC launched 90 insider-trading enforcement actions in the same period, officials said. Not all of those began as referrals from outside the SEC.

Still, the referrals about SAC offer a regulator's highly detailed observations of the trading habits of a hedge-fund giant that spreads trading commissions and other fees across Wall Street. Finra, other self-regulating groups and exchanges monitor billions of trades a day, and their data are the raw material on which law-enforcement agencies can build investigations.

The details of the SAC trades and regulators' reports about them haven't been disclosed previously.

In one 2006 referral regarding SAC, NASD urged government regulators to probe what it called "timely trading" by SAC and two other hedge funds in shares of Red Robin Gourmet Burgers Inc.

In January 2006, SAC sold more than $2 million of Red Robin shares within a week before the hamburger-restaurant operator publicly lowered its earnings projections, the regulator said. When the bad news hit the markets, investors dumped the stock, sending it down 26% in a single day.

SAC's share sales helped it avoid a $530,766 loss, NASD said.

A Red Robin spokesman declined to comment.

The Finra referrals are at the center of a showdown between the SEC and Sen. Charles Grassley (R., Iowa), a frequent critic of the agency, whose office obtained the reports from Finra in May. The senator's staff then demanded that the SEC detail what steps it took to resolve the referrals.

"Finra is trying to do its job, but you also have to consider that this particular firm is a huge firm, and there's lots of trading," said Paul Atkins, a former SEC commissioner who now does regulatory consulting. He said SAC isn't a client.

The referrals describe trades by SAC and other hedge funds, in a variety of industries, from software and biotechnology to banking, natural-gas exploration and steelmaking.

The SEC could still take enforcement action using data gleaned from reports it received years earlier.

Instances of trading are described in the 18 NASD and Finra referrals as making SAC as much as $2.3 million in a single stock, or helping the firm avoid as much as $1.2 million in losses in cases where SAC sold shares or otherwise bet against a company ahead of negative news. Others involved much smaller amounts, including the $37,500 SAC made in potential profit from trades around an infant-formula maker's 2010 share offering, according to a Finra referral.

All told, the referrals say SAC or funds affiliated with it benefited from the trading in question by making potential profits or avoiding losses totaling more than $15 million.

To back up its concerns in 2006, NASD included a list of SAC trades since 2000 in 39 other companies – among them drug and computer makers, a home builder and a forklift-rental company – that were previously flagged as suspicious by a broader group of Wall Street regulators.

Of those, 27 instances of trading by SAC resulted in referrals by those other regulators to the SEC, according to the NASD's Red Robin trading referral. The remaining dozen were classified as "FWA," or "filed without action."

A later referral by Finra, dated August 2009, noted that there also had been 18 separate reports made to the SEC about suspicious trading in options and stocks by CR Intrinsic, a prominent SAC unit housed in the firm's main office in Stamford, Conn.

None of the trading described in the reports is known to have resulted in charges against SAC, its founder Mr. Cohen or SAC employees.

The fracas has brought unwanted attention to SAC.

The SEC is probing the fund's trades ahead of the takeovers of two health-care companies, MedImmune Inc. and Cougar Biotechnology Inc., people familiar with the matter said.

Regarding MedImmune, SAC said in June it was confident in its business practices. The firm hasn't been contacted about its trades in Cougar, SAC said last week.

Since Sen. Grassley's office went public with the document requests, SAC has hired two of the senator's former staffers, Kenneth Cunningham and Cory Crowley, as consultants to provide insights into the office's next steps, people familiar with the matter said. The two didn't respond to requests for comment.

"There has been no dialogue between anyone on Sen. Grassley's staff involved with the investigation, and any former Grassley staffers," a spokeswoman for Sen. Grassley said.

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Editor: If the ever more sensational technological marvels of the internet were bringing us closer to heaven, we would by now be holy harp virtuosi.

Unfortunately, it has contributed to a hitherto unsuspected technology of knowing what the market is going to do before it actually has happened. As a result the powers of interloping corruption are rapidly approaching infinity.

And so long as we leave representatives of the old regime in charge of the show, we have simply suppressed the advice of the great American sociologist Duncan North who advised that a new economic regime must never, ever leave officials of the old power in the saddle. That was the purpose of the guillotine in the French Revolution. We are not proposing lopping off heads, but merely protecting society from the flood of high-tech corruption that is overwhelming the world.

W.K.

Why CIBC is being Sued over Mortgage Penalties

Ellen Roseman, The Toronto Star, October 13, 2011

I don't like the unfair way that prepayment penalties are calculated for borrowers who break a closed mortgage. Lenders don't follow a standard formula, nor do they make full disclosure in their contracts.

In the past few years, I've received a steady flow of mortgage penalty complaints. Many have been resolved in the borrower's favour, including one where ING Direct gave a $7,300 refund to a borrower because of faulty communications.

The federal government promised to standardize mortgage penalties, but didn't follow up. Now there's a class action lawsuit challenging the math used by CIBC Mortgages Inc., a subsidiary of CIBC bank.

Kieran Bridge, a Vancouver lawyer, is the lead counsel on the case, in partnership with Siskinds LP in Ontario. You can find information at Siskinds' website.

"CIBC believes this suit to be without merit and we intend to defend ourselves vigorously," says bank spokesman Rob McLeod. "CIBC's disclosure of how prepayment charges are calculated is clearly laid out in our mortgage documentation."

The class action, which has not yet been certified to go ahead, claims the language was so vague in CIBC's mortgage contracts that the penalties are unenforceable. It wants the bank to give refunds going back to 2005.

Robert McLister of Canadian Mortgage Trends mentioned that I have a connection to this lawsuit. Lawyer Matt Baer of Siskinds posted a comment at my blog last July, saying he was doing research on mortgage penalties and people who paid them. Maybe he found a few participants that way.

Class actions have been used against mortgage lenders before. A number of Canadian banks were sued successfully for not including a borrower's prepayment privileges when calculating the penalty.

McLister says mortgage penalty language is "notoriously cryptic" at the big banks. I agree, since I get complaints about almost all of them.

Verbal disclosure to customers is often non-existent or wrong. Many borrowers think they'll pay a penalty of three months' interest. Later, they're hit with an interest rate differential penalty that is much higher than they had anticipated.

I hope this lawsuit puts pressure on Finance Minister Jim Flaherty to keep his promise. Action on unfair mortgage penalties is long overdue.

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Editor: Here then, as in so many other connections, there is urgent need of penalties against banks and other lenders who scooped up unwarranted penalties.

W.K.

Olive: Our Own Jobless Recovery

David Olive, The Toronto Star, October 14, 2011

"It's all about response time," explains Mike, a fire department mechanic I befriended outside the Yorkville firehouse this week.

I listened to Mike's answers to my questions with a mixture of awe and growing discouragement. Mike, I learn, is one of just three mechanics for the entire GTA.

Emergency first responders speak of a "golden hour," the limited time available to stop a problem from becoming a crisis.

"More like golden minutes," says Mike. A house fire might be next-door to a chemical plant or paint factory. If the fire spreads, "then you've got an explosion, which sets the whole neighbourhood on fire."

Mike, who knows where our fire department's every gauge and gasket comes from – many of our newest pumpers "are built in a cornfield in Iowa" – is not a bellyacher. Yet neither is he wildly convinced the GTA appreciates him.

There should be at least 20 Mikes, it seems to me. But in today's climate of false economies, Mike counts himself fortunate, so far, to being doing the job of two mechanics rather than getting a layoff notice.

The cure for admiring the latest, glowing federal jobs report, for September, is to chat with Mike, a public-health nurse, a teacher dipping into his or her own pocket for school supplies, or any civil servant targeted by the austerity-obsessed.

"Canada outshines US with stunning jobs growth," was the breathless headline Reuters put on its report of the 60,900 new jobs created in Canada last month. Applying the usual 10-to-1 ratio, the US should have created about 600,000 jobs that month.

Instead, U.S job growth was just 103,000 in September. And even that number was greeted with hope that job-growth had resumed, after zero US job creation in August. That September improvement wasn't enough to budge the needle on the US jobless rate, stuck at 9.1 per cent.

By contrast, Canada's jobless rate has dropped to 7.1 per cent from 7.3 per cent. "Wow: the jobs report just smashed expectations in Canada," was the headline for that story by BusinessInsider.com, a leading US financial website. It noted our September numbers were twice as high as the most optimistic forecast.

MSNBC, another leading foreign financial-news source, on Tuesday had the most recent report I've seen in the past few weeks of US jobseekers heading to the Great White North for work. It noted the doubling in temporary work visa applications received by Ottawa from US citizens between 2008 and 2010.

But Canada is not a workers' paradise for the 1.4 million Canadians still unemployed, and the roughly 1 million children living in poverty due to resulting diminished family incomes. Our current jobless rate is still far removed from the 6.0 per cent prior to the Great Recession.

Stephen Gordon, highly regarded economics professor at l'Université Laval, isn't sanguine about that suffering. But he is on board with expert observers at home and abroad who regard Canada's economic performance during the worst downturn since the Great Depression as mightily impressive.

"Calls for government to 'do something' are misplaced," says Gordon of the hand-wringing after Canada's poor job-creation performance in August. "The labour market has been functioning normally for quite some time now."

And that might be true. But it's not nearly good enough. When you look closely at Canada's job-creation numbers you see all kinds of trouble.

In truth, Canadian job growth has been miserable over the past three months. "Modest employment creation in Q3 is consistent with other indicators pointing to tepid underlying growth in the economy," says Jacques Marcil, senior economist at TD Economics.

Worse, Marcil forecasts, the continued global financial malaise, particularly in the US and Europe; weakening Canadian exports; and a likely slowdown in public-sector job creation at home, point to a hike in joblessness to 7.5 per cent in the coming months.

The International Monetary Fund (IMF) last month slashed its estimates of Canadian economic growth next year to just 1.9 per cent, from its earlier forecast of 2.6 per cent – a huge blow to job-creation prospects.

The private sector still isn't pulling its weight, not even close, shedding an additional net 14,900 jobs in September. In the generally higher-paying manufacturing sector, we lost a net 23,500 jobs last month.

The private sector continues to happily reap productivity gains by not restoring its massive layoffs earlier in the recession. Indeed, that's been the private sector's practice through the 2000s.

So where did September's net new job creation come from?

Largely from the public sector – 38,400 net new jobs in education alone. But even that was essentially recapturing jobs lost earlier in the year. School boards nationwide, along with publicly funded essential services in health, police and fire services, are under pressure as never before to cut costs, and that usually starts with layoffs.

Bear in mind that public-sector work, whether it's continual repair of streets to keep the city efficiently moving for business, individuals and emergency responders, or ensuring that teachers and daycare workers are at their jobs in order not to condemn a future generation of Canadians to a less than enriched childhood, cannot be "offshored" to Malaysia or dispensed with except at great cost to future generations.

The same applies to our library system (our "libaries," as the current mayor has it), now the largest in the Western Hemisphere, an opera house, refurbished museums and art galleries, the publicly funded "Discovery District" of world-class hospitals – cultural and R&D assets whose excellence helps account for the *Economist* placing Toronto in the world's top 10 most livable cities among the 140 leading centres in its annual survey. Such assets and amenities create jobs, of course. And they generate sustained economic growth by attracting the world's best and brightest to work and raise their families here.

Prudent public and private financial management has indeed been indispensable in Canada's out-performance of other advanced economies in these difficult times. But we know that cutting back on stimulus spending too soon – as FDR did in 1937 and the US did last year – puts the economy right back in the soup.

It would be nice if there was a sage to sound the all-clear for returning to balanced budgets. Absent that, I'll know we can get back to saving for a rainy day once we have the sufficient enriched daycare spots and affordable housing units in place that a caring society demands.

And that my new friend Mike is no longer stressed out doing the work of two mechanics, making our city safer in the process.

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Editor: It is in fact more serious than that. In its May, 1970 issue the highly prestigious French publication on economic theory, *Revue économique* had published a 41-page article of mine on which I had worked for well over a decade.

I had noted that price levels could rise for two quite different reasons. There could in fact be more demand that the market was able to satisfy, but it might well be for wholly other reasons: more of the national product was not even marketed, but acquired directly by the government. This involved the human capital that was not bought and sold, but acquired directly by the government. That would include education, health, adequate transport facilities to bring workers to and from their jobs.

Were the government not to recognize these non-marketed services or its direct contribution to marketed services, it would be neglecting vital social services. This study was purchased immediately by *Revue économique*. It was most favorably reviewed by some eight other journals on economic theory including that of Cambridge university, which was particularly applauded the title I had given to this non-marketed contribution of governments' prepaid non-marketed contribution – the "social lien."

On the board of the *Revue*, was the most outstanding sociologist of the day, and two statisticians who had tried relating the rise of prices to supply and demand with little success. That review reported in a Toronto paper led to my invitation to come to Waterloo University by John Hotson and the founding of COMER.

And in no time at all Waterloo University invited François Perroux, proponent of similar ideas in France to Waterloo University to address a full auditorium, and in invitations to explain the concept of human

Continued on page next page

Default Insurance Market Takes Hit

By Serena Ng and Katy Burne, The Wall Street Journal, October 28, 2011

A vast market in which banks, hedge funds and investors trade insurance against debt defaults got a jolt Thursday, sparking worries of new strains in the global financial system.

Under the broad deal reached this week to stem the euro-zone's financial crisis, holders of credit-default swaps on Greek government bonds aren't expected to receive any payout, even though a preliminary agreement between financial institutions and European policy makers would recognize just half the face value of some Greek debt.

The decision not to trigger the swaps raises questions about the value of the insurance-like contracts and exposes the limitations of the hedging strategies that banks and investors have come to rely on. The swaps are widely used by bondholders and major banks to defuse a wide range of risks, and by traders to bet on market trends. If the swaps don't pay out when bonds default, banks and funds that bought the insurance may face losses they thought they had hedged.

In the case of Greece, losses appear to be manageable because of the country's relatively small size. Up to $3.7 billion in credit-default swap, or CDS, payments would change hands in the event of a default, a far cry from Greece's €350 billion ($496 billion) government debt.

Global markets applauded the euro-zone deal, with stock and bond prices rallying. But some market observers warn that Thursday's decision could prompt investors to back away from trading swaps on other European countries, potentially reducing demand for government bonds and further constraining credit.

"You need the real money guys, the banks, to view [credit-default swaps] as a viable contract for CDS to be a real market," said Adam Fisher, chief investment officer at hedge fund Commonwealth Opportunity Master Fund Ltd., and a trader of sovereign credit-default swaps. The deal reached Thursday, he said, could "kill off the market."

Many US and European banks purchase the default swaps on sovereign bonds to hedge their exposures to individual countries, or financial institutions and corporations they have lending or other relationships with. Buyers of the swaps make periodic payments to sellers in exchange for the protection, and if bonds default, the sellers make payouts to the buyers.

The deal European leaders reached with banks will see some private holders of Greek debt accepting what they call a "voluntary" 50% reduction in the principal amounts they are owed.

That is significant because the terms governing credit-default swaps on European sovereign bonds imply that a voluntary debt restructuring won't trigger payouts to buyers of protection.

European leaders have repeatedly signaled over the past year their desire to avoid debt defaults that would trigger credit-default swap payouts. Politicians have been loath to devise solutions to the debt crisis that end up rewarding speculators and providing them with a windfall from swaps payouts.

"I don't think it's a surprise…. People have been aware that European policy makers were trying to avoid" an outcome that would trigger credit-default swap payouts, said Otis Casey, director of credit research at data provider Markit.

Even so, the failure of the swaps to pay out could push some investors out of the market for European government debt, some investors said.

"If you owned a sovereign bond and you got scared because you bought CDS thinking it would pay out, you'll realize you would have been better off just selling your bond – and you'll just get rid of everything," said Ashish Shah, co-head of credit at AllianceBernstein.

The cost of default insurance on Greece tumbled Thursday but remains high, showing the country is still far from resolving its debt woes even with the latest deal. Analysts say Greece could still end up defaulting on its obligations or forcing all bondholders to take losses, an outcome that could trigger swap payouts. Default swap costs narrowed for other European countries, too.

Concerns about the possible ripple effects of a default swept financial markets this fall, prompting major banks to offer more information about their exposure to European economies.

The biggest US lenders don't stand to lose much on the Greek "haircut." A bigger issue is exposure to economies such as Portugal and Ireland, and much bigger countries such as Spain, Italy and even triple-A-rated France.

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Editor: A "haircut" that can become a "headcut."

W.K.

The Privileges of China's Elite Include Purified Air

By Andrew Jacobs, The New York Times, November 4, 2011

Beijing – Membership in the upper ranks of the Chinese Communist Party has always had a few undeniable advantages. There are the state-supplied luxury sedans, special schools for the young ones and even organic produce grown on well-guarded, government-run farms. When they fall ill, senior leaders can check into 301 Military Hospital, long considered the capital's premier medical institution.

But even in their most addled moments of envy, ordinary Beijingers could take some comfort in the knowledge that the soupy air they breathe on especially polluted days also finds its way into the lungs of the privileged and pampered.

Such assumptions, it seems, are not entirely accurate.

As it turns out, the homes and offices of many top leaders are filtered by high-end devices, at least according to a Chinese company, the Broad Group, which has been promoting its air-purifying machines in advertisements that highlight their ubiquity in places where many officials work and live.

The company's vice president, Zhang Zhong, said there were more than 200 purifiers scattered throughout Great Hall of the People, the office of China's president, Hu Jintao, and Zhongnanhai, the walled compound for senior leaders and their families. "Creating clean, healthy air for our national leaders is a blessing to the people," boasts the company's promotional material, which includes endorsements from a variety of government and corporate leaders, among them Long Yongtu, a top economic official who insists on bringing the device along for car rides and hotel stays. "Breathing clean air is a basic human need," he says in a testimonial.

In some countries, the gushing endorsement of a well-placed official would be considered a public relations coup. But in China, where resentment of the high and mighty is on the rise, news of the company's advertising campaign is stirring a maelstrom of criticism. "They don't have to eat gutter oil or drink poisoned milk powder and now they're protected from filthy air," said one posting on Sina Weibo, the country's most popular microblog service. "This shows their indifference to the lives of ordinary people."

News that Chinese leaders are largely insulated from Beijing's famously foul air comes at a time of unusually heavy pollution in the capital. In recent weeks, the capital has been continuously shrouded by a beige pall and readings from the United States Embassy's rooftop air monitoring device have repeatedly registered unsafe levels of particulate matter.

But those very readings, posted hourly on Twitter or through an iPhone app, have prompted a public debate over whether the Chinese government is purposely obscuring the extent of the nation's air pollution. Unlike the American Embassy readings, Chinese environmental officials do not publicly release data on the smallest particulates, those less than 2.5 micrometers, which scientists say are most harmful because they are able to penetrate the lungs so deeply. Instead, government data covers only pollutants larger than 10 micrometers – a category that includes sand blown in from the arid north and dust stirred up from construction sites.

Environmental officials prefer to focus on air quality improvements of recent years, largely achieved by replacing coal-fired stoves with electric heaters and closing heavy industry in and around the capital. Driving restrictions have slightly eased the environmental injury of the 700,000 new vehicles that last year joined the capital's jammed roadways.

But when pressed, those same officials acknowledge that their pollution metrics willfully ignore the smaller particles, much of them generated by car and truck exhaust. In fact, the American Embassy's monitor has become an unwelcome intrusion into China's domestic affairs, according to a diplomatic cable released this year by WikiLeaks, which said a Foreign Ministry official had requested that the Americans stop publicizing the data.

The director of the Institute of Public and Environmental Affairs, a nonprofit organization in Beijing, said many government officials feared that publicly revealing such data could stymie development or dent the image of cities that had been trumpeting their environmental bona fides.

"I don't agree with this philosophy," said the director, Ma Jun. "The government's more urgent priority should be to warn the public when the air quality is dangerous so people susceptible to poor air quality, like children or the elderly, can make decisions to protect their health."

The government does appear to be moving in that direction. In September, the Ministry of Environmental Protection said it planned to amend the nation's air quality standards to include the smallest particulates, although it has not released a timetable for adopting the new standards.

Officials in Beijing, however, are apparently not quite ready to embrace it. In response to criticism over the heavy smog of recent weeks, a spokesman for the city's environmental protection bureau, Du Shaozhong, assured the public that they should feel secure in the government's own readings, which termed the city's air "slightly polluted" even as the embassy monitor found it so hazardous that it exceeded measurable levels. "China's air quality should not be judged from data released by foreign embassies in Beijing," he said.

According to the Broad Group's Web site, it did not take much to convince the nation's Communist Party leaders that they would do well to acquire the firm's air purifiers, some of which cost $2,000. To make their case, company executives installed one in a meeting room used by members of the Politburo Standing Committee. The deal was apparently sealed a short while later, when technicians made a show of cleaning out the soot-laden filters. "After they saw the ink-like dirty water, Broad air purifier became the national leaders' appointed air purifier!" the Web site said.

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Editor: When the tiniest but most dangerous pollutants threaten Chinese political bosses action comes fast, and foreign suppliers profit.

W.K.

Jobless *from previous page*

capital to university audiences from Japan to Chile.

However, the idea of vital human capital that was not even marketed did not go down well with old-style economists who consider any rise in the price level as "inflation" that must be put down with higher interest rates. That is what afflicts the world today. Unless we recognize the key importance of human capital, we shall be riding blind-folded to the next world war.

W.K.

Next Frontier in Credit Scores: Predicting Personal Behavior

By Scott Thurm, The Wall Street Journal, October 27, 2011

Do you know your Medication Adherence Score?

Fair Isaac Co. thinks it does. The company that created the FICO credit score is branching into new territory, assembling disparate data in an effort to better understand a range of human behaviors.

"We know what you're going to do tomorrow," Mark Greene, Fair Isaac's chief executive, told investors earlier this year.

The Medication Adherence Score is Fair Isaac's latest innovation. It aims to gauge the likelihood that a person will take his prescribed medications. Though the company is mum about how it crunches numbers, the score is based partly on how long a person has lived at the same address and whether he owns a car.

Fair Isaac hopes health-care providers will use the score to cut costs by targeting email and other reminders at people who are less likely to take their drugs.

"Data is good," Mr. Greene said in an interview. "The more data we have access to, the more insight we have."

Fair Isaac's partners and sometimes-rivals at the nation's credit bureaus also are delving deeper into consumers' financial histories to generate tailored scores, which influence where a person can live and work and how much they have to pay for insurance.

Experian PLC, the credit-report giant, recently introduced an Income Insight score, designed to estimate the income of a credit-card applicant based on the applicant's credit history. Another Experian score attempts to gauge the odds that a consumer will file for bankruptcy.

Rival credit reporter Equifax Inc. offers an Ability to Pay Index and a Discretionary Spending Index that purports to indicate whether people have extra money burning a hole in their pocket.

The proliferation of "scores" highlights the widening trade in personal information, which is already fueling public concern about diminishing personal privacy. It also shows how data collected for one purpose, such as credit histories, are increasingly used for others.

Many scores are built on the premise that people who pay their bills on time are likely to be accountable in other ways. "There's a 'responsibility' thought lurking inside" many measures, said Fair Isaac's Mr. Greene.

For businesses, the scores' relatively low cost adds to their appeal. Steve Wagner, head of Experian's US consumer-information unit, said his company's Income Insight score lets credit-card issuers estimate an applicant's income for less than $1.

Verifying income through tax forms would cost more than $10, which he said would be too expensive for some types of cards. To develop the score, Experian obtained anonymous tax data from the Internal Revenue Service and compared it with its own database of credit histories.

Scoring-company executives say their products are fairer and more consistent than the subjective judgments they often replace. Though they concede their formulas aren't perfect, they say credit-based scores increase economic efficiency, improving people's access to loans and cheaper insurance.

The system "has been incredibly powerful for consumers," said Mr. Wagner.

Use of credit-related data is regulated by a federal law that gives people the right to see and correct information about them. But those provisions may not apply to some new products.

Experian says the provisions don't apply to Income Insight because it produces only an estimated income, and card issuers can't use the estimate alone to deny an applicant.

Consumer groups and privacy advocates say the scores can tag people with hard-to-escape labels, often based on flawed data or little science. "People make character judgments about you based on that FICO credit score that may or may not be accurate," said Chad Gentry of Community Credit Counseling Services in Denver, a nonprofit consumer adviser. "It's not the real world. It's just a computer program."

One flashpoint in these debates is employers' use of credit histories to check out potential hires. A 2003 study by researchers at Eastern Kentucky University found no correlation between credit scores and employees' job performance, or likelihood of being fired.

Eric Rosenberg, director of state-government relations for credit bureau TransUnion LLC, told Oregon state lawmakers last year that his company can't show "any statistical correlation" between the contents of a credit report and job performance.

About 60% of employers check credit histories of some or all prospective hires, according to a 2010 survey by the Society of Human Resource Management.

A TransUnion spokesman said employers "should have access to information that can help them protect their workers from theft, and their businesses and their customers from losses."

A credit history may have hurt Deborah Aston, who managed the city-owned parking lot at the Eugene, Ore., airport from 2006 to 2010, after the city hired a new company, Republic Parking System, to run the lot. Republic required a background check for employees who wanted to keep their jobs.

Ms. Aston, who had filed for bankruptcy in 2009, wasn't re-hired. She said a Republic manager initially cited her bankruptcy filing, then later told her she had a poor attitude. She filed a complaint under an Oregon law that took effect in July 2010, limiting employers' use of credit information. Since 2007, six states have adopted similar laws.

Ms. Aston and Republic later settled. She said it took her a year to find a new job at a call center.

Bob Linehart, chief operating officer of Republic's airport division, declined to comment on Ms. Aston's experience, citing the settlement. He said credit checks are only one factor in the company's hiring.

Use of credit histories also raises concerns about racial discrimination, because studies show blacks and Hispanics, on average, have lower credit scores than non-Hispanic whites. The US Equal Employment Opportunity Commission filed suit last December against the Kaplan Higher Education unit of Washington Post Co., claiming it discriminated against black employees and applicants by using credit-based screens that were "not job-related."

The lawsuit followed a complaint to the EEOC by a Cleveland-area woman who alleged Kaplan had hired her as a financial-aid adviser in February 2009 and fired her 10 days later because of her credit report.

The lawsuit is pending. A Kaplan spokesman said the company is an equal-opportunity employer and is "proud of the diversity" of its work force. He said Kaplan checks credit histories for jobs involving finance.

Credit-based insurance rates raise similar concerns. A 2007 Federal Trade Commission study found that credit scores weren't being used as a "proxy" for race in setting insurance rates, but the study has critics.

One of those critics is Florida Insurance Commissioner Kevin McCarty, who told Congress in 2008 that credit-based insurance scores are "indirectly measuring socioeconomic status," hurting minorities, the young and the elderly.

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Editor: As though stationary and even mounting unemployment were not enough, using highly questionable data on past performance to hide plain racial and other irrelevancies, is just a cowardly helping of something that should be investigated and nipped in the bud, with penalties.

W.K.

Cooper Union Looks at Charging Tuition

By Richard Pérez-Peña, The New York Times, October 31, 2011

Facing serious financial trouble in a weak economy, Cooper Union, the New York City college founded in 1859 to provide free education for the working class, may begin charging undergraduate tuition for the first time in more than a century, its president said Monday.

"Altering our scholarship policy will be only as a last resort, but in order to create a sustainable model, it has to be one of the options on the table," Jamshed Bharucha, who took over as president in July, said in an interview.

Such a change would be a cultural shift for an institution whose tuition-free education and esteemed programs in engineering, architecture and art have made it one of the nation's most selective schools, admitting 5 percent to 10 percent of applicants annually, depending on the department.

Peter Cooper, a self-taught industrialist, inventor and social reformer, founded the college with the mission of making higher education available to all; it was among the first to admit blacks, women, students of any religion and those who could not pay, making it need-blind long before the term existed.

Dr. Bharucha emphasized that lower-income students and many middle-income ones would continue to attend free, and that none of the 900 current undergraduates would be charged. He said that if the school decided to charge tuition, it was not clear whether it would set its price comparable to those at other private colleges, $40,000 or more, or adopt a different payment structure.

Despite consternation at the East Village school and on Facebook among students and alumni who had heard murmurs of a possible change, Dr. Bharucha said no decisions had been made. He plans to ask the board of trustees next week to approve creation of a task force to look into ways to solve the school's persistent, and worsening, budget problems, and report back next spring.

"We have to find new, robust revenue streams, and we have to do that quickly," he said.

For many Cooper Union alumni, the idea of charging tuition feels like an assault on the college's identity and social mission.

"It's a contradiction to everything we've learned about Cooper," said Milton Glaser, 82, the graphic designer and co-founder of New York magazine. "It's the last opportunity for free education on that level in the entire country."

Gerard W. Ryan, an alumnus who works at Motorola and has been an adjunct professor of computer science at Cooper Union, said, "I think the idea is dreadful, and I really hope it doesn't come to pass."

"This spirit of Peter Cooper, that there should be an excellent education for everybody, that's pervaded everything," he added. "It's in the DNA of the school."

But he praised Dr. Bharucha for confronting financial troubles he did not create. In its first decades, Cooper Union collected tuition from students who had the means to pay. But since 1902, following major gifts from Andrew Carnegie and Cooper's descendants, it has been free for all undergraduates. (Students enrolled in non-degree night programs do pay tuition and undergraduates pay for room and board.)

A result has been a student body that, for an elite college, is unusually diverse, ethnically and economically. Fewer than half of Cooper Union's students are white, and almost two-thirds attended public high schools.

Dr. Bharucha said that in recent decades, the school had resorted to unsustainable practices to support its operations – like selling assets and dipping into the principal of its endowment, which stood at $577 million in mid-2010 – rather than just spending the endowment's earnings. In recent years, it also spent heavily on a new academic building and renovations of its historic building, both on Cooper Square.

The school also generates significant income from real estate it owns, including the land under the Chrysler Building, but the value of those properties has also been dropping.

Word of a possible change leaked out in recent days, leading to student protests over the weekend. On Monday night, Dr. Bharucha discussed the matter with a large group of students for the first time, addressing a gathering at Rose Auditorium.

Dr. Bharucha said Cooper Union needed to introduce new sources of revenue, reaching $28 million a year by 2018, or about one-quarter of the expected operating costs. He said being more aggressive about winning research grants and raising money from alumni would cover part of that. In the meantime, he said, there will be belt-tightening, like a freeze on faculty hiring he has imposed.

He said the school needed money not just to keep up with current costs, but also to invest in academic facilities and provide more financial aid for poorer students' room and board.

"I will not be forcing solutions on the organization," he said, adding that he wanted employees, students and alumni involved in finding answers. "But we have to do the hard thinking now."

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Editor: Nothing could better alert us to the failure of our governments to protect even the social standards of 150 years ago then slapping on attendance fees on an institution that acquired an aura of well earned merit in creating highly and certified human capital than this scandalous proof that our government deem it good policy to wipe out a highly productive free university for training engineers 150 years ago.

For a study in the destruction of invaluable human capital, it quite compares with the contemporary treatment of the priceless heritage of Greece.

W.K.

Brighter Mood Buoys Dow Rally

By Jonathan Cheng and Steven Russolillo, The Wall Street Journal, October 24, 2011

Stocks burst higher on Friday, capping a sharp reversal in sentiment that has seen the Dow Jones Industrial Average climb 14% in less than three weeks.

As in previous rallies, there were few obvious catalysts for Friday's surge, which drove the Dow up 267.01 points, or 2.31%, to 11,808.79. The strong finish gave the Dow its fourth week in a row in positive territory, its longest such run since January.

Friday's buying appeared to be fueled by hope that European policy makers would come up with clear solutions to the region's deepening debt crisis at meetings over the weekend and next week.

Domestic factors also played a role. US companies have continued to impress analysts by topping profit expectations, with about 70% of reporting companies beating estimates.

A recent string of economic data has also emboldened a number of economists to expect a strong third quarter of growth in the US gross domestic product, set for release next Thursday.

Separately, a number of Federal Reserve officials on Friday expressed their willingness to consider new securities purchases to aid the economy.

"There are a few factors at work here, and they're all hope-based," said Rebecca Patterson, chief markets strategist for J.P. Morgan Asset Management.

The change in attitude has been abrupt. Investors entered October in a bleak frame of mind and stocks quickly fell to their lowest in more than a year, verging on bear-market territory – technically considered a decline of 20% from a recent high. And while stocks were bouncing wildly, the Dow was still locked in what is considered a "trading range," between 10,700 and 11,700.

"It's been a volatile ride even if you just look back two and a half weeks ago," said Ed Cowart, a portfolio manager at the Eagle Asset Management. "Three weeks ago, the received wisdom was that we're drifting off into recession, but we've gotten a lot of data in the last few weeks that has had people raising their expectations for growth."

The Standard & Poor's 500-stock index finished the day at 1238.25 and is now up 9.4% for October, on pace for its best month in more than 11 years.

For many investors, the rally is something they can't ignore, even if they aren't convinced that the outlook is brighter. Many remember 2009, when stocks zoomed higher from the March nadir, leaving many skeptical investors behind.

Some point to the recent trading activity, where stocks ping-ponged between gains and losses for 10 days. The last time that happened was in May 2009, as stocks were taking off.

Despite the good corporate and economic news in the US, investors remain fixated on Europe. Investors seemed to take solace in European leaders' willingness to add a second meeting next Wednesday.

On Thursday, German Chancellor Angela Merkel and French President Nicolas Sarkozy issued a joint statement promising to produce a comprehensive plan by that date. Bolstered by that news, European markets finished the week higher. The Stoxx Europe 600 gained 2.5% and Germany's DAX index soared 3.6%. The advance helped both indexes eke out a fourth weekly gain.

Despite the strong performance of late, many investors remained cautious about the stock market's longer-term prospects. "We could get a grand solution to the European debt situation that could push us up 10% to 15%, but that's a low-odds bet at this point," Mr. Cowart said. He said he still thinks the market will stay within a fairly tight range as long as investors remain skeptical of policy decisions in the US and Europe.

With a busy calendar of economic numbers and another flurry of corporate earnings on the horizon, investors are looking for further signs of a gathering recovery.

"I wouldn't claim victory yet," Ms. Patterson said. "I would love for hope to stay around for a while and there's a good chance it could, but until I see the details from Europe, I'm not convinced that the trend has changed. "

In earnings news, a strong earnings report from fast-food giant McDonald's helped push its shares $3.31 higher, or 3.7%, to $92.32.

General Electric pulled on the downside, falling 32 cents, or 1.9%, to 16.31 after reporting quarterly results. Chief Executive Jeff Immelt called the company's third-quarter industrial-profit margin "a low for the year" and vowed that the figure will rise in the fourth quarter and next year.

Microsoft edged up 12 cents, or 0.4%, to 27.16 after the software company reported higher third-quarter earnings that matched expectations, although profits in the Windows and Windows Live division declined.

Chipotle Mexican Grill rallied 25.58, or 8.3%, to 333.49 after the casual-dining restaurant chain reported third-quarter earnings and revenue that surpassed expectations. Honeywell International gained 2.82, or 5.8%, to 51.28 after the diversified industrial company raised its full-year earnings and revenue outlook.

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Editor: To sum up briefly, the recoveries of our crippled illiterate economy compare to a real economic solution as a broken mouth-organ might to the pipe-organ of Westminster Abbey.

W.K.