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## Has the Good Lord Sent Us Bedbugs as a Desperate Rescue?

The New York Times (6/09, "Bedbugs Bad for Business? Depends on the Business" by Kate Murphy) reports of one of the few thriving businesses in the US: "Recent reports that bedbugs have infiltrated office buildings, movie theaters and stores in New York did not come as a surprise to West Tyler, general manager of the Chancellor Hotel on Union Square in San Francisco.

"Short of putting a bedbug-sniffing beagle at your door to check everyone before they come in, you're going to get bedbugs,' he said. 'Dealing with them is the cost of doing business these days.'

"An employee first discovered a bedbug in the 137-room hotel in 2003, and Mr. Tyler has since instituted a comprehensive bedbug detection program to find the blood-sucking insects before a guest does. For starters, Mr. Tyler created a position called 'bedbug technician' – an employee whose sole job is to go from room to room checking for bedbugs. There is also a bedbug bounty of \$10 paid to any employee who finds one.

"If a bedbug is found, the room and all adjacent rooms are taken out of service for up to five days while they are steam-cleaned and chemically treated against the bugs and their eggs. The mattresses in the rooms are also discarded. The total cost for each room is \$2,500, including lost bookings.

"'It sounds like a lot of money, but the value of a good reputation is infinite,' Mr. Tyler said. 'Your biggest fear is that someone will get bitten and post something about it on an online travel site, and that would be a killer.'

"Bedbugs used to be solely a residential problem, but they are showing up in commercial settings, and not just in places with beds like hotels, nursing homes and apartment complexes. Increasingly, pest control companies report finding bedbugs in office buildings, movie theaters, clothing stores, food plants, factories and even airplanes. For the affected businesses, the expense can run into the hundreds of thousands of dollars. For the companies that deal with the scourge, it is a bonanza, with business doubling and tripling.

"The costs of coping with bedbugs are significant, and they are not covered by most insurance policies because they are seen as a maintenance issue. Hiring bedbugsniffing dogs, which is considered the most effective detection technique, costs about \$250 for a 1,200-square-foot retail store and as much as \$10,000 for a million-square-foot department store.

"'To stay ahead of bedbugs, I recommend having the dogs come through quarterly,' said Pepe Peruyero, chief executive of J&K Canine in High Springs, Fla., which trains bedbug-sniffing dogs and offers inspections for large buildings like department stores and school dormitories.

"However, he added, many customers cannot afford it and instead choose to rely on the vigilance of employees after an initial dog check comes up clean.

"Eliminating infestations is also costly, ranging from \$750 for a few rooms in an office building to \$70,000 for a large apartment complex. And that is just for the application of the cocktail of pesticides that kills bedbugs. It costs an additional 40% for the gold standard regimen of placing all the contents of an office or retail space into a heat chamber – bedbugs die at 120 degrees – and then spraying pesticides in the

Continued on page 2



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ΙΑΥΟΙΙΤ

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Bedbugs *from page 1* temporarily empty rooms.

"'It takes about four to seven hours per room' for the combination heat and pesticide procedure and a couple of hours on three separate occasions if using pesticides alone, said Judy Black, technical director for the Steritech Group, based in Charlotte, NC, which provides pest control and other quality control services to commercial customers. 'Getting rid of bedbugs is not quick or easy.'

"Businesses lose money when they have to interrupt operations. In addition, they may have to destroy bedbug-infested merchandise. Abercrombie & Fitch, for example, had to close two of its stores in New York in July, one for four business days and another for five, to deal with bedbug infestations. A representative continued disposing of merchandise but declined to comment on the cost.

"The management of the Empire State Building and the AMC Theater chain were similarly tightlipped about the cost of dealing with recent bedbug infestations.

"'Nobody wants to talk about this even though it is happening everywhere,' said Ron Harrison, director of technical services for Orkin, a pest control company based in Atlanta, whose commercial business has more than tripled since 2008. 'I spoke at the Mobile, Ala., chapter of the National Apartment Association and asked for a show of hands of who had experienced problems with bedbugs, and not a single hand went up, and right there in front of me were three of our customers who I know had us out to treat for them.'

"The silence, of course, is to avoid the stigma of an infestation. Even if businesses manage to avoid media attention, they may end up on one of several new websites like bedbugregistry.com and bedbugreports.com which encourage people to report hotels, apartment complexes, offices and retailers where they saw or were bitten by bed bugs.

"'It's been nonstop drama dealing with hotels disputing claims,' said Maciej Ceglowski, a computer programmer in San Francisco who started bedbugregistry.com in San Francisco after he was bitten by bedbugs in a local hotel. 'Everyone is scared of being publicly outed and losing business.'

"There is also a real fear of liability. Bedbug-related lawsuits have been increasing since 2003, and several lawyers now advertise themselves as specialists in such litigation. Typical is a recent case filed against Aaron's Sales and Lease in Norristown, PA,

by a woman who contends furniture she bought there had bedbugs. In court documents, she said she wanted at least \$50,000 in compensation because the bedbugs not only gave her itchy welts but also caused her to lose her hair and her job as an attendant in a nursing home.

"'Most bedbug suits are settled out of court for less than \$5,000, but I've seen damages go as high as six figures,' said Christian Hardigrees, associate professor at the William F. Harrah College of Hotel Administration at the University of Nevada, Las Vegas, and a lawyer who has consulted on bedbug cases involving hotels, cruise ships, movie theaters and nursing homes.

"It can be a nightmare for businesses because a lot of claimants in these cases are treating the litigation system like a lottery and are going after the big win.

"In addition to personal injury law firms, other businesses benefitting from the bedbug scourge include Protect-a-Bed, based in Chicago, which makes mattress encasements to keep out mites and bedbugs. The company developed the product in 2004 and had sales of \$10 million last year, twice as much as in the previous year, according to James Bell, the company's chief executive. He predicts an even larger jump in sales this year. 'The response has been enormous,' he said

"Bedbugs gave Linda Develasco of Des Plaines, Ill., a new career when she was laid off from her job as a new-accounts manager at Verizon, two year ago. Having learned about bedbugs in the hospitality industry from her fiancé, who was general manager of a hotel, she bought a bedbug-sniffing beagle named Scooby for \$9,700. She recouped the expense within three months by doing one to three inspections each week. 'He was worth every penny,' said Ms. Develasco, who had been doing mostly residential work but within the last week began inspecting office buildings, retail stores and movie theaters. 'It's been crazy.'

"Exterminators are also enjoying a windfall after several years of declining revenue as customers cut back on pest control treatment to save money in the tight economy.

"I just got a \$60,000 contract to take care of bedbugs in an apartment complex.' Tony Esposito, owner of the Bug Reaper, a pest control company in Katy, Tex., shouted into his cell phone as he drove to investigate another bedbug complaint in Houston. 'I had to pull my truck over and do a happy dance.'"

Which leaves us with the inevitable con-

clusion that a benign God, perplexed by the greedy persistence of His peoples in ignoring their histories, and the admonitions of His various Gospels, plus double-entry book-keeping, invented by the Arabs and brought back to Europe and that made possible the long-term investments leading to the discovery of sea routes to Asia by the Christians. With the result that in His Wisdom

and Interdenominational Kindness, He resorted to the humblest of His Creations, the lowly bedbug, to remind the mighty of this planet about the suppressed lessons of their own history as well as His Gospel – in all its nuances – rather than plunge humanity into the next and final atomic war.

Of course, the Infinite Kindness of the bedbug solution will force the mighty of

this world to pay heed to the greatest lesson to come out of World War II – that investment in human capital is not a debt, but the most productive investment that a society can make. Mistaking it for such required a reprimand, but He chose a very gentle one, that hopefully not even the mighty of this non-functioning world will miss.

W.K.

## High Technology Mocks Democratic Institutions

Financial Times (3/09, "Up against a bandsaw" by Jeremy Grant) reports: "At an industrial estate on the edge of Tsung Kwan O, a new town connected by road tunnel to Kowloon, work has started on a data centre where traders of stocks, futures, options and currencies will place their computers next to Hong Kong's own systems.

"The idea is that, by placing their equipment only meters way from where the operator of the territory's securities markets handles trades, those for whom speed is everything can shave milliseconds off the time for a transaction to be completed. It is a far cry from the days when shares were bought and sold by humans on a trading floor.

"The concept – known as co-location – is growing fast. Last week, NYSE Euronext completed the move of trading in thousands of New York Stock Exchange-listed companies to a similar data centre in New Jersey. The Hong Kong facility is being built by the local exchange as one of its 'strategic business initiatives.' The same is happening in India, where the National Stock Exchange has rented out racks of computer space for traders. In Australia, ASX plans a centre offering co-location by next August.

"The speed with which exchanges are building such facilities is a sign of a the global spread of a phenomenon gripping the markets: 'high-frequency trading' (HFT). The phrase describes a style of electronic dealing that uses algorithms to dip automatically in and out of markets hundreds of times faster than the blink of a human eye.

"The practice is controversial in the US. HFT has chilling associations with the 'flash crash' of May 8, when rapid computer-driven orders were seen as a main culprit in sending the Dow Jones Industrial Average down by 1000 points in 20 minutes – a fall unprecedented in its depth and speed.

"Ted Kaufman, a US senator for Delaware, where many of America's listed companies are incorporated, wrote to the Securities and Exchange Commission last month arguing that 'excessive messaging traffic, the dissemination of proprietary market data catering to high-frequency traders, and order-routing inducements all may be combining in ways that cast doubts on the depth of liquidity, stability, transparency and fairness of our equity markets.'

"Regulators such as the SEC are still puzzling over exactly what caused flash crash. But what is clear is that it exposed fundamental flaws in the mechanics of today's markets – and, some maintain, in the rules that govern them. High-frequency traders are by and large privately held, have no clients and trade using their own money. That has led, some believe, to a point where there has been a dangerous breakdown in investor trust of the depth of liquidity, stability, transparency, and fairness of our equity markets.

"Christian Thwaites, chief executive of Sentinel Investment Companies, a US asset manager, says: 'The mystery and mystique of HFT, the lack of clarity and therefore opacity has meant that retail investors – who have obviously been terribly burned the last few years – look at this and say: "this whole Wall Street thing is just rigged against me."

"But like an invasive species in the natural world, HFT has grown rapidly before the wider public even noticed. Tabb Group, a consultancy, estimates that HFT now accounts for about 56% of all trades in the US and 38% in Europe. Another sign that Asia is the latest growth spot came this week as traders and technology companies gathered for a Hong Kong conference billed as Asia's first high-frequency trading event."

"At the same time, changing regulations and increasing competition have created a complex matrix in the US of nine exchanges and dozens of other types of venue, including networks run by banks and brokers and 'dark pools' set up to handle large blocks of

shares away from public markets. Exchanges now compete not only with each other for their order floor but also with banks and broker networks, including dark pools.

"In Europe the same pattern has played out thanks to the Markets in Financial Instruments Directive, a European Commission regulation that broke the national monopolies of exchanges, Mifid allowed the emergence of rival platforms such as Chi-X Europe, fragmenting trading across many venues: the London Stock Exchange now accounts for only 55% of trading in the stocks that comprise the FTSE 100 index

"Such fragmentation has been a driving force behind the growth HFT, since it produces a variety of trading venues each with slightly different trading systems, speeds and schedules. This allows traders to exploit these differences by using computer algorithms to trade back and forth from one platform to another.

"Concern is therefore growing that the markets may be morphing into little more than a playground for a specialized type of trading that has minimal economic benefit and contributes little if anything to capital formation – the traditional function of stock exchanges.

"Established market users – such as the asset managers that take care of pension funds – say HFT, coupled with the fragmentation of trading across venues, makes it harder to rely on one of the most basic functions of the markets.

"'Because of the predatory nature of some participants, we have no incentive to post liquidity,' Kevin Cronin, head of equity trading at fund manager Invesco, told a hearing into the flash crash last month. There are 40 places where stocks are transacted. and none of us has clarity of supply and demand on most [equity] issues. These are fundamental issues as to what the value of a securities market is."

## The Dangerous Techniques of Algorithmic Internet Trading

"One worry is the use by HFT if algorithms to direct trades automatically, often to several market centres at once. Not only do such algorithms generate huge volumes of trades, but they can – like any machinery – go wrong. The past six months have brought three cases where an algorithm has run amok – and those are only the ones revealed publicly. The latest came last month when the Osaka Stock Exchange handed an 'admonition' to Deutsche Bank for not having a sufficient degree of control' over an algorithm trading Nikkei 225 index future.

"Mr. Cronin is not alone in suspecting that certain kinds of algorithms are actually predatory. Analysts at Nanex a Chicago market data company, say high-frequency traders may be using algorithms to send unusually heavy traffic to exchanges and others platforms in a deliberate attempt to slow down their data systems.

"Knowing that a certain exchange's system is about to run more slowly gives a trader an opportunity to set up a buy or sell order in advance. The process is called 'quote stuffing' and is used in a strategy known as 'latency arbitrage' – latency referring to the speed at which the message traffic moves through a system.

"In its analysis of the flash crash, Nanex managed to plot how the bursts of traffic looked visually on graphs. Many appeared as distinct geometric patterns, such as jagged shapes that Nanex dubbed 'Bandshaw H,' and another pattern called the 'Boston Zapper.'

"There's no economic justification for it,' says Eric Scott Hunsader, founder of Nanex. 'If this is OK by everybody, the market is not going to function in a very short period of time.'

"Some go further and suggest outright wrongdoing. 'When orders get pinged out to multiply trading venues, there is at least circumstantial evidence that there's quite widespread use of the information to frontrun trades,' Jim McCaughan, chief executive of Principal Global Investors, a large US asset manager, told CNBC last month.

"Yet for regulators it is hard to figure out who is behind any of this activity. That is because high-frequency traders can operate with minimal supervision. In Britain, for example, all it takes to set up a HFT operation is a company registration and the necessary technology.

"Trading systems can be bought off the shelf from a number of specialist companies.

Registration with the Financial Services Authority, the UK markets watchdog, under a long-standing exemption for people trading on their own account – as high-frequency traders do – unless they present themselves as market makers. Similarly in the US some are registered as broker-dealers but some are not.

"'Some of the people who are doing the really big volumes are completely unregulated,' says one lawyer familiar with the business....'

"Many exchanges say they have controls in place that can detect unusual trading patterns before they cause trouble....

"For their part, the few HFT firms willing to show their face in public are at increasing pains to demonstrate that their business is beneficial to markets in providing liquidity and tighter bid-ask spreads.

"Firms such as Getco, based in Chicago and formed by a pair of former pit-traders, and peers in Europe including Optiver of the Netherlands, argue that high-frequency trading is a label used too loosely to describe any kind of rapid electronic trading, whether beneficial to markets or not.

"Getco and other US firms – excluding the banks and hedge funds that are equally big in HFT – recently formed an association to make their case more coherently.

"Getco rejects allegations that high-frequency traders' interests are at odd with those of ordinary investors. 'While the story line may be a compelling narrative, there is no reliable evidence to suggest that this conflict exists. To the contrary, most retail brokers...intentionally route a majority of their customers' marketable orders to firms that engage in high-frequency trading....'

"Back in June, a group of little-understood trading firms, at the cutting edge of computer-fired technology in equities, derivatives and foreign exchange decided it was time to stand up and explain what they do to a broader audience.

"The Principal Traders Group they formed, under the umbrella of the US Futures Industry Association, comprises the top ranks of high-frequency traders that use their own capital and function as automated market makers, providing buying and selling prices. They include US-based firms such as Getco, DRW Holdings, Infinium Capital Management, Tradelink and RGM.

"As a group, principal trading firms have historically minded our own business as we do not have customers and trade our own money,' says Richard Gorelick, chief executive officer at RGM. 'Regulators and

exchanges understand principal trading, but we need better to inform and indicate the public about what we do.'

"The group's formation is the first sign of frustration among some of the largest high-frequency traders, who feel they are being swept up in a backlash, with commentators failing to understand the differences between rogue and basic electronic market making which, which PTG members say provides liquidity to markets in the same way as the pit traders of old.

"A number of academic studies agree that high-frequency trading has cut costs for retail investors. But the practice has faced intensifying criticism following the 'flash crash' of May 6 when during a 20-minute period, stocks plunged and rebounded.

"Apart from questioning its social value, some critics say it foments abuse, placing markets at the mercy of an algorithm (a computer program that executes trades without human involvement) running wild. A recent report from data provider Nanex blames 'quote stuffing' – whereby traders are said to attempt to overwhelm a market with excessive numbers of quotes – by high-frequency firms for the May crash.

"Mr. Gorelick says activities such as this would be both manipulative and unsustainable as orders can be traced back to a particular firm should regulators decide to take action.

"This week signs emerged of political support for a more nuanced view of high-frequency trading. Spencer Bachus and Jeb Hensarling, senior Republicans on the House of Representatives' financial services committee, wrote to Mary Schapiro, Securities and Exchange Commission chair saying: 'Before assigning blame to algorithmic or high-frequency trading firms, the SEC should seek to understand the importance of liquidity providers that now operate in our market.' (Signed by Michael Mackenzie.)"

But how are we to bring these glib appraisals into some serious relevance to the stubborn problems that has paralyzed the world economy from working its way out of the deepening hole into which speculative banking has landed it? Who could claim the slightest relevance of the alleged liquidity of high-frequency algorithmic trading to the stubborn unemployment and real estate disasters that show little sign of retreating even though governments throughout the world are assuming ownership positions and slashing key social services. At the root of the gathering mess is the stubborn re-

fusal to recognize the greatest lesson that came out of World War II. The realization that human capital is the most productive investment a government can make. It explains, for example, much of the difference between to state of Haitian society and that of Canada is to be explained by the difference in their investment in human capital. Without recognition of that "greatest investment a government can make,' and the obdurate insistence of governments of treating prepaid human capital as a debt rather than as an asset, there is no way out of the ever-deepening world economic mess.

William Krehm

## The Cost of Confusing Human Capital with Debt

It was hailed in its day as "the most important investment a government can make" – the most important lesson to come out of World War II. The tale of how that conclusion was arrived at has been told and celebrated, but since it ran counter to the power of our speculative mega-banks, it would be stretching the facts to even assume that our government has a system of accountancy worthy of the name.

Our readers will find the details of how this conclusion had been reached, and how and why the conclusion was wiped out of official memory.

The fact is that nothing can function without the recognition of this underlying problem. It explains the deepening sense of hopelessness that has overtaken the world. Though what we are dealing with has to do with forecasts of the Canadian government's Auditor General, Sheila Fraser, it is not to be seen as a criticism of her. The limits within which she is confined – although they have to do with elementary accountancy – are not set by her. Her problem is that she is supposed to be administering a government that simply does not distinguish between long prepaid government investment in human capital and debt.

The Globe and Mail (8/25, "Auditor General urges better longer-term forecasts for health care" by Andre Picard) informs us: "It is impossible to say whether Canada's Medicare system is providing value for money because governments are making little effort to measure performance, the federal Auditor General says.

"Similarly, there is no way of knowing if the health system is sustainable because there has been a failure to invest in long-term projections, Sheila Fraser told delegates to the Canadian Medical Association in Niagara Falls, Ont., on Tuesday.

"'Will governments have the cash to meet the health needs of our aging population without increasing debt to unsustainable levels?,' she asked. 'Frankly, I'm not sure the government of Canada has all the information to answer this important question.' "Ms. Fraser said the 'answer lies in longterm financial projections' that lay out scenarios 25 to 75 years in the future. While many other countries do so, currently in Canada, she said, the government limits itself to projections of three-to-five years, which is not enough, said Ms. Fraser, to 'understand the implications of policy choices on spending, taxation and debt.'

"Ms. Fraser stressed that the role of the Auditor General is to conduct financial and performance audits of government programs, not to evaluate whether public policies are cost effective or sustainable."

That is clearly so, but understated. If you confuse "the most important investment a government can make," you have in fact no system of accountancy. And that explains the hopeless grinding of our government to get the economy functioning again. Those who have brought on this mess are flying blind.

"Nevertheless, she noted that there are 'significant gaps in performance reporting so, no, we don't know if we're getting good value for money.'

"For example, Ottawa will transfer \$25.4 billion to the provinces and territories this year through the Canada Health Transfer. (That accounts for a little less than 20 per cent of the \$128 billion in public spending on health care; private spending accounts for another \$55 billion annually.)

"Ms. Fraser noted that those massive cash transfers come with no strings attached and little monitoring. The accord that sets out the health dollars Ottawa transfers to the provinces and territories expires in 2014.

"Anne Doig, president of the Canadian Medical Association, said that improving accountability should be a precondition for any future cash transfers."

Without adopting a system of accountancy that will recognize investment in human capital – education, health, and the environment included in that concept – our governments will continue clueless about where they are headed.

That conclusion is echoed – though confined to a single of the many fields that human capital embraces – in a quotation of Ms. Doig: "Public reporting on the performance of the health system in Canada is piece-meal at best and non-existent at worst," Dr. Doig said. Without this critical "report-back function, Canadians have virtually no information about how well – or how poorly – their health system is working."

"Delegates to the CMA general council – which is commonly described as the parliament of Canadian medicine – also tackled the issue of sustainability head on, saying it should become the sixth principle of the Canada of the Canada Health Act. The Act sets out five conditions that provinces and territories must respect in return for receiving federal health dollars: public administration, comprehensiveness, universality, portability and accessibility.

"The original conditions are parts of a funding agreement, but they have morphed over time to become a fundamental statement of belief of Canadians in their health care system,' Dr. Doig said.

"Similarly, she said, the renewal of the health accord can serve as a launching point for enshrining sustainability as a fundamental principle of medicine.

"Danielle Martin, president of Canadian Doctors for Medicare, praised the CMA for its renewed commitment to Medicare after years of actively promoting more private health care, but she expressed concern about the emphasis on sustainability.

"'There are two camps talking about sustainability: one group, like ourselves are concerned with getting best value for money spent on patients. But the other uses sustainability, or unsustainability, as code for giving up on publicly funded health care,' she said. 'The CMA needs to make clear what camp they're in.'"

Bravo! That is the core message that COMER has been trying to get across. Human capital is the best and basic investment that society can and must make: human capital – education, knowledge of history, sociology, care of the environment, and adequate employment is not debt but the only means of protecting society and its future.

W. Krehm

## The Financial Fiction of Fannie Mae and Freddie Mac

The New York Times (20/06, "Cost of Fannie and Freddie Keeps Rising" by Binyamin Appelbaum) reports: "Casa Gande, Ariz. – Fannie Mae and Freddie Mac took over a foreclosed home roughly every 90 seconds during the first three months of the year. They owned 163828 houses at the end of March, a virtual city with more houses than Seattle. The mortgage finance companies created by Congress to help Americans buy homes, have become two of the nation's biggest landlords.

"Bill Bridwell, a real estate agent in the desert south of Phoenix, is among the thousands of agents hired nationwide by the companies to sell those foreclosures, recouping some of the money that borrowers failed to repay. In a good week, he sells 20 homes and Fannie sends another 20 listings his way.

"'We're all working for the government now,' said Mr. Bridwell on a recent sunbaked morning; steering a Hummer through subdivisions laid out like circuit boards on the desert floor.

"For all the focus on the historic federal rescue of the banking industry, it is the government's decision to seize Fannie Mae and Freddie Mac in September 2008 that is likely to cost taxpayers the most money. So far the tab stands at \$145.9 billion, and it grows with every foreclosure of a three-bedroom home with a two-car garage one hour from Phoenix. The Congressional Budget Office predicts that the final bill could reach \$389 billion.

"Fannie and Freddie increased American home ownership over the last half-century by convincing investors to provide money for mortgage loans. The sales pitch amounted to a money-back guarantee. If borrowers defaulted, the companies promised to repay the investors.

"Rather than actually making loans themselves, the two companies – Fannie, older and larger, Freddie created to provide competition – bought loans from banks and other originators, providing money for more lending and helping to hold down interest rates."

We must not miss drawing our readers' attention to this new definition of "competition" – two distinct government agencies peddling to a public most of whom cannot

afford what the agencies are dedicated to sell. To keep your minds limber you might extend the formula to the production to anything from steel to motor-boats. No problem of the sort dreamt up by social reformers: extending the Fanny and Freddie competition, the financial system can fly on in great fettle, higher and higher.

"'Our business is the American dream of home ownership,' Fannie Mae declared in its mission statement, and in 2001 the company set a target of helping to create six million new homeowners by 2014. Here in Arizona, during a housing boom fueled by cheap land, cheap money and population growth, Fannie Mae executives trumpeted that the company would invest \$15 billion to help families buy homes.

"As it turns out, Fannie and Freddie increasingly were channeling money into loans that borrowers could not afford to repay. As defaults mounted, the companies quickly ran low on money to honor their guarantees. The federal government, fearing that investors would stop providing money for new mortgage loans, placed the companies in conservatorship and took a 79.9% ownership stake, adding its own guarantee that investors would be repaid.

"The huge and continually rising cost of that decision has spurred national debate about federal subsidies for mortgage lending. Republicans want to sever ties with Fannie and Freddie once the crisis abates. The Obama administration and Congressional Democrats have insisted on postponing the argument until after the midterm elections."

## Editing the Results of the Housing Boom at Government Expense

"In the meantime, Fannie and Freddie are editing the results of the housing boom at public expense, removing owners who cannot afford their homes, reselling the houses at much lower prices and financing mortgage loans for the new owners.

"The two companies together accounted for 17% of real estate sales in Arizona during the first four months of the year, almost three times their share of the market during the same period last year, according to an analysis by MDA DataQuick. The sign of their presence – small placards hung be-

neath the real estate agent's standard for sale sign – often are panted in the front yards of several homes on the same street."

A new touch of aesthetics has thus arisen to beautify the land.

"The population of Pinal County, where Mr. Bridwell lives and works, roughly doubled to 340,000 over the last decade. Developers built an entirely new city called Maricopa on land assembled from farmers. Buyers camped outside new developments, waiting to purchase homes. One builder laid out a 300-lot subdivision at the end of a three-mile dirt road and still managed to sell 30 of the homes.

"Mr. Bridwell sold plenty of those houses during the boom, then cut workers as prices crashed. Now his firm, Golden Touch Realty, again employs as many people as at the height of the boom, all working exclusively for Fannie Mae. The payroll now includes a locksmith to secure foreclosed homes and two clerks devoted to federal paperwork.

"Golden Touch gets more work from Fannie Mae than any other in Pinal County. Mr. Bridwell said he was ready to jump because he remembered the last time the government ended up owning thousands of Arizona houses, after the late 1980s collapse of the savings and loan industry.

"Selling a house generally costs the government about \$10,000. The outsides are weeded and the insides are scrubbed. Stolen appliances re replaced, brackish pools are refilled. And until the properties are sold, they must be maintained. Fannie asks contractors to mow lawns twice a month during the summer, and pays them \$80 each time. That's a monthly grass bill of more than \$10,000.

"All told, the companies spent more than \$1 billion on upkeep last year....

"Prices have dropped significantly. So by the time a home is resold, Fannie and Freddie on average recoup less than 60% of the money that borrowers failed to repay, according to the companies' financial filings. In Phoenix and other areas where prices have fallen sharply, the losses are often larger.

"Foreclosures punch holes in neighborhoods, so resident community groups are public officials are eager to see properties re-occupied. But there is also concern that investors are buying properties, making it harder for communities to recover.

"Real estate agents tend to favor investors because the sales close surely and quickly and there is the prospect of repeat business.

"Executives at both Fannie and Freddie

say that have an overriding obligation to limit losses, but they are taking steps to sell more homes to families.

"Fannie Mae last summer announced that it would give people seeking homes a 'first look' by not accepting offers from investors in the first 15 days that a property is on the market. It also offers to help buyers with closing costs."

In short, what already has proven unworkable – running a world economy without serious accounting, mistaking human investment, proven after WWII "as the best investment a government can make" (Theodore Schultz, summing up the most important lesson to come out of World War II, briefly recognized and applauded – see elsewhere in this issue of *ER*), we are back to considering that investment as debt, and riding a sabre-toothed tiger bare-back as a substitute for accountancy. This is all to restore an unworkable system of unaccountable speculative banking that has proved that it cannot work. All this is leading to the final hopelessly gamble – atomic war.

W.K.

## Correspondance

The Editor:

Promises, Promises, but where will the money come from?

A cynical person might suspect that the billions of dollars for services and tax cuts promised by our politicians during this election campaign will not be forthcoming. After the election the party in power might simply ignore their promises or suddenly "discover" some unforeseen event which "prevents" them from keeping their promise – not their fault, of course.

The main reason given for not keeping a promise is that there is not enough money, but if not, where did it go? During the great depression we had the same problem; money was very scarce.

To overcome this problem, Prime Minister Mackenzie King knew that it would be necessary for the government to take control over the issue of currency and credit. This was accomplished in 1938 when King nationalized the Bank of Canada, and control of the issue of currency and credit was assumed by the Government of Canada. The government borrowed from the Bank for WWII and the post-war development, thereby helping "to avert the depression that had been widely expected" after the war. Instead of a depression, the Bank's monetary policy "ushered in the most vibrant period in Canadian economic history" lasting until the early 1970s. Great social programs like Medicare and pensions were started, and money was available for housing, education and infrastructure.

However, step by step, banking regulations were removed after 1950 (not just in Canada, but throughout the western world) and the government once again parted "with control of its currency and credit."

From 1975 on, the government's long-term debt was borrowed almost entirely

from the private sector. When interest rates went sky high in 1981, so did Canada's debt. From confederation to 1974, our federal net debt amounted to \$18 billion, and that included the debt of two world wars. By 1997 the federal net debt had climbed to a peak of \$588 billion, an increase of over 3,000% in 23 years. Net debt for the provinces and municipalities amounted to more than \$400 billion, for a total public net debt of over \$900 billion. Interest at one point amounted to \$77 billion a year. It is now down to about \$65 billion a year (which is 650 times bigger than the \$100 million sponsorship scandal that everyone is bothered about, and it goes on year after year after year). Ninety-three per cent of the debt came from compounding interest not from government program spending.

Resources for programs and transfer payments to provinces have been diverted to the debt and to the interest on the debt. There is not enough money for health, education, municipal infrastructure, the environment or anything else.

To get out of the financial hole we are in and have the resources for the things we need, we must once again take back control of our currency and credit. To do this, the government needs to return to using the Bank of Canada for its long-term debt. Some say this would cause inflation, but this did not happen during the 30 years (1940 to 1970) when the government used the Bank of Canada in this way.

Question for the candidates: Will you support using the Bank of Canada to carry some of the government's long-term debt and will you lobby your own caucus to do the same?

Richard Priestman Committee on Monetary and Economic Reform, Kingston Chapter

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# China — Unlike the West — is Increasingly Recognizing the Key Importance of Human Capital

The Wall Street Journal (7/07, "Inland China Beckons as Hon Hai Seeks Fresh, Cheaper Labor Force" by Jason Dean and Peter Stein) recounts a new reorientation of Chinese policy that has a lesson for the rest of the world: "Shenzhen, China – The world's biggest contract manufacturer of electronics, facing rising wages for its huge Chinese work force, is making a big investment in China's hinterland in a bet that country can retain its role as the world's factory floor for decades.

"Hon Hai Precision Industry Co. plans investments near two inland cities that will together employ half a million people, including suppliers. In just one of these locals, near Chengdu, the capital of Sichuan province, the maker of Apple Inc. iPads and other gadgets is investing \$5 billion to build a complex that Chairman Terry Gou hopes will become a model for how big companies operate in China.

"The inland investments come as workers demand better treatment. The investments also highlight the challenges that manufacturers face in China's coastal belt, including worker suicides earlier this year at Hon Hai, the sharp wage increases that Mr. Gou implemented afterward and recent strikes at other Chinese factories producing cars and parts for Toyota Motor Corp. and Honda Motor Corp.

"Hon Hai's success in managing rising wages could ultimately keep prices down for the Apple iPads, Nokia Corp. phones and Hewlett-Packard Co. printers that global consumers buy. And the shift inland by Hon Hai and other companies could solidify China's dominance as a low-cost exporter, fending off challenges from emerging-market rivals in Asia, Latin America and elsewhere – even as China also makes progress up the value chain in higher-end, more capital-intensive industries.

"Mr. Gou, whose company has factories in a dozen other countries, dismisses the idea that any of them could supplant China with its advanced infrastructure, businessfriendly policies and still large pools of surplus labor. In a nearly three-hour interview, he outlined his plans to keep plowing billion into the country. "I think in the next 20 years China won't have a competitor' as the world's main manufacturing center, he said.

"His response to the challenges he faces lies in two shifts under way at Hon Hai: one geographic, the other philosophical.

"He is rapidly relocating the core manufacturing work of Hon Hai's business away from its historical home in the coastal special economic zone of Shenzhen, where more than half of the company's 920,000 Chinese workers are employed. He is building facilities in less-developed areas further inland: Chengdu, Wuhan, and Zheng-zhou, secondtier cities that supply most of the laborers for the wealthier coastal provinces. In those areas the typical wage would be two-thirds that of the more developed coastal provinces, or less. Within two years, Mr. Gou expects 50% of all Hon Hai's workers to be located inland, compared with 20% today.

"Mr. Gou is trying to build industrial centers that hire more local labor. Gone will be the factory towns where Hon Hai runs not only factory lines but dormitories and hospitals – responsibilities that Mr. Gou said his company is ill-suited to handle. Instead he is enlisting local governments to build towns to house Hon Hai's staff and take over social functions that the company kept in-house."

Right there is a real move towards the recognition of human capital, with public resources invested in taking proper care of it, though the language of "human capital" is still not used. The single-child restriction imposed under the years Communist dictatorship has also led China's leaders to foresee a period ahead of acute labor shortages which also endows it for the role of a key investment of the nation. As do the numerous exiles from their homeland in the dictatorial rightist times of Chiang-Kai-Shek, and those who fled from the Communist dictatorship, and came back to China well-versed in foreign languages and even as distinguished academics on scientific fronts. However, without the inbred Chinese tradition for learning the present miracle of China could never have been achieved.

Today that is a growing advantage over the West where human capital in all its forms is increasingly considered a source of useless debt that prevents our governments from balancing their budgets and raising interest rates to keep prices flat.

But back to the WSJ article: "We're not just moving a factory from one location to another location, Mr. Gou said in the office of the company's enormous Longhua factory complex in Shenzhen. 'We move to a new concept, new ideas.'

"Mr. Gou's plans have outsize importance because of Hon Hai's massive scale, Since Mr. Gou founded the company in Taiwan in 1974, it has come to dominate the business of outsourced electronics manufacturing. Besides iPads and iPhones for Apple, Hon Hai makes personal computers, cell phones and videogame consoles for most of the biggest electronic brands, including H-P, Dell Inc., Nokia, Sony Corp, and Nintendo Co. Hon Hai's revenue is larger than that of its 10 main global competitors combined.

"Analysts on average expect Hon Hai's revenue to reach nearly \$85 billion this year, up from \$61 billion last year."

#### **Industrialization Moves Inland**

"Mr. Gou's plans for Hon Hai and its affiliates, known collectively as Foxconn Technology Group, reflect a broader shift in China's economic development toward faster growth in the hinterland. This week, Schenzhen, a boomtown that has one of the highest per-capita income levels in mainland China, is celebrating its 30th anniversary. For more than a decade, China's government has been trying to extend the success of Shenzhen and the rest of the coast inland.

"It has created a national highway system tens of thousands of miles long, built scores of air-ports and constructed the world's fastest rail network. That has made giant interior provinces such as Sichuan, home to more than 80 million people, more appealing for companies like Hon Haii. Last year, the fastest-growing region for foreign investment was Chongqing, which sits next to Sichuan.

"That growth is prompting many laborers to want to stay closer to home, rather than move to the coast for work. Last year, the number of migrant workers going to the Pearl River Delta region – the southern manufacturing heartland that includes Shenshen – shrank by 22.5%, the government said.

"'The trend is likely to exacerbate a tightening labor supply on China's coast,' said Michael Wang, managing partner of McKinsey & Co. in Shanghai. The migrant workers are always going to do their own

math. 'It doesn't make sense for me to go to Guangdong if I can do something in Chonqing,' he said.

"Mr. Gou began investing inland years ago, but the suicides this year prompted him to revise and accelerate his plans. Ten employees at the Longhua campus jumped to their deaths between late January and late May.

"Most notably, Hon Hai has sharply increased salary levels. Minimum base pay

for assembly-line workers in the Shenzhen operation will rise to 2,000 yuan or about \$295 a month in October, from as little as 900 yuan earlier this year. Mr. Gou said he was making the move in part because Chinese officials told him they plan to start enforcing a legal cap of 36 monthly overtime hours per employee. compared with the 80 hours Hon Hai and other factories use.

"In the interview, Mr. Gou denied that the suicides reflected poor working conditions. He and other Hon Hai officials said many of the suicide attempts appear to have been made on impulse, when workers had difficult personal problems."

However that may be, there is a widespread attempt to improve the condition of the worker, whose talents and efforts are recognized as a national asset rather than a burden on the national budget, as is the sorry case in the West.

W.K.

## Lessons from the Sinking of the Titanic

The Globe and Mail (23/09, "Family secrets rise to surface, shed light on sinking of the Titanic" by Mark Brown, London) tells a shattering tale of the suppressed steering error that led to the steering error that led to the pilot making the wrong turn into the iceberg, instead of driving away from it as he intended.

"Family secrets...cast new light on the sinking of the Titanic, one of the most enduring 20th-century disaster stories. Just as remarkable is that the first-hand testimony has remained a secret for nearly 100 years.

"Louise Patten, the grand-daughter of the most senior surviving officer from the Titanic, on Wednesday revealed family secrets that, she says, get to the heart of why the ship went down overnight on April 14-15, 1912, resulting in the death of more than 1,500 people. If true, the secrets reveal two things: that the ship was steered toward the iceberg that sank it because of a simple mistake.

"There is a caveat to the revelations. Ms. Patten, the wife of the former British education secretary Lord John Patten, and a London high flier, is making them known because they are a part of the of her new novel, *Good as Gold*.

"But 'that should not detract from their veracity,' she told *The Guardian*. 'I've known since I was 10.'

"The secrets come from Ms. Patten's grandfather, Commander Charles Light-toller, who was serving as second officer on board the Titanic. He was in a unique position to know exactly what happened, and told the story to his wife – but not to the official inquiries.

"That the Titanic hit the iceberg could be attributed to a misunderstanding. Because the ship sailed during the transition from sail to steam, there were two different systems in operation: rudder orders for steamships and tiller order for sailing ships. 'The two steering system were the completely opposite of one another,' Ms. Patten said. 'So a command to turn "hard astarboard" meant turn the wheel right under one system and left under the other.'

"The man at the wheel, Quartermaster Robert Hitchins, was trained under rudder orders – but tiller orders were still in use in the North Atlantic. So when First Officer William Murdoch first spotted the iceberg and gave a 'hard a-starboard' order, a panicked Mr. Hitchins turned the liner into the course of the iceberg.

"By the time the error was corrected, two minutes were lost. Nothing could stop the iceberg breaching the hull.

"Cdr. Lightoller was also privy to shocking decisions that followed. Shortly before the Titanic went down, there was a final meeting of four senior officers in the first officer's cabin. It was there that Cdr. Lightoller heard of the communication mistake. He also discovered that after the iceberg struck, the captain, Edward Smith, was persuaded to keep sailing by the chairman of White Star Line, Bruce Ismay, perhaps fearful of damaging the company's reputation.

"'My grandfather described the decision to try and keep Titanic moving forward as criminal,' Ms. Patten said. Pressing on added to the pressure of water in the hull, forcing it over the bulkheads and sinking the ship many hours earlier than it otherwise would have sunk.

"Ms. Patten added – 'the nearest ship was four hours away. Had she remained at "stop" it's probable that Titanic would have floated until help arrived.'

"There is a third part to the story, one that reflects less well on Ms. Patten's grandfather. Why did he not tell the truth at the inquiries into the Titanic's sinking?

"Ms. Patten said he felt duty bound to protect his employers, fearing it would bankrupt the company and every job would be lost.... It was for the best of reasons."

Ours is an epoch when we are increasingly absorbed with the basic structures of our social thinking and behavior. We can hardly fail to note some surprising similarities in the most seemingly unrelated areas.

Identifying the patterns of thought and behavior on the deck of the doomed Titanic and in the unending economic crisis that has closed in on the economies and politics of the world today is alarming, not because the solutions are unknown - but have been systematically suppressed. I need only mention that our society is ever more mobile and inventive in advancing its technologies, but, nonetheless ever meaner, and thoughtless in its recognition of human capital not as an expenditure that we cannot afford, but it comes prepaid since it had long since been recognized as the most important investment a government can make. It helped the transition from sailing vessels to steam engines, and much, much. It exposes our society to the depths of the oceans, icebergs, and much, else, around which we must guide the ship of state. If we are avoid the resulting perils, we must keep careful charge of our history, for it is te dearly-acquired knowledge of what we have learned, and is known as "history." That and the education to learn from our past successes and failures was recognized as the most valuable investment that society and hence a conscientious government, can make.

Thus *The Toronto Star* (30/09, "Stay tuned on EI hike plan: Flaherty" by Les Whittington informs us from Ottawa: "Finance Minister Jim Flaherty is waffling on the Conservative government's much-disputed plan to begin collecting billions of dollars more on payroll taxes as of January 1. Significantly, this has to do with what is known as the Harmonized Tax having to do with the losses of expected income to the

federal government from its previously having downloaded its social obligations onto the provincial governments.

"He also said Canada's economic growth number for July, due out on Thursday, may be negative.

"Facing massive budget deficits, the government said in its March budget that unemployment insurance premiums would rise on January 1. The increases are expected to generate an estimated \$24 billion in extra revenue for Ottawa over the next four years.

"The Harper government has been under fire from both business and labour groups to cancel the scheduled premium increase while unemployment remains high. The proposed hike of 15 cents per \$100 of insurable earnings would be paid for by employers and workers."

Sounds dreadfully business-like, except what is being double-taxed as an expenditure of government, was in fact recognized as prepaid human capital investment which in turn was classified as the most productive investment a government can make. That investment, in human capital, not only includes education, but care for health and the environment.

Yet while spending on human education is being treated as a luxury, spending on innovative technologies is extending to oceanic depths far greater than the Titanic end up in, and mining projects in a moon of the outlying planet Saturn where iron is found not in a different chemistry that with oxygen.

How a frantically urbanizing world is to cope with governments increasingly readier to build more prisons than schools is the exact equivalent of the helmsman of the Titanic mistaking confusing the rudder and tiller quite opposite turns of the wheel – using the one appropriated to sailing vessels for the one for sailing vessels.

In essence what we are up against is running an ever more complex high-tech world with nothing that could qualify as serious accountancy.

William Krehm

## Walking Backwards with Their Eyes Closed, the Fed and the US Treasury Seek a Way Out of the Financial Mess

The New York Times (19/09, "Vast Bailout by US Proposed in Bid to Stem Financial Crisis" by Edward L. Andrews) is vaguely approaching the core of the crucial bit of history that would clue them in to their big problem: "Washington – Top officials at the Treasury Department and Federal Reserve began discussing with Congressional leaders a plan to buy up vast numbers of distressed mortgages held by ailing financial institutions.

"While the details of the plan remain to be worked out, the discussions could result in the biggest bailout in US history and the most direct commitment of taxpayer funds so far in the worst financial crisis that Fed and Treasury official say they have ever seen.

"What we are working on now is an approach to deal with systemic risks and stresses in our capital markets,' said Henry M. Paulson Jr., the Treasury secretary. It would be 'a comprehensive approach that would require legislation to deal with the illiquid assets on financial institutions' balance sheets,' he added."

That being so, it would be essential to consult history to find out how they got into this mess. Were they to do that, they would learn what they shouldn't and couldn't have forgotten, but has been actively closed out of the nation's memory. When President Franklin Roosevelt was inaugurated for his first term in January 1933, 9,000 American banks had already shut their doors, and one of the first thing the new president did was declare a bank moratorium, since the run on the banks could not have taken longer

than a week or two to close all remaining banks in any case. When the banks opened their doors again a month later, legislation was brought in setting up a governmentbacked insurance of deposits up to a certain amount, and the Glass-Steagall law (1935) that barred banks in the Federal Reserve system from acquiring an interest in the other financial "pillars," i.e., stock brokerages, insurance, and mortgage firms. The reason: each of these other "pillars" has its own liquid reserves - not necessarily actual cash but readily convertible into cash, which it had need of for its own business. Allow the federal system banks - up to now confined to short-term commercial loans to take over the "other financial pillars"), they will acquire and reinvest those near-cash reserves as base for applying the bank multiplier and that will give them the means of acquiring further storeys of miscellaneous reserves invested to earn interest. And in this way a skyscraper will emerge serviced by one-way elevators that can only go up ever faster, never down - except in disaster. That is the stage that we have reached.

The compounded bank multiplier – floor by floor of this arrangement had by the year 1998 when COMER stopped making the calculation because we had run out of a plausible denominator – having reached the multiple of 380, using the small coins and bills in the tellers' tills and the ATMs for lack of anything better to serve as denominator of our crucial ratio. But these were needed for giving the public small bills

and coins, failing which there would be a run on the banks that it is the prime duty of banks and their advisors to avoid. So we abandoned our calculations in the last year of the last millennium.

It should be clear that had Glass-Steagall law not been repealed in 1998, there could have been no subprime mortgage crisis because the investment banks would never have been allowed to take over the reserves of banks whose lending had been restricted to discounting relatively short-term trade bills based on bills of trade transactions for relative short-terms. Nor would insurance concerns such as AIG involved in insuring the quality of subprime securities. It is astounding that even with the moving laments published in the leading financial and general press, there should not have been until a couple of days ago a mention of the key role in producing the crisis of the repeal of the Glass-Steagall legislation that imposed the restriction on banks getting into those fateful "other financial pillars."

Nor is much written or made of the abandonment the US – and hence, indirectly of the leading economies of the gold standard in 1971. That left the credit of the treasuries and central banks the only legal tender in existence. Mix that up with subprime debt, and you end up with subprime treasuries and subprime central banks. And that is where we are, with the press at its most revealing still far, far from having come completely clean.

W. Krehm

## Very Ancient China May Help Us Cope with Today's Permissible Half-truths

The New York Times (08/20, "Appeasing the Bond Gods" by Paul Krugman) informs us: "As I look at what passes for responsible economic policy these days, there's an analogy that keeps passing through my mind.

"I know it's over the top, but here it is anyway: the policy elite – central bankers, finance ministers, politicians who pose as defenders of fiscal virtue – are acting like the priests of some ancient cult, demanding that we engage in human sacrifices to appease the anger of invisible gods.

"Hey, I told you it was over the top. But bear with me for a minute.

"Late last year the conventional wisdom on economic policy took a hard right turn. Even though the world's major economies had barely begun to recover, even though unemployment remained disastrously high across much of America and Europe, creating jobs was no longer on the agenda. Instead, we were told, governments had to turn all their attention to reducing budget deficits.

"Skeptics pointed out that slashing spending in a depressed economy does little to improve long-run budget prospects, and may actually make them worse by depressing economic growth. But the apostles of austerity — sometimes referred to as 'austerians' — brushed aside all attempts to do the math. Never mind the numbers, they declared: immediate spending cuts were needed to ward off the 'bond vigilantes,' who would pull the plug on spendthrift governments, driving up their borrowing costs and precipitating a crisis. Look at Greece, they said.

"The skeptics countered that Greece is a special case, trapped by its use of the euro, which condemns it to years of deflation and stagnation whatever it does. The interest rates paid by major nations with their own currencies – not just the United States – showed no signs that the bond vigilantes were about to attack, or even that they existed.

"Just you wait, said the austerians: the bond vigilantes may be invisible, but they must be feared all the same.

"This was a strange arrangement even a couple of months ago. when the US government could borrow for 10 years at less than 4% interest. We were being told that it was necessary to give up on job creation, to inflict suffering on millions of workers, in order to

satisfy demands that investors were not, in fact, actually making, but which austerians claimed they would make in the future.

"But the argument has become even stranger recently, as it has become clear that investors aren't worried about deficits; they're worried about stagnation and deflation. And they've been signaling that concern by driving interest rates in the debt of major economies lower, not higher. On Thursday, the rate on 10-year US bonds was only 2.58%.

"So how do austerians deal with the reality of interest rates that are plunging, not soaring? The latest fashion is to declare that there's a bubble in the bond market: investors aren't really concerned about economic weakness; they're just getting carried away. It's hard to convey the sheer audacity of this argument: first we were told that we must ignore economic fundamentals and instead obey the dictates of financial markets; now we're being told to ignore what those markets are actually saying because they're confused.

"You see, then, why I find myself thinking in terms of strange and savage cults, with human sacrifices to appease unseen forces.

"And, yes we are talking about sacrifices. Anyone who doubts the suffering caused by slashing spending in a weak economy should look at the catastrophic effects of austerity programs in Greece and Ireland.

"Maybe those countries had no choice in the matter – although it's worth noting that all the suffering being imposed on their populations doesn't seem to improve investor confidence in their governments.

"But, in America, we do have a choice. The markets are not demanding that we give up job creation. On the contrary, they seem worried about the lack of action – about the fact, as Bill Gross of the giant bond fund Pimco put it earlier this week, we're 'approaching a cul-de-sac of stimulus,' which he warns 'will slow to a snail's pace, incapable of providing sufficient job growth going forward.'

"It seems almost superfluous, given all that, to mention the final insult: many of the most vocal austerians are, of course, hypocrites. Notice in particular, how suddenly Republicans lost interest in the budget deficit when they were challenged about the cost of retaining tax cuts for the wealthy. But that won't stop them from continuing to pose as deficit hawks whenever anyone proposes doing something for the unemployed.

"So here's the question that I find myself asking: What will it take to break the hold of this cruel cult on the minds of the policy elite? When, if ever, will we get back to the job of rebuilding the economy?"

#### Krugman Is Silent on the Punch Line

However, for that we would have to dredge up again, the greatest lesson to come out of World War II. Since Paul Krugman, strangely enough is silent on the point, I am left with the need of recounting a cut of history, that had it not been suppressed, would have solved the problem that seems to concern Dr. Krugman.

So here goes: At the end of WWII, Washington sent to Japan and Germany hundreds of economists to study the damage done on those two outstanding trading nations, and predict how long it would take before they could resume such roles. Some sixteen years later, one of these, Theodore Schultz of the University of Chicago, published a book in which he explained how wide of the mark they were in their forecasts Then he concluded that what led them astray was their having concentrated on the war's physical destruction, but overlooked the importance of their human resources had come through the conflict essentially intact. And in a stroke of genius he concluded that investment in human capital is the greatest investment a government can make. Of course, Dr. Krugman, Nobel prize winner, did not have to depend on COMER to bring that to his attention. It is simply that he finds himself impaired to speak his full mind on such matters.

Fortunately, my research department has come up with a measure of what I hope might reassure him. In very ancient China in Beijing the Emperor naturally had his exquisite harem, and a staff of trustworthy eunuchs to assure that no hanky-panky might slip in behind His Imperial Back. But what was cut off to qualify them for such key posts, was carefully preserved to be buried with the faithful eunuchs upon their death so that they might be made whole once again as due reward for their faithful earthly service.

William Krehm

## Price Stability and the Public Sector: Part 2

The following is Part 2 of an essay that was translated into French and appeared in the March, 1970, issue of Revue économique of Paris. Part 1 appeared in the September issue of ER.

We have already examined one multiplier that acts upon the shift function to increase its value – the counter-shift effect. There are still other multipliers.

These indirect or multiplier effects of the shift function we shall now attempt to trace. They may be grouped broadly into two classes. Those that we might call "structural" are essentially adjustments to changes originating elsewhere in the economy. Others might be termed "inflationary" because they actively disturb the relationship of supply to demand and thereby generate pressures on productive capacity. These two sets of effects are closely intertwined; at times they are essentially distinct aspects of the same phenomenon. Because of this, indeed, it will never be possible to disentangle completely the impact of the social lien and of inflationary factors proper on price.

- 1. In its primary incidence the social lien itself is structural its growth reflects the relative expansion of the unpriced public sector.
- 2. However, the accretion of social lien onto price is a vital part of the mechanism by which purchasing power is transferred from the private to the public sector. And this transfer of purchasing power does not have a *neutral* effect on supply and demand. Governments rarely save: their propensity to consume may be taken as unity, whereas private individuals and firms have a propensity to consume of less than unity. The effect of such a transfer of purchasing power from the private to the public sector is thus to increase aggregate demand, and by dint of this to push up price. We thus have a secondary inflationary effect of the social lien.<sup>1</sup>
- 3. A sustained upward price gradient, once established by the social lien, has a marked influence on the patterns both of consumption and investment. In a society where consumer credit has grown as potentously as in ours, a secular price rise has a most significant effect in reducing the burden of debt. the consumer experiences a "wealth effect." Inevitably his mood becomes more buoyant and he is encouraged to make further purchases on credit. For the business community, too, soaring prices are

a great amortizer of errors: windfall profits in many lines are delivered as though by conveyor belt. Equity is shifted from the hands of the passive lenders to the risk-takers, and cannot but help lead to stepped-up investment.

Don Patinkin has held that the drop in real money balances due to price increases tends to reduce demand and exerts an equilibrating restraint ("The wonders of the 'invisible hand' never cease").2 This would have a measure of validity if the active buyers of goods made a habit of holding great cash balances. The fact is that the entrepreneur has always made a point of operating to a large extent on borrowed funds. The spectacular growth of home mortgage-financing, and of consumer durables has put the public at large on a not dissimilar footing. In this context Patinkin's real balance effect is reversed: price stability is given the back of the "invisible hand." A sustained price surge reduces the real indebtedness of consumers and entrepreneurs and encourages further purchases. This is what is occurring in our economy today, and to a large extent as a secondary inflationary effect of the social lien.

4. When we come to consider the impact of the social lien on interest rates, we find in it both structural and inflationary components. The structural one is simple enough: with continuing price increases becoming a strong probability, lenders learn to distinguish between the nominal and the real rate of interest that they receive. As a protection against the lower purchasing power of the money in which their loan will be paid back to them, they exact a higher rate of interest.

This is clearly but an adjustment to changes arising elsewhere in the economy.

### The Pattern of Rising Interest Rates is Set

But once the pattern of a climbing interest rate has been set, it can exert an inflationary effect. Isolated increases in interest rates will in many instances act as a deterrent to investment. But if there is a strong reason to believe that the interest rates will continue pushing upward along with prices, the prospect becomes most inviting for their long-term borrowers. For they may capitalize the probable further increase in interest rates over the term of their borrowing, and consider that a windfall.

This effect of rising prices on interest

rates is at times reinforced by misguided official policy. Identifying higher prices with inflation, when it may at times be mainly a structural effect, governments often attempt to cool off what they take to be an "overheated economy" by dousing it with higher interest rates and tighter credit. In doing so, they may simply compound the trouble, and nudge still higher the interest rates that have already been driven up by the price rise that they seek to combat. And such higher interest rates feed back into price and impart to the price-interest spiral an added torque.

In many fields – notably in housing – interest enters as a major factor into costs. Indeed, in large urban centers the combination of soaring costs *and* interest rates is putting the supply of inexpensive rental housing quite beyond the scope of the private sector. As a result the public sector is becoming saddled with it. This, of course, adds further to the burden of taxation and the impact of the social lien upon price. As the proportion of public to private sector continues to shift to the disadvantage of the latter we are likely to see this same pattern cropping up in more and more areas of the economy.

The depressant effect upon prices of higher interest rates was closely tied in with the onset of the downward phase of the business cycle. But it is one of the crucial workings of the social lien — quite apart from parallel influences of anti-cyclical policy and built-in stabilizers — to attenuate the downward phase of the cycle and all its consequences.

Our point may be illustrated by borrowing from Alvin H. Hansen's *Business Cycles and National Income*, 1951 (p. 174), a table setting forth the endogenous forces that contribute to the business cycle. By endogenous forces Hansen refers to routine economic factors in contrast to external contingencies such as wars, bumper crops, technological upheavals. First we will give the table as Hansen offers it, and then we extend it to take in the investment effects of the social lien.

In constructing his table (Table 1), Hansen assumed a constant rate of annual autonomous investment of \$10,000 per annum. By applying to this multiplier and accelerator effects, he shows that these two influences are enough to impress a cyclical pattern on business activity. By the multiplier effect, of course, he refers to the addi-

tional consumption induced by a quantum of investment beyond the demand created by its initial expenditure. To the extent that the factors of production spend the income received from such investment, more purchasing power is created in successive production periods. But each time this purchasing power changes hands a portion of it is saved rather than spent and the momentum of the initial investment is dissipated. The proportion of income received that is spent is "c" – the propensity to consume. The accelerator is the proportion of investment induced by the increase of consumption during the period.

It is assumed that disinvestment (capital consumption) cannot exceed \$10.0 per annum. The cyclical effect appears beyond all doubt.

Now into this table let us introduce a further column entitled "Investment Induced by the Social Lien additive to Price." This ingredient of price rise feeds signals to the investment community and tends to increase the volume of investment. The extent of such increase will depend upon: (1) the proportion of the tax increase to the Gross National Product; (2) the value of the Tax Shift Function; (3) the sensitivity of the investing community to price increases. To achieve a crude simplification of our model we will assume that such investment induced by the SL amounts to \$3,000 per annum. We will then calculate the multiplier and accelerator effects upon this, keeping in mind that when the accelerator effect takes on a negative value it cannot exceed the sum of the autonomous and SL-induced investments.

Comparing this table (Table 2) with the original table of Hansen we find: (1) The high point of the cycle in either case is attained in period six. However, as a result of the investment effects of the Social Lien, the peak has been lifted from 101.3 in Table 1 to 131 in Table 2.

(2) In Table 1 the low point was reached in period 13 with a value of 9.9. In Table 2 the low point does not come until period 14 and its value has been increased somewhat to 13.0.

The Social Lien has thus contributed to weakening the equilibrating function of the business cycle, imparting to it a powerful upward thrust, somewhat blunting its trough, and drawing it out in time. Our model, of course, is a very crude simplification of reality. Thus we have assumed that taxation and investment induced by the Social Lien are spread evenly throughout the cycle. This, of

Table 1: Hansen Table — Marginal propensity to Consume is 2/3; Accelerator 2

Period	(1) Autonomous	(2)	(3)	(4) = (1) + (2) + (3)
	Investment – deviation from base period	Induced Consumption (b)	Induced Investment (c)	Total deviation of income from base period
Base Period	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
1	10.0	0.0	0.0	10.0
2	10.0	16.7	13.4	30.1
3	10.0	20.0	26.6	56.6
4	10.0	37.8	35.6	83.4
5	10.0	55.6	35.6	101.2
6	10.0	67.5	23.8	101.3
7	10.0	67.6	.2	77.8
8	10.0	51.6	(-10.0)	51.6
9	10.0	34.4	(-10.0)	34.4
10	10.0	22.9	(-10.0)	22.9
11	10.0	15.2	(-10.0)	15.2
12	10.0	10.1	(-10.0)	10.1
13	10.0	6.7	(-6.8)	9.9
14	10.0	6.6	(-0.2)	16.8

(b) The figures in this column increase for each period by  $^2I_3$  the *increment* of income in the *preceding* period. This procedure follows from the assumption (1) that the marginal propensity to consume is  $^2I_3$ , and (2) that changes in consumption lag one period behind income.

(c) The figures in this column in each period are twice the difference between the induced consumption of that period and that of the preceding period. This procedure follows from the assumption that every increase in consumption induces (via the acceleration principle) an increase in investment equal to twice the increase in consumption.

Table 2							
Period	(1)	(2)	(3)	(4) Investment	(5) = (1) + (2) + (3) + (4)		
	Autonomous	Investment induced by	Induced	induced by Increased	Total Deviation of Income from		
	Investment	Social Lien	Consumption	Consumption			
0	0	0	0	0	0		
1	10.0	3.0	0	0	13.00		
2	10.0	3.0	8.66	17.33	39.00		
3	10.0	3.0	26.00	34.66	73.66		
4	10.0	3.0	49.1	46.20	108.3		
5	10.0	3.0	72.1	46.00	131.1		
6	10.0	3.0	87.4	30.60	131.0		
7	10.0	3.0	87.4	0	100.4		
8	10.0	3.0	66.9	(-13.0)	66.9		
9	10.0	3.0	44.6	(-13.0)	44.6		
10	10.0	3.0	29.7	(-13.0)	29.7		
11	10.0	3.0	19.8	(-13.0)	19.8		
12	10.0	3.0	13.2	(-13.0)	13.2		
13	10.0	3.0	8.8	(-8.8)	13.0		
14	10.0	3.0	8.6	(4)	21.2		
15	10.0	3.0	14.1	11.00	38.1		
16	10.0	3.0	25.4	22.6	61.0		

					Table 3	m												
	1950 1	1952	1953	1954	1955 1	1956 1	1957 19	1958 19	1959 1960	50 1961	51 1962	52 1963	3 1964	4 1965	5 1966	5 1967	1968	~
(1) Gross National Product (billions of dollars)	284.8 34	5.5	364.6	364.8 3	398.0 4	419.2 4	441.1 44	447.3 48	483.7 503.7	3.7 520.1	0.1 560.3	.3 590.5	.5 632.4	.4 684.9	.9 747.9	9 789.7	7 860.7	7
(2) Total Receipts (all governments) – T –	68.7	868	94.3	89.7 1	100.4	109.0	115.6 11	114.7 12	128.9 139.8	.8 144.6	1.6 157.0	.0 168.8	.8 174.1	.1 189.1	.1 213.2	.2 227.2	2 260.9	6
(3) Output per man-hour (1958 prices)	80.3	84.3	87.8	89.9	93.9	94.1	96.9	99.8 10	103.4 105.0	.0 108.6	3.6 113.8	.8 117.9	.9 122.5	.5 126.6	.6 131.4	4 133.5	5 137.9	6
(4) Implicit price deflators for GNP (Index Numbers 1958 = 100) – P –	80.2	87.5	88.3	9.68	6.06	94.0	97.5 10	100.0 101.6	1.6 103.3	3.3 104.6	1.6 105.8	.8 107.2	.2 108.8	.8 110.9	.9 113.8	.8 117.3	3 121.8	<b></b>
(5) $X = \frac{P_{n+1} - P_n}{P_n} \cdot \frac{OMH_{n+1}}{OMH_n} \cdot \frac{GNP_n}{T_{n+1} - T_n}$	0.744	-1.31	0.527	7 1.56	2.42 -	-12.9	0.521	0.755	1.36 (	0.502 (	0.646	1.73 0	0.833 0.	86	1.35 1	1.02		
OMH <sub>n+1</sub>	-2.8	-1.18	2.17	4.17	17.4	-4.6	0.881	1.47 2	28.9 12	12.0	2.28	-1.12 23.0		3.16 8	8.77 2	2.42		
oss hourly earr total non-agri	\$1.34	1.52	1.61	1.65	1.71	1.80	1.89	1.95	2.02	2.09	2.14	2.22 2	2.28 2	2.36 2.	2.45 2	2.56 2.	2.68 2.	2.85
(7) Corporation profits after taxes (billion dollars)	24.9	19.6	20.4	20.6	27.0	27.2	26.0 2	22.3	28.5 26	26.7 2.	27.2 3	31.2 33.1	.1 38.4	.4 46.5	.5 51.0	.0 48.1	1 51.0	0
(8) Income of unincorporated enterprises	24.0	27.1	27.5	27.6	30.3	31.3	32.8 3	33.2	35.1 34	34.2 3!	35.6 3.	37.1 37.9	.9 40.2	.2 42.4	.4 44.8	.8 46.3	3 47.8	8
<ul><li>(9) Gross Government Product (compensation of general government employees)</li></ul>	20.9	31.2	31.9	32.5	34.2	36.1	39.1 4	42.1 4	44.4 47.	2	50.9 5	54.7 58.1	.1 63.0	.0 67.8	.8 76.	.5 84.8	8 94.3	ю
(10) Corporation profits less taxes plus capital consumption allowance	33.7	31.0	33.5	35.5	44.4	46.1	46.8 4	44.3 5	52.0 5′	51.6 5	53.5 6	61.3 64.8	.8 72.	.3 82.	.9 90.7	.7 91.5	5 98.1	<b>-</b>
(11) % Corporation profits after taxes to GNP less Gross Govt. Product	9.4	6.2	6.1	6.2	7.4	7.1	6.5	5.5	6.9	5.9	2.8	6.2 6	6.2 6	6.7 7.	7.5 7	7.6 6.8		6.7
(12) % Corp. profits after taxes to sales dollar all manufacturing	7.1	4.3	4.3	4.5	5.4	5.3	4.8	4.2	4.8	4.4	4.3	4.5 4	4.7 5	5.2 5.	5.6 5	5.6 5.0	0	
(13) % Income of unincorporated enterprises to GNP	8.4	7.8	7.5	9.7	7.6	7.5	7.4	7.4	7.3 (	6.7	6.8	9.9	6.4 6	6.4 6.	6.2 6	6.0 5.9		5.6
(14) % of Corp. profits less taxes plus one half of capital consumption allowance to GNP less gross Government Product	11.1	<sub>∞</sub>	8.	8.5	6.6	9.6	9.1	8.5	6.8	8.6	9.8	9.2 9	9.2 9	9.7 10.5	.5 10.5	5. 9.9		9.7
(15) % Total Receipts of all Governments to GNP	24.1	56	25.9	24.6	25.2	. 92	26.2 2	25.6 2	26.6 28		27.8 28	28.6	.6 27.7	.7 27.8	.8 28.5	.5 28.8	8 30.1	<u>_</u>
(16) Average gross hourly earnings (total non-agricultural private) $\times$ 10 <sup>4</sup> Output per Man-Hour $\times$ Implicit GNP Deflator or $\frac{(6) \times 10^4}{(3) \times (4)} =$	1.96	1.97	7	2.04	1.97	2.01	1.99	1.96	1.93	1.94	1.91	1.87	28. 1	1.87	1.73 1	1.77 1.	1.91	1.79

course, flies in the face of long-established anti-cyclical policies. However, the general direction of the influence of the Social Lien is established by our model.

In his "Economic Issues of the 1960s," published in 1960, Alvin Hansen makes the point that the inflation of the period from 1948 to 1959 was really much milder than that between 1897 and 1913. For consumer prices the increase between 1948 and December 1959 averaged 13/4% compounded annually, as contrasted with 2.5% between 1897 and 1913. We might add that between 1960 and 1967 this rate compounded annually averaged still lower (116.3 for 1967 as compared with 103.1 for 1960): the annual growth factor was 1.61%. But averages can hide as much as they disclose. Thus the increase in 1966 over 1965 was 3.8% and the following year 2.8%. And we have reason to believe that since then price increases both have and will accelerate considerably. This is not only because of the workings of the Social Lien but because of the cumulative psychological effect of what has already happened. For we have by now chalked up almost 30 years of virtually unrelieved price rise. The last decline in the US Consumers' Price Index was in 1949 - a drop from 102.8 to 101.8 compared with the previous year - and the second last was in 1939 - a drop from 60.3 to 59.4.

The persistence of such a rising trend over so long a stretch of time is hardly less important than the annual rate of the increase. The very contours of a pronounced cycle with price collapses occurring periodically kept the public mindful that price movements were a two-way affair. If they where plucky and cunning, lenders might contrive to get their loans back when prices are low; no one quite knew when fortune's wheel would turn. Moreover, the anguish of the collapse by far exceeded the euphoria of the rise, and imprinted itself on the public mind beyond anything that cold statistics might suggest to the historian. Timid souls, trust establishments, and retired people were always available to invest as rentiers and bondholders and thus to fill the essential role of passive investors. But with the hazards of price drops dampened, and a sustained upward price trend powered by the Social Lien, all sectors of the public must necessarily become more "inflationminded" - not excluding bondholders, widows and orphans.

We will now venture upon a statistical testing of our theory. With the available data we can hardly pretend to results of great precision, but we should be able to satisfy ourselves that we are at least operating within the right magnitude, and that our conclusions are fully compatible with the evidence to hand.

Our basic difficulty will be in sorting out the effects of the shift function from those that we might term the *index of inflation* proper. This, of course, is not unrelated to the classic demand-pull vs. cost-push debate, but our posing of the problem is novel insofar as it focuses attention on the part of taxation in this picture, a role that has been ignored in most discussions.

#### The Two-faced Inflation Index

The index of inflation will in turn be the resultant of two distinct factors - the excess of demand over supply, and any unneutrality in the money supply. We may at once eliminate the "unneutrality of the money supply" as a major factor in the long-term price movements of the United States for the period that we will be examining. Between 1950 and 1966 the total money supply and time deposits in the United States increased by 158% as compared with an increase in the GNP during the same period of 202.2%. Even if we were to consider all time deposits as part of the money supply, on balance the monetary policy would thus appear to have been restrictive. We may therefore confine our consideration of inflationary forces to non-monetary factors in our examination of the American experience during these years.

Let S = the Index of Inflation; X = the Tax Shift Function; P = GNP Deflator; OMH = Output per Man-Hour; T = total of government revenue at all levels. The subscripts refer to time periods.

If we assume that the Shift Function X = 0, the index of inflation may be stated as follows:

$$S = \frac{P_{n+1} - P_n}{P_n} \cdot \frac{OMH_{n+1}}{OMH_n}$$
 (1)

On the other hand if we work on the assumption that the Index of Inflation S=0, then the following equation may be set up:

$$X = (T_{n+1} - T_n/GNP_n) = \frac{P_{n+1} - P_n}{P_n} \cdot \frac{OMH_{n+1}}{OMH_n} (2)$$

Combining equations (1) and (2), we obtain a more general equation that covers workaday reality:

$$S + X = (T_{n+1} - T_n / GNP_n) = \frac{P_{n+1} - P_n}{P_n} \cdot \frac{OMH_{n+1}}{OMH_n}$$

Now let us calculate the values of X on the assumption that S = 0. The data that we use are taken from the *Annual Report of the* 

Council of Economic Advisers, United States Government Printing Office, Washington, 1969 (Table 3).

The values of the Shift Function X – on the assumption that the Index of Inflation S = 0 – are to be found in row (5) of page 23. With the exception of the two negative values for 1953-4 and 1957-8 which we shall discuss below, none of these values are outside the range of probability, even on the assumption that S, the index of inflation is zero. But S, of course, is only exceptionally zero: it takes on positive or negative values. And when the X value tends to be high as in 1956-7 (2.42), 1960-1 (1.36), and 1963-4 (1.73), there is a strong suggestion that we are in fact not warranted in supposing that S is zero. Rather it is likely to have played a significant part in the price rise. We can see this, too, in the circumstance that these years combined a quite substantial growth of the GNP with a very restrained growth of government receipts, T.

We may arrive at a better insight into the interaction of S and X by comparing the equation given in our row (5) with another expression, seemingly more accurate, given in our row (5A) that we shall now develop.

Assuming once more that S = 0, and taking V for the physical volume of production, we have:

$$X \cdot d(T/GNP_n) \cdot GNP_n = P_{n+1} - P_n \cdot \frac{OMH_{n+1}}{OMH_n}$$

Dividing both sides by GNP (= VP) this becomes:

$$X \cdot d(T/GNP) = \frac{P_{n+1} - P_n}{P_n} \cdot \frac{OMH_{n+1}}{OMH_n}$$

In this expression we may replace d(T/GNP) with the formula of the differential calculus and we obtain:

$$X \cdot \frac{T'GNP - GNP'T}{GNP^2} = \frac{P_{n+1} - P_n}{P_n} \cdot \frac{OMH_{n+1}}{OMH_n}$$

This tells us that the larger the growth of the GNP, the greater the Shift Function would have to be to account wholly for any increase in price. And where in our row (5A) we find that this yields improbably high values for X, we can interpret this to mean that S was in fact substantial rather than zero, and quite decisive for the behaviour of prices, while the role of the social lien was negligible. This was so, for example, in 1964-5 when X by our equation in (5A) would have equaled 23.0 on the supposition that S was 0. In that year the increase of the GNP from \$632.4 to \$ 684.9 bullion sufficed both to reduce the specific weight of the social lien and to reinforce inflationary demands.

In general such high values of X as calculated by our equation in (5A) occur under one of two distinct sets of conditions: (1) when the GNP has grown substantially providing a broader tax base to keep down the specific weight of the social lien, and stocking inflationary pressures; and (2) when T, the revenue of governments, has grown but slightly (as in 1956-7 and 1960-1) which rules out a significant contribution of the social lien in such price rises as may have taken place.

In the two instances where the equations for X in rows (5) and (5A) produced negative values, we are confronted with a point of some interest. In both these years T declined moderately) 94.3 to 89.7 billion in 1953-4 and 114.7 in 1957-8) reflecting in part a near-stationary GNP (364.6 to 364.8 billion and 441.1 to 447.3 billion). Clearly when dT assumes a negative value, and attempt to explain a price rise on the basis of the social lien must yield a negative value for this shift function. And this in turn might mean either that any tax reduction was not passed onto price, or that inflation and not the social lien was the factor responsible for the price increase that year.

In both these years a quite stationary GNP, instead of leading to price stability as the supply-demand theory would lead us to expect, was accompanied by an Implicit GNP Deflator that showed more than a trivial advance – 2.1 points in 1953-4 as compared with 1.3 points during the subsequent year and 2.5 points in 1957-8 along-side 1.6 points for 1958-9. The probable explanation is that in these subsequent years the social lien was spread over a substantially increased GNP – 364.8 to 398.0 in 1954-5 and 447.3 to 483.7 in 1957-8.

Our equation in (5A) clearly shows this likely relationship.

We referred to the equation for X in (5A) involving d(T/GNP) rather than just dT/GNP as "seemingly more accurate." We did so because as in so many instances in economics a more elaborate mathematical equation does not necessarily bring greater

precision. Often as in this case the simpler formula may do less violence to a complex reality. Specifically the only time interval that we have available for use in (5A) is a calendar year, and this must certainly introduce gross error when substituted for an infinitesimal quantity in the differential equation. In a year even natural population growth by its effect on the GNP will produce its own peculiar astigmatism. We are, moreover, living in a period of upwardly tilted and highly administered prices, and in such a microeconomic climate prices tend to be raised almost at the very moment that higher taxes are levied. Such price increases in turn through the sundry multipliers that we have examined spark an expansion of the GNP which tends to offset the price increases by spreading the tax burden - if further productive capacity is available - or contribute to inflationary price increases if such unused capacity is not at hand. Either of these effects would lessen the impact of the social lien, and thus call for a much higher value for the Shift Function if the price data are to be explained exclusively on the basis of the social lien. Hence the improbably higher values for X that we obtain in our row (5A).

Because of such considerations we must accept the equation in (5) as more useful for actual calculation of the likely value of X than that in (5A) which embraces too many secondary inflationary effects of the social lien rather than just the initial structural one.

Economic discussions today are haunted by the paradox of a near static output that is often accompanied by an upward price trend. Thus on page 58 of the *Report of the Council of Economic Advisers* for 1968, we find the following passage: "Over the 6 and <sup>3</sup>/<sub>4</sub> year period (1961-7), real disposable income per capital...rose 29 percent, a greater gain than that of the preceding 18 years... the price performance for much of the period was outstanding, though the record of the past two years is blemished. For the period as a whole, the over-all GNP price

deflator rose 2.0 percent a year.... During the preceding seven years of slow growth and intermittent recession, the annual rate of increase had been: 2.2 percent for the GNP deflator."

The Report offers little to explain this paradox. For paradox it is. During a period of "slow growth and intermittent recession" it stands to reason that our S - the index of inflation - should have been small or negative. Yet the price boost was beyond that of the bustling sixties. Viewed in the light of our social lien theory, these seemingly contradictory facts drop rather neatly into place, as can be seen from our tables. During the years of laggard GNP, the tax burden grew substantially both in absolute and relative terms. On the other hand in the sixties though taxes increased at a not too dissimilar pace, the rapid increase of the GNP spread its burden on price.

Again on page 105 the Report tells us: "Largely as a consequence of restrictive monetary and fiscal policy and a concurrent rise in the personal saving rate, the growth and final demand slowed in late 1966. A period of inventory adjustment and sluggish overall growth followed in the first half of 1967 - the rise in prices that did occur in that sluggish period was essentially a reflection of rising costs rather than of excessive demand. However, these cost increases originated in the strong demand conditions of 1965 and 1966. Thus the price-wage spiral continued to turn...." There is never a suggestion that it may have been the tax-price spiral that did at least part of the "turning."

The following figures (Table 4) taken from the 1969 Report of the Council of Economic Advisers would indicate that the latter was at least an important factor in this period.

We have here a rising weight of taxation to GNP that is reflected in ascending prices even in the presence of limp demand.

There are two approaches to testing the statistical validity of our social lien theory. The first is to establish the magnitude of the shift function. We have done this and found that the results, though perfectly compatible with our hypothesis, were not wholly satisfactory because of the difficulty in sorting out the social lien from effects of inflation proper.

The other approach, which we shall now attempt, is to compare the trend of government revenue as a proportion of the GNP, with that of wages to production, and of profits to the output of the private sector.

First let us deal with the likely contribu-

	Table 4			
		Billior	ns of Dollars	
	1964	1965	1966	1967
All government Revenue	174.1	189.1	213.2	227.4
Increase over previous year	5.3	15.0	24.1	14.2
GNP	632.4	684.9	747.6	789.7
Increase over previous year	42.1	52.5	62.7	42.1
% Total Government Receipts to GNP	27.7	27.8	28.5	28.8
Implicit GNP Deflator	108.8	110.9	113.8	117.3

#### Figure 1

Average hourly wages gross (total non-agricultural private)

 $\times$  10<sup>4</sup> (Row (6) of our table)

Output per man hour (total non-farm) – our Row (3) Implicit Price Deflator for GNP – our Row (4)

tion of wages to the unsettlement of prices over the past 18 years. For this purpose we shall use the formula in Figure 1.

This gives us hourly wages adjusted to both productivity and price changes, and the results may be found in row (16) of our tables.

They would indicate that wages in industry so adjusted have not risen during the period in question. It is important to note, however, that this by no means eliminates the possibility that there may have been an important element of "wage-cost push on price." For it is not excluded that the upward price movements so initiated should have outstripped the wage increases and thus left real wages adjusted to productivity no higher than before. However, we should find that the proportion of profit to price, or profit to GNP, or taxes to GNP, increased substantially during this same period, there is a strong suggestion that such a dynamic disequilibrating element in the cost-price complex.

We give the proportion of corporation profits after taxes to the GNP less the gross government product in row (11) of our tables. The gross government product is in remuneration to direct government employees. We deduct this rather than total government revenue or expenditure from the GNP to ascertain the output of the private sector; for the goods purchased by government from the private sector contribute to profits. We should, of course, keep in mind that profits tend to increase as production moves towards fuller capacity, and fall off when production drops to well below capacity. Yet we obtain an arithmetical mean of 6.8 for this portion over an 18-year period, and end up with figures just of that order during the final two years, when production, by the way, was extraordinarily buoyant.

Profits of corporations clearly are only a part of the picture. We are not able to provide figures for the profits of unincorporated enterprises *after* taxes for obvious reasons; but the proportion of such profits to GNP can be found in our row (13). During the last two prosperous years of this period the figures for this ratio were 5.9% and 5.6% as compared with an average over

the entire period of 6.8%. This probably reflects in part the shrinking importance in the national production of unincorporated enterprises. But to the extent that this is so, row (11), giving the proportion of corporation profits after taxes to the GNP less gross government product, understates our case.

The share of corporation profits after taxes to the sales dollar of all manufacturing is given in row (12). This would indicate a modest gain in 1966 (5.6%) as compared with an average of 5.0% for the entire period and 5.0 again in 1967. This rather inconclusive result should probably be adjusted downward for our purpose because the increased value of inventory due to price rises must have contributed to such profits.

In our row (14) we give the proportion of corporation profits after taxes plus one half the capital consumption allowance to the GNP less gross government product. This is based on the supposition that one half of the writeoff allowed for capital consumption constitutes in fact effective profits - a most generous assumption. Over the 18 years under survey the average value of this proportion was 9.3%. The average over the last three years is 10.3% - an increase of the order of 11%. It is highly questionable whether this increase is not in large part of a cyclical character. But even accepting it, it must be considered of a relatively modest order alongside what we find to have taken place in the proportion of government revenues to GNP.

#### **Enter the Social Lien Effect**

The figures for the latter are to be found in our row (15). Here, once more, we must recognize that the growth of government revenues has had the effect via the social lien of increasing both the real and dollar volume of the GNP, and of thus counteracting the ratio. Yet in spite of this the ratio has moved most impressively, with but few setbacks, from 24.1% to 30.1% – an increase of almost 25%. And since the volume of government revenues is well over 300% the volume of corporation profits after taxes plus half the capital consumption allowance, the impact of each percent of increase of the former is likely to have considerably

more resonance on price than a percent increase of the latter.

Without a doubt all this raises a strong probability that the growth of our public sector through the taxes to pay for it has been the most dynamic of the factors contributing to our price surge. It is likely, indeed, to have played a greater role in this than the wage-cost push to which so much attention has been devoted – in part because the latter fits so much more cozily into the runnels of supply-demand theory.

When price movements are basically cyclical, interest rates tracked a cycle of their own - one that was out of phase with that of prices and thus tended to counteract it. Indeed, the prescriptions of earlier anti-cyclical policy were founded upon this phase lag: when prices rose dangerously, the remedy was to up the interest rate to help drive down prices. Today, however, because of the social lien prices and interest rates more and more tend to move in phase. This further weakens the much-blurred cyclical pattern: prices and interest rates seem locked in a secular upward course. The social lien accretes steadily onto price, and the anticipation of still higher prices adds to the interest rate a correction for the anticipated shrinkage of the currency.

This positive correlation that is developing between price and interest has the effect of upsetting much of the vintage wisdom of conventional theory. Where it does not squarely invalidate its teachings, it often leaves its equations dangling indeterminately. Price has become an autonomous variable not wholly shaped by forces within the private sector itself; in part its movements reflect the growth of the public sector.

We can illustrate the point by viewing our contemporary dilemma as it appears through the model abstracted form Keynes' *General Theory of Employment, Interest and Money.* 

The basic equations of this later Keynesian system may be expressed in Keynes's "wage-unit" as follows:

(1) i = L(M, Y)

i = rate of interest, Y = income of factors of production

(2) C = 0 (Y, i)

M = quantity of money, C = consumption expenditure

(3) I = F(i, C)

I = Savings or Investments which in this system based on real units are necessarily equal

(4) Y = I + C

In the parameters of these equations

there are, of course, involved Keynes' *liquidity preference* and his *propensity to consume*.

In our dual economy prices in the private sector acquire a growing measure of autonomy because of the influence of the Social Lien *deriving entirely from influences outside the private sector.* This in turn has its effect on i, the interest rate, as price advances are discounted into the remote future. Hence in equation (1) we must include P for price as an additional independent variable. This gives us an amended equation

$$(1a) i = L (M, Y, P)$$

Substituting this in (2) and (3), and then the amended equations (2) and (3) in (4), we obtain:

(2a) C = 0 (M, Y, P)

(3a) I = F (M, Y, P)

(4a) Y = Y (M, Y, P)

Thus P appears as an independent variable in all equations. It is no longer enough for the achievement of an equilibrium of price to manipulate Y, i, and M in a way that would give us full employment. For factors outside the private sector could bring on a price increase by stepping up the incidence of the social lien. It is rather like playing poker with deuces wild. It can be done, but unless the player is alert to this added rule of the game, he is unlikely to end up with the pot.

Should the reader be unconvinced by this reasoning, I would refer him to the Economic Letter of the First National City Bank of New York of January, 1969, where the following passage is to be found: "Expectations of accelerated inflation have led some firms to speed up capital spending programs on the grounds that it will cost more next year. However...anticipation of investment needs can be costly if the expected growth in markets does not develop on schedule, or if prematurely installed facilities become technologically outmoded. A puzzling feature of the investment boom is the fact that industry is operating well below optimum capacity in both the United States and Canada."

The contents of the above passage could well be expressed in terms of our equation (3a) above. I is growing because of an increase in P. There would be nothing in the original Keynesian version of this equation I = F (i, C) to cover the facts set forth in the bank letter.

Once the Indians have been sorted out from the trees, it should be possible to design policy to alleviate the mischief caused by the groundswell of price.

It is common practice for much of the

capital expenditure in the public sector to be paid out of current revenue.3 But such capital expenditures are investments that will serve their purpose for many years. According to accepted theory, financing such works in the public sector by borrowing would tend to inflate prices; paying for them on an "as you go" basis from current revenue keeps down prices by syphoning off purchasing power from the private sector. Undoubtedly this is one effect, but not the only one. For the increased taxation to defray such capital outlay from current income must give rise to a heavier social lien precipitating onto price. At bottom this is bound to have much the same influence on price that one-year writeoffs for capital investments would have in the private sector.

One reason that this has been overlooked is that the very notion of capital investment has not stuck very deep root in the public sector. Liberal economists have been brought up to regard the public sector as a sink of waste; Marxists regard government expenditures as the unproductive use of surplus value for the unspeakable end of the capitalist state. Writers like J.K. Galbraith have fought a valiant battle to enlighten the public to the real role of the public sector, but their struggle has been essentially a defensive one of limited tactical objectives. Up to now the basic theory relating the private and public sectors has not been elaborated.

In the Statistical Abstract of the United States, 1968, "Producers' Durables" is given for 1967 as making up 11.7% of the national wealth, while "Business Structures" as 13.2%. Jointly they added up to 24.9%. Consumers' durables on the other hand amounted to 11.5% or almost half the combined value of the buildings and equipment of business.

Now it is not hard making a broad comparison between the cost of educating an average family and the likely value of that family's stock of consumers' durables. Where two children and two parents have all had a high-school education, it is likely that such 48 student-years of education would at least equal the cost of that average family's durables, especially since a far more rapid depreciation must be applied to a car or a television set than to a person's training. Where one or more in the family has had university training, the cost of that family's learning is certain to outstrip considerably the depreciated value of their durables very much so if the scholars' keep while at college is reckoned. And the best-educated part of the population today is found among younger people who still have to acquire an impressive stock of worldly goods. Given this, and the great numbers of such younger people in our contemporary society, it is not a headlong conjecture that within a decade the capital that advanced countries will have invested in the education of their people will equal or exceed the capital vested in the physical plant of the private sector.

The same conclusion is suggested even more obliquely by the rapid shrinkage of depreciation periods for industrial equipment. This has little enough to do with physical wear; rather, it is a matter of anticipated technological obsolescence.4 This does not necessarily shed light on the actual cost of training the research and development personnel responsible for such obsolescence. but it does indicate what order of expenditure would be warranted for such education. Such educational capital is less exposed to obsolescence than physical plant - when training becomes outdated it can often be brought up to standard through refresher courses. Its effects are carried over even to subsequent generations - note the rapidity with which devastated Germany was rebuilt after World War II, as contrasted with the slow progress of say Egypt which was spared serious ravages in that struggle.

#### **End Notes**

- See Alvin Hansen's Business Cycles and national Income, 1951 (p. 200) for a summary of pioneer writings on this effect.
   See Thorn, Richard S. (1966). Monetary Theory and Policy. Major Contributions to Contemporary Thought, p. 288. NY: Random House. Inc.
- 3. The Statistical Abstract of the United States (1967) gives the total revenue for all governments during 1066 as \$225,641 million and the total expenditure as \$224,813 million. But the figure for expenditure more than covered by revenue included capital outlays by governments of \$39,981 million.
- 4. In his Modern Capitalism Changing Balance of Public and Private Power (London, 1965), Andrew Schonfield informs us that "Imperial Chemical Industries, the largest British manufacturing firm, had commonly used a 20-year depreciation period for equipment...this was reduced in 1950 to 15 years for new projects. In the early 1960s this became 12-15 years, and more recently...an average of 10 years. For certain types of investment, the period is down to 5-7 years."

#### A Word of Explanation

Burdening our readers with so long and ancient a document certainly does not make for light reading. However, what is involved has a clear, many-sided relevance to the seeming unsolvable nightmare that has overtaken the world.

Published in French translation by the leading French economic journal of the day, *Revue économique*, in May 1970, it embodies the conclusions arrived at after decades of study of various disciplines. It had been sent out blindly to some 30 economic journals

around the world. The French publication led to some eight favorable reviews – a very favorable one in the economics journal of Cambridge University in Britain. Only later did I come to understand why *Revue économique* had responded practically by return mail.

On its board was not only the leading French economic historian, but two statistical experts who had tried testing price behaviour with the actual movements of the supply-demand ratio, with negative results. Their conclusion: an unidentified factor was missing. And then the postman arrived with my unsolicited answer to their puzzle.

The point to this note is that until recently I myself had been left without a copy of the essay causing all this trouble. I had been approached for information about my new economic theory. I left the gentleman making the inquiry by laying out all material including my only copy of the *Revue économique* essay. Only when he departed, did I discover that he had taken that copy

with him. Surely he must have come on assignment from the secret service of some government. But since I have no hard evidence on the point, we will leave the name of that government unspoken.

Eventually I found time to locate a copy of the *Revue économique* issue in the University of Toronto library, and was engaged in retranslating the French back into English, when a diligent assistant found the a copy of the original English in my basement files.

W.K.

# Alongside Mouse-poor Haiti, Richly Endowed Brazil is Handicapped by a Similar Lack of Human Capital

The New York Times (08/05, "Educational Gaps Limit Brazil's Reach" by Alexei Barrionuevo") informs us: "Caetes, Brazil – When Luiz Inacio Lula da Silva was sworn in as Brazil's president in 2003, he emotionally declared that he had finally earned his 'first diploma' by becoming president of the country.

"One of Brazil's least educated presidents – Mr. da Silva completed only the fourth grade, but soon became one of its most beloved, lifting millions out of extreme poverty, stabilizing Brazil's economy and earning near-legendary status at home and abroad.

"But while Mr. da Silva has overcome his humble beginnings, his country is still grappling with its own. Perhaps more than any other challenge facing Brazil today, education is a stumbling block in its bid to accelerate its economy and establish itself as one of the world's most powerful nations, exposing a major weakness in its newfound armor.

"'Unfortunately, in an era of global competition, the current state of education in Brazil means it is likely to fall behind other developing economies in the search for new investment and economic growth opportunities,' the World Bank concluded in a 2008 report.

"Over the past decade, Brazil's students have scored among the lowest of any country's students taking international exams for basic skills like reading, mathematics and science, trailing fellow Latin American nations like Chile, Uruguay and Mexico.

"Brazilian 15-year-olds tied for 49th out of 56 countries on the reading exam of the Program for International Student Assessments, with more than half scoring in the test's bottom reading level in 2006, the most recent available. In mathematics and science, they fared even worse.

"'We should be ashamed of ourselves,' said Ilona Becskehazy, executive director of the Lemann Foundation, an organization based in Sao Paolo devoted to improving Brazilian education. 'This means that 15-year-olds in Brazil are mastering more or less the same skills as 9-year-olds or 10-year-olds in countries such as Denmark or Finland.'

"The task confronting the nation – and Mr. da Silva's legacy – is daunting. Here in this dirt-poor northeastern town, where Mr. da Silva lived his seven first years, about 30 percent of the population is still illiterate, a figure three times higher than the national rate

"When Mr. da Silva was a boy here, his father used to beat some of his older siblings when they went to school instead of working, said Denise Parana, the author of a biography of the president.

"Today, teachers say that many parents send their children to school only because school attendance is a requirement of the Bolsa Familia subsidy program that Mr. da Silva has greatly expanded under his watch which provides up to about \$115 a month per family.

"But even with the added incentive, reading levels vary so greatly in the eighth-grade classroom, students from 13 to 17 all read aloud from the same text.

"A lot of parents say, "Why should they study if there are no opportunities?," said Ana Carla Pereira, a teacher at another school here.

"As president, Mr. da Silva's own education policies got off to a slow start; he dismissed two education ministers before settling on one in 2005. Then the government's educational program did not start until 2007 – four years after Mr. da Silva took office."

#### Da Silva's Slow Start on Education

"Now in his last year in office and talking about his place in history, Mr. da Silva has an 'obsession' with the issue, his education minister, Fernando Haddad, said, which was plain to see when he recently returned here to his childhood town.

"'I want every child to study much more than I could, much more,' he said while announcing a program to give laptops to students. 'And for all of them to get a university diploma, for all of them to have a vocational diploma.'

"The urgency could hardly be clearer. Brazil had already established itself as a global force, riding a commodity and domestic consumption boom to become one of the largest economies in the world. With huge new oil discoveries and an increasingly important role in providing food and raw materials to China, the country is poised to surge even more.

"But the nation's educational shortcomings are leaving many Brazilians on the sidelines. More than 22 percent of the roughly 25 million workers available to join Brazil's work force this year were not considered qualified to meet the demands of the labor market, according to a government report in March.

"In certain cities and states we have a problem hiring workers, even though we do have employment,' said Marcio Pachmann, president of the Institute for Applied Economic Research, the government agency that produced the March report. Earlier estimates showed that tens of thousands jobs went unclaimed because there were not enough qualified professionals to fill them.

"'Unless that gap is filled soon, Brazil may miss its 'demographic window' over the next two decades in which 'the economically active population is at its peak,' the World Bank said.

"Dr. Haddad, the education minister, said that while Brazil still performed poorly compared with other countries, it was improving faster than many competitors.

"'Brazil is trying to make up for lost time,' Dr. Haddad said. 'While other countries were investing in education we were wasting our time here saying that education was not important.'

"The government has had some notable successes, including a program that has created about 700,000 scholarships for low-income students to attend private colleges, an effort lauded by education specialists.

"Under Mr. da Silva, the government also opened more than 180 vocational schools – compared with 140 added during the previous 93 years – and has administered a new test to evaluate student performance.

"School enrolment has continued to climb, a trend that began in the 1980s under the previous president, Fernando Henrique Cardoso, and middle school graduation rates have risen under Mr. da Silva by 13 percentage points to 47 percent, Mr. Haddad said.

"But those successes fall short of the urgent thrust for change that some educational specialists were hoping to see from Mr. da Silva, considering his background. Not nearly enough was done to improve the quality of education and teaching methods, and the president has not used his bully pulpit to inspire the nation to demand more from its teachers and its schools, they say.

"'He has this aura, he has this power, he influences a lot,' Ms. Becskehazy of the Lemann Foundation said. 'He did not use the opportunity to lift people up.'

"It has not helped, critics add, that Mr. da Silva has sometimes used his own lack of an education as part of a populist discourse to assail the well-educated 'elites' who long ruled Brazil, almost boasting that he got as far as he did without formal education.

"In his speeches, he tended to pit lesseducated people against the educated Brazilian elite,' Mr. Pachmann said. "Finding workers with the adequate skills for even manual labor jobs is becoming a challenge, and many companies are not waiting for Brazil's education system to catch up. The Brazilian construction giant Odebrecht is one of several companies that train a potential labor pool for a few months in basic reading and math.

"'Education is the big disadvantage for Brazil when compared to China, India and Russia,' said Paulo Henrique Quaresma, the director of human resources at Odebrecht, referring to the other three nations that global investors see as the world's largest developing economies.'

"In Caetes, it is not difficult to see why. 'The first my father introduced me too was the handle of a hoe,' said Jose Bezerra da Silva, who, like his wife, is illiterate and cannot help his children with their schoolwork. The couple and their seven children share a two-room house; the couch's wood frame is poking out from under a threadbare cushion. 'Lula has changed a lot of things.'"

#### **Brazil's Struggling System**

"Brazil's first-grade repetition rate is 28 percent, among the highest in the world, the World Bank said, though the government contends the number has been shrinking. Secondary schools contain many older students because of the high rate of failing students in earlier grades, and many of the frustrated simply drop out.

"'Brazil will continue to grow slower than its potential,' said Samuel Pessoa, an economist at the Brazilian Economic Institute at the Getulio Vargas Foundation. 'If it had a better education system, things would be different.'

Summing up: we have noted the epochmaking recognition of the importance of government investment in human capital, as the most important lesson to come out of World War II. Canada, had utilized its nationalization of its central bank in 1938 and many of the restrictions on what private banks could invest in pioneered by President F.D. Roosevelt in the United States. It led to the nationalization of the Bank of Canada in 1938, and its use to receive thousands of highly educated professionals as immigrants - financed in part by private organizations funded by American private relief organizations who were not allowed to bring these professional refugees into the US. However, Washington immediately after the war, had sent hundreds of economists to Japan and Germany to predict how long it would take for these great trading countries to resume such roles once again. Sixteen years later, one of these, Theodore Schultz of the University of Chicago, published a book explaining why he and his colleagues had been so far out to sea with their predictions. The main reason was that they had concentrated on the physical destruction and paid little heed to the fact that the highly trained and talented work force had come out of the conflict largely intact. From this he concluded that human capital, and hence the environment and health services, is the most profitable investment a government can make. For years Schultz was feted, decorated, and then completely expunged from official memory.

Canada, however, having made full use of the essence of Schultz's great conclusion, went on to apply it not only in opening its gates wide to millions of mostly penniless refugees, above all to professionals, and transformed our country to what was the most successful use of imported human capital – along with little New Zealand.

Under the influence of our large speculative banks much of that glorious record has been buried. Our universities, with a very few exceptions, have had their economic faculties purged of the history that had served us so well.

However, lurking there is our still completely nationalized bank – our government still chooses to recognize its vast prepayment in investment capital not as a capital asset, but treats it as debt. Yet, though unused, our nationalized central bank is there – so superior to the partially nationalized, Federal Reserve – where the state units of that central bank are still in the hands of the private banks.

And on top of the positive lessons to be found at least on Canada's books, if hardly used, we now have the negative record of these matters of the powerful Brazilian economy, gasping for its lack of human capital.

Putting the two together, we can still evade the inevitable consequences – a blind rush of governments to the final hopeless gamble in which there can be no winners – the next atomic war. For in that field there have been no piddling hesitations – the funding for future space wars has known no restraints. Without a clear grasp of our history, and the key involvement of other sociological and scientific faculties in our gagged universities, the odds against the survival of humanity are immense and shooting up further.

William Krehm