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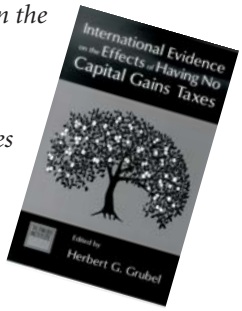

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Editor's notes

I dislike flying intensely. Consequently, I do very little of it. And as a result of my inexperience, I am unable to distinguish one plane sound and feel from another. To be specific, turbulence feels to me simply like the precursor to a full-on crash.

On one memorable return flight from Britain, the plane was tossing about severely enough that I asked the pilot, who was on a reassuring stroll around the main cabin (this was well prior to Sept. 11), whether the wings were going to hang on until we landed.

"Madam," he answered, "Please understand that I, too, have an interest in the plane's safe arrival." Indeed.

Much the same can be said of our environment. Every one of us has a vested interest in its good health, in its survival. The Left, which may regard itself as the conscience of the planet, has no monopoly on concern about the state of our planet. We all want to live.

But the analogy doesn't end there. I, a rare traveler ignorant of the minutiae of flight physics, have no personal knowledge base that can give me accurate information about whether or not the plane I am traveling on is really in trouble. Whether I like it or not, I must rely on the pilot's expertise. A cheerful pat on the back from an equally ignorant fellow traveler is not calming. That traveler knows as little as I do. I am not prepared to put my trust in someone who is no expert in the field.

We would do well to heed the same principle when it comes to a discussion of the environment. Most of us are not scientists. We have no way of knowing what the true state of the environment really is. A protester dressed up in a polar bear (or seal, or tree) costume is not a good source of hard facts about the well-being of our environment. Fortunately, there are plenty of experts out there who do have the understanding to give us the information we need to come to some well-reasoned, sensible conclusions about the environment and whether or not we can, and how we should, help keep it healthy.

This issue of *Fraser Forum* introduces you to some of these experts. I think you'll be pleased to find that, like the pilot of my plane, their assessment of the situation is clear, straightforward, and for the most part, quite reassuring.

—*Kristin McCahon*

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When Does More Doctors Mean Less Access?

by Nadeem Esmail

Some health policy analysts who deny that the Canadian system is in crisis point to the increase in doctors per capita since the introduction of taxpayer-funded health care as proof. Indeed, the number of doctors in Canada has risen from 1 doctor for every 950 Canadians in the 1960s to one doctor for every 550 Canadians in 1999 (Rachlis *et al.*, 2001; Barlow, 2002).

However, the fact that the number of doctors per capita in Canada has risen does not prove that Canada has no doctor shortage. There must also be some accounting of the increased demand for medical services on the part of patients, which is not possible in Canada where no marketplace for physicians' services exists. What is possible is a comparison of Canada's experience with that of other OECD countries where consumers of health are able to determine, through parallel private systems or market mechanisms in the public system, what the growth in the number of physicians per capita should have been.

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In 1998, Canada ranked sixteenth out of 22 OECD countries in a comparison of doctors-to-population (table 1). That year, Canada had a population of 56,203 full-time-equivalent doctors (OECD, 2001). In order to rank with equally developed countries, Canada would have needed a significantly larger population of doctors. For example, in order for Canada's 1998 ranking to equal that of France, which spends as much as Canada does on health care as a percent of GDP, the number of doctors would have had to be higher by approximately 35,000. In order to rank first, Canada would have needed 44,000 more doctors—an 83 percent increase.

Although the number of doctors per capita in Canada has increased over time, it is important to consider the growth rates in other countries. In 1970, Canada had 1.2 doctors per 1,000 people, the fourth- highest ratio among 9 OECD countries for which data was then available. Canada had a higher doctor-to-population ratio than Switzerland, and as high a ratio as the United States. Since 1970, however, 8 of these 9 countries have bettered Canada's growth in doctors per capita. Only Finland did worse. While the density of doctors in Canada grew by 50 percent over the period, the average increase in the density of doctors in the other 8 countries was 125 percent.

In the 28 years between 1970 and 1998, Canada's doctor per capita rank fell from fourth of 9 countries to sixteenth out of 22 countries. This is particularly remarkable given that in 1998 Canada ranked fourth in health spending as a percent of GDP. Only Germany, Switzer-

continued on page 6

Table 1: Comparison of Doctors per 1,000 Population for Select OECD Countries (1998)

Rank	Country	1998
1	Germany (1997)	3.3
2	Belgium	3.1
2	Hungary	3.1
4	Austria	3.0
4	Finland	3.0
4	France	3.0
7	Czech Republic	2.9
8	Portugal	2.8
8	Sweden	2.8
8	Norway	2.8
11	Luxembourg	2.4
12	Switzerland	2.3
13	United States	2.2
14	United Kingdom	2.1
15	Australia	2.0
16	**Canada**	1.8
17	New Zealand	1.5
18	Netherlands	1.4
19	Mexico	1.3
20	Turkey	1.2
21	Denmark	0.7
21	Ireland	0.7

Source: OECD Health Data 2001.

The Environmental Right to Sue:

Should Canada Follow America's Litigious Lead?

by Sylvia LeRoy

Celebrity sightings are not entirely unusual for Banff, where each summer the annual Banff Television Festival attracts established stars and would-be producers to collect awards and pitch their wares. But rather than pushing the usual Hollywood products, when Robert F. Kennedy Jr. descended on Banff with an entourage of his Hollywood friends early this year, they were promoting a very different American import: the use of environmental lawsuits to save Alberta's lakes and rivers from unseen polluters.

The celebrity event, planned around a fundraising dinner for the New York-based eco-litigation group the Waterkeepers Alliance, set off a war of words between Kennedy and Alberta's Environment Minister Lorne Taylor over the province's environmental protection record. This is not the first time Kennedy has clashed with Canadian politicians over his activist and litigious brand of environmentalism. Invited to speak to the House of Commons during EcoSummit 2000, Kennedy provoked the ire of federal Environment Minister David Anderson by criticizing Ottawa for devolving environmental protection and enforcement powers to the provinces.

Both incidents draw attention to the differences between US and Canadian environmental protection regimes, and the role that courts and private interests play in setting and enforcing environmental policy. In the late 1960s, environmental activists began advancing their cause through the American courts in much the same way that civil rights activists had used the justice system to change social policies relating to desegregation, affirmative action, and abortion. Environmental groups such as the Natural Resources Defence Council, and the Sierra Legal Defence Fund (now Earthjustice Legal Defence Fund) were formed for just that purpose, and now claim credit for writing many of America's major environmental laws. To ensure the vigorous enforcement of powerful US legislation such as the Clean Air Act, the Clean Water Act, and the Endangered Species Act, these laws contain powerful civil suit provisions that encourage private citizens and activist groups to sue alleged polluters.

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Canada's federal system and the rapidly eroding tradition of Parliamentary supremacy have heretofore limited the ability of the courts to advance an environmental agenda. Rules of standing have traditionally limited the right to bring a case to court to those who have suffered a particular harm to their person or their property. Nevertheless, environmentalists, specifically a newly-emerging group of environmental lawyers, have become key players in establishing federal and provincial environmental departments with strong oversight powers. Since the advent of the Charter of Rights and Freedoms in 1982, access to courts by special interest groups has grown enormously, as has the success of environmental litigants. The environmental litigation and activism of Canada's own Sierra Legal Defence Fund along with a network of other lobbying and litigation groups have constituted the vanguard for environmental law reform. The past decade has seen court challenges used to extend the application of federal environmental laws deep into areas of provincial jurisdiction.[1]

Today, Canada's most powerful federal environmental protection laws, the Canadian Environmental Protection Act (CEPA) and the Fisheries Act, both include citizen suit provisions. Environmentalists are currently lobbying to have a citizen suit provision reinserted in the proposed Species at Risk Act (SARA) as well.[2] Citizen suit provisions give anyone the right to sue accused

environmental lawbreakers, whether the citizen-plaintiff has suffered a particularized injury or not. In effect, these provisions empower private citizens to defend the Earth in court. In addition to both deterring environmental harms and providing compensation for them, an environmental right to sue is endorsed as a way to improve public participation in environmental decision-making while supplementing government enforcements efforts.

But are more lawsuits really the answer? Certainly, the common law tort system has always played an important role in environmental protection efforts. As Berkeley law professor Peter S. Menell explains, "By identifying the cause of environmental harms, assessing the behavior of actors responsible for such harms, and quantifying the harm to plaintiffs, individual assignment of liability through courts, in theory, provides compensation to victims while internalizing the social costs of harm-producing activities" (Menell, 1991, p. 93).

American experience with citizen suit provisions suggests that what works in theory does not always work in practice. For instance, rather than promoting participatory grassroots democracy, empirical evidence suggests that an environmental right to sue may advance the organizational goals of powerful but narrow special interest groups. A review of citizen suit activity under the US Clean Water Act in the 1980s found that five national environmental groups (including Kennedy's own Natural Resources Defense Council)[3] were responsible for the majority of suits filed between May 1984 and September 1988 (see Greve). A later study found that $9.3 million out of the total $11.3 million received as penalties between 1988 and 1993 were collected by four prominent groups that had a practice of carefully screening potential cases (see Lehner). Of course, everyone would like to assume that the environmental interest groups are taking polluters to court purely for altruistic reasons, but the reality is that organizational incentives exist to bring suits for the purpose of attracting or retaining members (Boyer and Meidinger, 1985). While plaintiffs may only receive costs, they stand to profit by obtaining attorneys' fees or settlements to finance subsequent litigation or other environmental initiatives. As Dr. Michael Greve, adjunct scholar at the Competitive Enterprise Institute, has noted, "Substantial portions of [citizen suit] settlements constitute direct transfer payments to environmental groups" (Greve, 1990, p. 339). In Canada, the individual or interest group initiating the case can be awarded half of the fine.

Frivolous lawsuits are more likely than ever in the US, where the Supreme Court recently reversed an almost decade-long trend that had limited the ability of environmental interest groups to push claims through the courts. The court ruled that *the perception* of environmental harm—whether or not that fear is justified—provides adequate grounds to achieve standing to prosecute an alleged polluter.[4] According to this reasoning, the enforcement of existing regulations does not necessarily result in environmental improvement. Consequently, it pays environmental bounty hunters to equate emissions with pollution, promoting phantom fears about the real state of the environment.

While budgetary constraints and accountability to the electorate encourage governments to prioritize enforcement efforts, private litigants have strong incentives to consider the ease of legal victory (and depth of defendant's pockets) when considering which violators to prosecute (Adler, 2001, p. 39). Because private litigants don't face political repercussions from unwise enforcement priorities, they are free to pursue enforcement for enforcement's sake, regardless of the severity of legal infraction, far less the real threat to the environment.

For instance, a report released in December 2001 by two BC environmental law groups criticizes the province's mine inspectors for focusing on workers' health and safety rather than making the prosecution of every environmental infraction the top priority (Campbell, Sumi, and Young, 2001). In contrast to jurisdictions that encourage private prosecutions (such as Ontario), the BC government has adopted a policy of taking over, and frequently staying the cases of private litigants. Considering the fact that BC's mining policy has been ranked the lowest on The Fraser Institute's *Annual Survey of Mining Companies* for the past five years (Jones and Fredricksen, 2001), any plans to expand opportunities for private prosecutions would be ill-considered.

... organizational incentives exist to bring suits for the purpose of attracting ... members.

The courts should continue to play an important role in protecting the environment by enforcing property rights that assign responsibility under traditional common and civil law rules. But as BC Attorney General Geoffrey Plant explained at a conference last November, while "it used to be said of the com-

mon law of civil obligation that its rules and their application encouraged predictability and stability … The legal landscape is in a constant state of flux, as the boundaries of legal principles expand into uncharted waters. These shifts have tended to favour increased liability for defendants, particularly solvent ones" (Plant, 2001). Whether it is the government or private industry that is directly being sued, it is ultimately the public—either as consumers or taxpayers—who pay the price.

Do Canadians really want to follow America's lead by encouraging special interest groups to act as "private attorneys general" using the precautionary principle to trump competing social and economic goods? Liberalized notions of legal liability, relaxed rules of standing, and citizen suit provisions in new and existing environmental laws suggest that we may already be following American trends. This is coming at a time of growing recognition about the limited capacity of courts to decide complex issues of social policy in an already overburdened court system. Before encouraging special interest groups to tie up the courts with more lawsuits, further research is needed to quantify the relative costs and benefits of an environmental right to sue.

Notes

[1]See, for example, *Friends of the Oldman River Society v. Canada (Minister of Transport)* [1992] 1 S.C.R. 3.

[2]Such a provision was included in Bill C-33, SARA's predecessor that died on the order paper when the 2000 general election was called.

[3]The other four groups are the Sierra Legal Defense Fund, Atlantic States Legal Foundation, Public Interest Research Group, and Friends of the Earth.

[4]*Friends of the Earth v. Laidlaw, 5*28 U.S. 167 (2000).

References

Adler, Jonathan H. (2001). "Stand or Deliver: Citizen Suits, Standing, and Environmental Protection." *Duke Environmental Law and Policy Forum.* Vol 12, no 1 (Fall): 39-83.

Boyer, Barry and Errol Meidinger (1985). "Privatizing Regulatory Enforcement." *Buffalo Law Review.* Vol. 34, no. 3 (Fall): 833-964.

Campbell, Karen, Lisa Sumi, and Alan Young (2001). Undermining the Law: Assessing the Crisis in Compliance With Environmental Mining Laws in BC. *West Coast Environmental Law and Environmental Mining Council of BC* (December). Available at *www.wcel.org/wcelpub/2001/13569.pdf.*

Greve, Michael S. (1990). "The Private Enforcement of Environmental Law." *Tulane Law Review.* Vol. 65, no. 2 (December): 339-94.

Jones, Laura and Liv Fredricksen (2001). *Fraser Institute Annual Survey of Mining Companies 2001/2002.* Vancouver, BC: The Fraser Institute.

Lehner, Peter H. (1995). "The Efficiency of Citizen Suits." *Albany Law Environmental Outlook.* Vol. 2, no. 1 (Fall): 4-12.

Menell, Peter S. (1991). "The Limitations of Legal Institutions for Addressing Environmental Risks." *Journal of Environmental Perspectives* vol. 5, no. 3, pp. 93-113.

Plant, Geoffrey P. "Civil Justice in the 21st Century—The Way Forward." Address to the Continuing Legal Education Society of British Columbia. Nov. 30, 2001. Available at *http://www.cle.bc.ca/cle/stay+current/collection/2001/11/01-misc-plant.htm.*

When Does More Doctors Mean Less Access?
continued from page 3

land, and the United States spent more on health care, while France spent a percentage equal to Canada's. Comparatively, the health care sector should have enough resources to provide for many more doctors than we now have. The long and growing waiting lists suggest that we could certainly employ more physicians to advantage.

The fact that there are more doctors per capita in Canada now than at any time in the past is not a decisive argument against claims of doctor shortages. Every OECD country has more doctors now than in 1970. What is clear is that Canada has a relative shortage of doctors compared to other, equally developed OECD countries and, in fact, compared to many less developed countries. It is also clear that the coverage of the population is, comparatively, much lower than it was 30 years ago when the current medicare system was launched.

Note

[1]Doctors are defined as general practitioners plus specialists, not including interns and medical residents.

References

Barlow, Maude (2002). *Profit is not the Cure.* Council of Canadians: Ottawa.

Organisation for Economic Cooperation and Development (2001). *OECD Health Data 2001: A Comparative Analysis of 29 Countries.* CD-ROM. Paris: CREDES.

Rachlis, Michael, Robert G. Evans, Patrick Lewis, and Morris L. Barer (2001). *Revitalizing Medicare: Shared Problems, Public Solutions.* Tommy Douglas Research Institute: Vancouver.

A Long-Term Perspective on Climate Change

by Petr Chylek

During the last few decades our ability to observe the climate and to detect climate and temperature changes has increased considerably as a result of improved ground-based measurements as well as by development of global satellite-based observations. Most of us seem to be surprised that the climate is changing. A changing climate challenges our feeling of stability and security. We are trying to find the reason for climate "change" and whom we should blame for it. However, the climate was changing even before mankind produced the first mole of carbon dioxide; it was changing dramatically even before mankind arrived on earth.

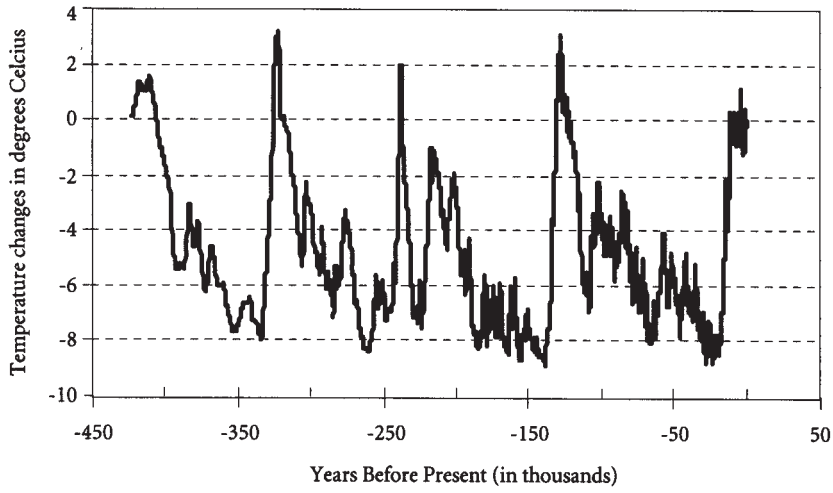
Petr Chylek *(Petr.Chylek@Dal.Ca) is a Professor of Physics and Atmospheric Science at Dalhousie University in Halifax. For ten years he held the AES/NSERC Research Industrial Chair in Climate Research and Marine Meteorology. He has established and developed a world-class research oriented graduate level atmospheric science program at Dalhousie University (www.atm.dal.ca). The Department of Physics at Dalhousie University has been recently renamed to Department of Physics and Atmospheric Science to reflect the program's national and international recognition.*

Ice ages and warm interglacial periods

The ice core records from Greenland and Antarctica provide one of the most reliable sources of information about the past climate. The longest and one of the most accurate records of past temperature change is available from the Vostok ice core (Petit *et al.*, 1999) in Antarctica. The fact that Greenland and Antarctic ice core results agree with each other, and with temperature records derived from ocean floor sediments and other climate indicators, suggests that the temperature changes observed in ice core records were global. Thus, the temperature record of the Vostok ice core can be considered to simulate global climate evolution.

Fig. 1 shows the atmospheric temperature changes (numerical data from Petit *et al.*, 1999) over the Vostok site for the last 420,000 years. The changes are displayed with respect to the current average temperature that determines a zero point on the vertical scale. There are several distinct peaks protruding considerably above the average. These peaks represent warm interglacial periods. The current warm period, called Holocene, started about 11,000 years ago. There were other warm periods around 130,000, 240,000, 320,000 and 420,000 years ago. These warm periods, similar to

Figure 1: Ice Ages and Warm Periods



The temperature record (about the last 420,000 years) from the Vostok ice core in Antarctica (numerical data from Petit et al., 1999) shows the climate oscillations between relatively short warm periods and longer lasting ice ages.

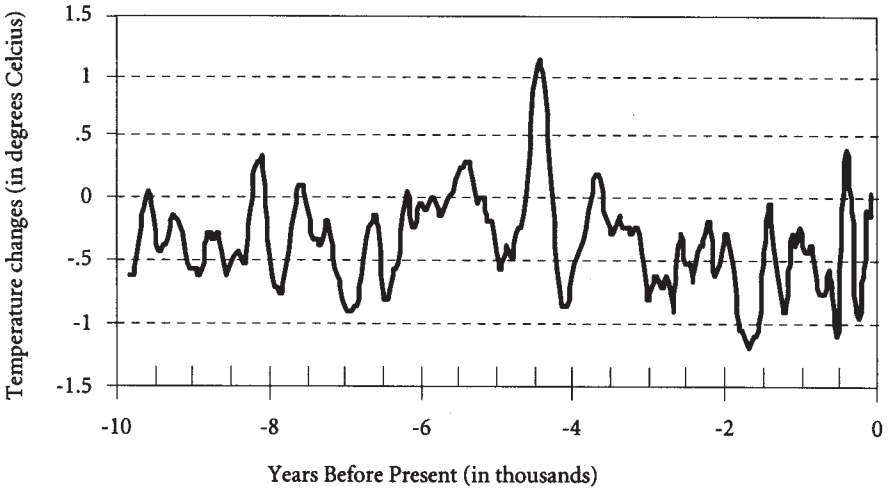
one we are living in right now, occupy only about 16 percent of the past 420,000 years. For most of the time, the Earth's climate was considerably colder and less hospitable to humans than it is today. In this sense we are living in an exceptional period of the Earth's climate history, in a pleasant warm period that has made the development of civilization and technology possible.

The Vostok ice core record (Petit *et al.*, 1999) also includes a record of atmospheric carbon dioxide (CO_2) concentrations. A challenging detail of the Vostok ice core record is that often the temperature changes first, followed later by changes in carbon dioxide (Fisher *et al.*, 1999). The changes in CO_2 lag behind changes in temperature. Consequently, changing carbon dioxide atmospheric concentration was not the cause of the past climate variation documented in the Vostok ice core.

Current warm climate

Our current, warm, interglacial period (the Holocene) started about 11,000 years ago. Figure 2 shows the Vostok temperature record (Petit *et el.*, 1999) for the last 10,000 years. Although the current temperature at the Vostok site is about 0.4 degrees C above the Holocene average, such a temperature is not uncommon. In the past, there were periods with even higher temperatures. The most distinct of these is a period of about 500 years between 4,000 and 5,000 years ago when temperatures were up to 1.5 degrees C above the Holocene average at the Vostok site. It is worth noting that there is no evidence that the West Antarctic ice cap collapsed or melted during this 500-year warm climate period. Although the current mass balance of the Antarctic ice sheet is subject to definite uncertainty, most of the reports indicate that the Antarctic ice sheet is currently growing. Similar warm periods are also recorded in ice core samples from Greenland, suggesting that the warming was not just local. Past warmer and drier periods also led to increased levels of forest fires, which are recorded in soot deposits in ice cores (Chylek *et al.*, 1992, 1995).

Figure 2: Last 10,000 Years

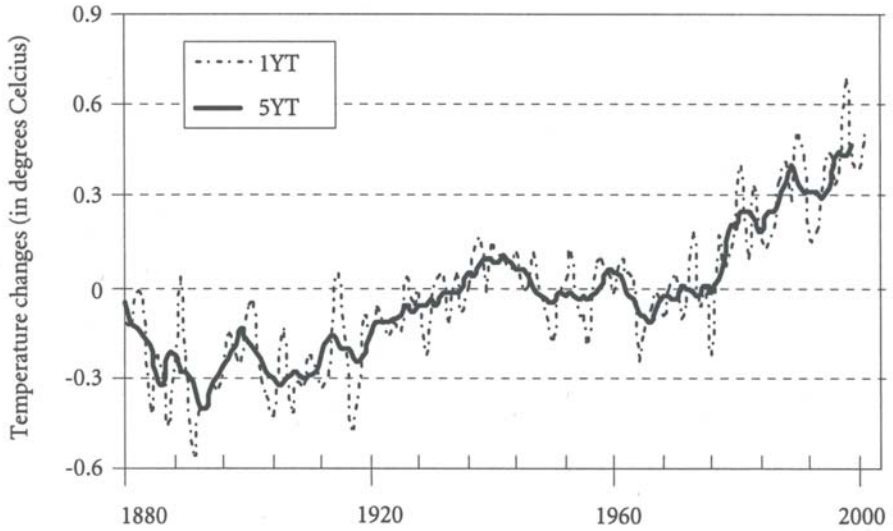


The Vostok ice core record of the temperature changes during the current warm period called Holocene (numerical data from Petit et al., 1999). About 4,500 years ago, the climate in Antarctica was considerably warmer than it is today for a period of over 500 years. In spite of that there is no evidence of any climate catastrophe (melting of ice sheets) taking place in this hot episode of climate evolution.

Instrumental temperature records

For the last 120 years, we have instrumental temperature records from meteorological stations distributed over several continents and a few observations from ships. Several research groups have tried to reconstruct the "global average" earth temperature from these measurements. Since the density of the stations is not uniform over land, and since there are very few observations over the ocean, the data need to be adjusted for this lack of homogeneity. The resulting "global average" depends on the way in which it is done. In addition, the environment at many stations has been changed over the decades from the growth of cities, the expansion of airports, and other environmental changes. The measured temperatures must be corrected to separate the effect of local environmental changes from the global climate change. Consequently, there are some differences between the results of individual research groups. As a typical example of the observed changes in global surface air temperature, figure 3 shows approximately the last 120 years of global average temperature as produced by the NASA Goddard Institute for Space Studies climate research group (Hansen *et al.*, 1999). Individual points represent annual global average temperature; the thick solid line is the five-year running average. The five-year averaging smoothes out annual variations and the long-term trend becomes more obvious.

Figure 3: Global Temperature Changes



Surface air temperature changes (annual data and 5 years running average) for the last about 120 years (numerical data from NASA GISS web site). The temperature rise started around the year 1890, when anthropogenic carbon dioxide production was negligible compared to present.

The observed warming is at the rate of 0.5 degree C per 100 years. There are two intervals during which considerable warming took place. The first warming period is from about 1890 till 1940. The second warming period starts around 1970 and lasts to the present. In between these two periods, a slight cooling occurred between 1940 and 1970.

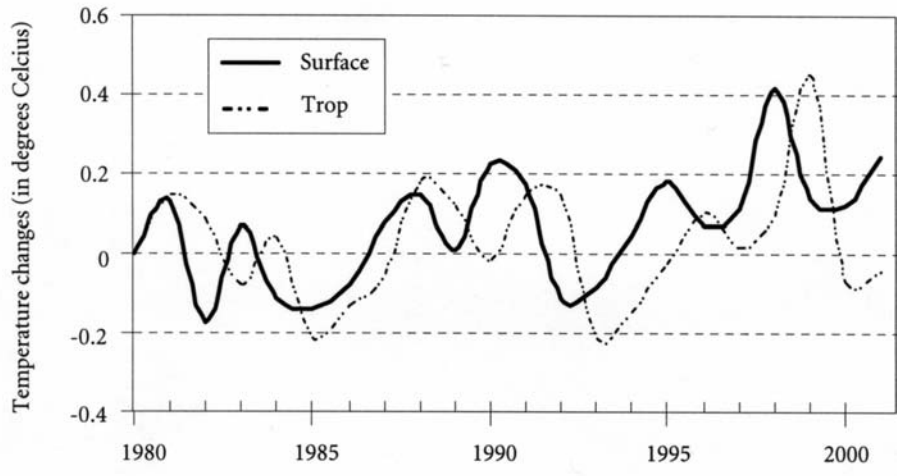
The warming between 1890 and 1940 cannot be blamed on carbon dioxide since its production, especially at the beginning of this period, was quite small. Most scientists agree that the changes in solar radiation are the most probable cause. Many blame the second warming period, from 1970 to the present on our production of carbon dioxide.

Satellite observations

As discussed in the previous section, the surface temperature record can be subject to various interpretations and criticism. The highest density of meteorological stations is in North America and Europe. Many fewer stations are spread over South America, Africa, and Asia. Over the oceans, which form about two-thirds of the earth's surface, the coverage is extremely poor. In addition, it is not always easy to separate the effect of changing local environments from global climate change in temperature measurements.

Recently, it has become apparent that satellite-based technology is the only feasible way to monitor global environmental and climate change. The microwave radiation emitted by the atmosphere is a sensitive function of the atmospheric temperature. This sensitivity can be used to measure the temperature of the atmosphere (Christy *et al.*, 2000). The satellite-based measurement of the temperature of the lower atmosphere (troposphere) has been available since late 1970s. Figure 4 compares the surface temperature records (NASA GISS site data) with the atmospheric temperatures deduced from the satellite

Figure 4: Surface and Tropospheric Temperature Changes



The annual global surface air temperature (data from NASA GISS web site) and tropospheric temperature derived from microwave satellite data (provided by John Christy). The average rate of temperature rise of 0.12 deg. C per decade for the surface air temperature is contrasted by almost no temperature change (a rate increase of 0.03 deg C per decade is within uncertainty of measurements and is not statistically significant) indicated by satellite observations.

microwave data (up-to-date data kindly provided by John Christy).

Although both the curves have a similar character, there is an essential difference between them. The overall trend of the surface temperature measurements shows the temperature increasing at the rate of 0.12 degree C per decade. On the other hand, the satellite measurements of atmospheric temperature indicate an increase at the rate of only 0.03 degree C per decade. Thus, the surface seems to be warming faster than the atmosphere.

How can we reconcile these different rates of warming between the surface and the atmosphere? We can, of course, argue, as some do, that either the surface or the satellite measurements, or both, are wrong. On the other hand, a lot of highly competent people put a lot of effort into both sets of data, and so we should not dismiss either set lightly. Is it possible that both sets are correct, and that the surface is really warming faster than the atmosphere? The IPCC (Intergovernmental Panel for Climate Change) 2000 report acknowledges the discrepancy between the surface and atmospheric temperature data that cannot be currently reconciled.

Current climate change

The General Circulation Models (GCMs) are complicated models of the atmosphere and oceans that are used for climate studies. The increasing concentration of carbon dioxide is generally considered to be the driving mechanism for current climate change. The GCMs suggest that the increasing atmospheric concentration of carbon dioxide or other greenhouse gases will heat the atmosphere at the same rate as the surface. On the other hand, if the warming is caused by factors other than greenhouse gases (for example the change of low-level cloudiness), then it is quite possible that the surface could warm faster than the atmosphere.

If we admit both sets of data as correct, then carbon dioxide should not be considered as a dominant force behind the current warming. Natural climate variability, changes in land use and the variability of solar radiation are a few factors that can affect the climate.

The sun can affect the climate by the variation of total solar radiation output, by changes in the UV radiation that affect the ozone layer, and by modifying the cloudiness through the variation of flux of cosmic rays reaching the earth's atmosphere. The current solar cycle is unusual in that it reached the solar maximum in the year 2000, but a second, unexpected peak in solar activity occurred again in late 2001 and early 2002. This double-peaked cycle keeps the sun close to its maximum activity for a longer time than usual, so should effect the earth's weather and climate. During enhanced solar activity, there is increased heating, especially of the tropical regions. This is just one example of how factors other than carbon dioxide do contribute to the current climate variability.

We are living in a rare period when the earth's temperature is pleasantly warm. Only 16 percent of the last 420,000 years had a climate as pleasant as it is today. Instrumental measurements suggest that the global average temperature increased by about 0.5 degree C over approximately the last 120 years. Some of this increase was very probably caused by increased atmospheric concentration of CO_2. However, how much of the increase can be ascribed to CO_2, to changes in solar activity, or to the natural variability of climate is uncertain. The fact that the temperature started to go up around 1890, when man-made production of CO_2 was negligible, indicates clearly that forces other than increasing CO_2 were responsible for the heating that occurred during the first half of the twentieth century. The fact that currently the surface air is warming faster than the atmosphere suggests that even in the post-1970 warming period, forces other than greenhouse gases are responsible for at least a considerable fraction of the observed warming. Thus, it is highly probable that global average temperature will go up and down in the coming years, decades, and centuries regardless of what we do.

References

Christy, John R., R. W. Spencer and W. D. Braswell (2000). "MSU Tropospheric Temperatures: Dataset Construction and Radiosonde Comparisons." *J. Atm. Ocen. Technol.*, 17: 1153-1170.

Chylek, Petr,.B. Johnson, and H. Wu (1992). "Black Carbon Concentration in Byrd Station Ice Core: From 13,000 to 700 Years Before Present." *Ann. Geophys.* 10: 625-629.

Chylek, Petr, B. Johnson, P. Damiano, K. Taylor and P. Clement (1995). "Biomass Burning and Black Carbon in the GISP2 Ice Core." *Geophys. Res. Lett.* 22: 89-92.

Hansen, J., R. Ruedy, J. Glascoe, and M. Sato (1999). "GISS Analysis of Surface Temperature change." *J. Geophys. Res.* 104: 30997-31022.

Fischer, H., M. Wahlen, J. Smith, D. Mastroianni and B. Deck (1999). "Ice Core Records of Atmospheric CO2 Around the Last Three Glacial Terminations." *Science* 283: 1712-1714.

Petit, J. R., *et al.*(1999)." Climate and Atmospheric History of the Past 420,000 Years From the Vostok Ice Core, Antarctica." *Nature* 399: 429-436.

Signing Kyoto is *Not* Sound Environmental Policy

by Laura Jones

As Canadian politicians jockey to articulate their positions on whether Canada should ratify the international agreement to reduce greenhouse gas emissions negotiated in Kyoto, Japan, in 1997, a critical consideration is being overlooked—what is best for the environment.

Many politicians, media commentators, and spectators believe that what is best for the environment is obvious: sign Kyoto. The only thing left to debate is whether we can afford it. Kyoto's price tag is a legitimate concern. If Canada ratifies the treaty, we are committing to reduce greenhouse gas emissions to 6 percent below 1990 levels sometime between 2008 and 2012. Since emissions are currently 15 percent above 1990 levels and expected to be even higher by 2008, we are really talking about reducing emissions by roughly 30 percent.

Where do the emissions come from? They are largely the result of burning fossil fuels, an essential ingredient to much of what Canadians produce and consume. How do we reduce emissions by over 30 percent? No one, including Environment Minister Anderson and Prime Minister Chretien, is quite sure. But to achieve such a major reduction will almost certainly involve making fossil fuels more expensive, likely a lot more expensive. What will this mean for you? Either heavier taxation on fossil fuel consumption, or detailed rationing schemes, or a combination of the two. Higher taxation and rationing will mean higher prices for almost any Canadian-made good or service you can imagine: from the bread at your grocery store to the gasoline that powers your car. Meeting the Kyoto targets will reduce our standard of living.

Since the federal government does not yet have a concrete plan for *how* Canada will meet its Kyoto target, perhaps it can be forgiven for not explaining to Canadians what Kyoto will mean for our pocketbooks. But given this state of affairs, how can it possibly be forgiven for saying it may sign Kyoto as early as June?

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Unlike our Prime Minister, President Bush has no intention of signing. He claims it will damage the US economy and throw 4.9 million people out of work. This makes our federal government's position look even more ridiculous, since making energy more expensive in Canada will put us at a competitive disadvantage with our biggest trading partner. What does this competitive disadvantage mean? Canadian producers will have lower incomes, and Canadians will be dealing with higher levels of unemployment.

What do the economic costs of Kyoto have to do with protecting the environment? Here environmentalists and those politicians intent on signing Kyoto could learn an important lesson from economists: what's bad for the economy is bad for the environment. This is because environmental amenity is what economists call a "normal good." When people's incomes go up, so, too, does their demand for environmental protection. The worst pollution problems in the world, lack of access to safe drinking water and the use of highly polluting fuels like cow dung, are problems we in Canada can hardly imagine. In fact, like indicators of health, most indicators of pollution improve as incomes increase. In simple terms, richer is cleaner and healthier, poorer is dirtier and sicker. Signing Kyoto will make us poorer, leaving us less concerned with other

Richer is cleaner and healthier, poorer is dirtier and sicker.

environmental and non-environmental priorities. How much poorer is yet to be determined.

One government study put the price tag to Canada alone at around $40 billion in lost economic output by 2010. What else could we do with $40 billion? Several years ago the Canadian Water and Wastewater Association estimated that we need to invest $27.5 billion in water treatment and distribution over the next 15 years—not a sexy environmental problem but an important one.

Or consider our concerns about health care. Canadians currently wait an average of 12 weeks for access to an MRI machine. To bring MRI availability to the top of OECD countries would require an additional 327 machines across Canada. How many extra machines would the costs of Kyoto allow us to have? 13,000.

A $40 billion sacrifice might be worth making if we knew that the proposed remedy was a cure. But nobody believes that without the US and developing nations such as India and China committed to reducing their emissions that Kyoto will have any effect at all. Peel the onion back one more layer and you will find that scientists don't even know how much of the observed warming is natural, and how much of it is a result of human emissions. In summary, Kyoto is an expensive remedy that will not work, designed to cure a disease we may not have.

Why would Canadian policy makers support such nonsensical policy? A generous explanation is that they believe it will do some environmental good. A less generous interpretation suggests they care more about appearing green than really being green.

Lessons From Walkerton

by Elizabeth Brubaker

Almost two years have passed since contaminated drinking water killed seven people and made 2,300 ill in Walkerton, Ontario. The tragedy called attention to severe deficiencies in water systems all across Canada. Consumers have been deluged with reports of their utilities' failures to comply with regulations and to make desperately needed capital improvements.

Despite the unprecedented attention, remarkably little progress has been made in upgrading our inadequate systems. From the Yukon Territory, where giardia and cryptosporidium periodically contaminate Whitehorse's water, to Ontario, where more than 400 adverse water quality incidents were reported in the last year, a steady stream of stories about inadequately treated water continues to flow through the daily news.

A January storm pushed turbidity in Vancouver's Seymour reservoir above federal health guidelines for weeks, giving urgency to the standing order that people with weakened immune systems boil their drinking water. Vancouver's substandard water is by no means an isolated case in BC. In his most recent annual report, the provincial health officer reported inadequate treatment in more than 300 small communities. "It is clear," he concluded, "that more can be done to... minimize our reliance on individual households boiling water as a *de facto* form of water treatment" (BC Provincial Health Officer's Annual Report 2000, p. 15).

On the other side of the country, residents in hundreds of communities likewise face "boil water" advisories. A quarter of Newfoundland's systems have been deemed vulnerable to contamination because of inadequate chlorination. Dozens of systems are contaminated with trihalomethanes, and still others with arsenic or other poisons. In January, one Newfoundlander summed up provincial residents' justifiable frustration. Complaining to the government that it had kept under wraps for months the high levels of arsenic in local wells, he said, "We put our trust in government to make sure our water supply is clean. And you've failed us" (*CBC News Online*, Feb. 1, 2002).

Our governments' wide-spread failure to protect our drinking water may be even more serious than generally thought. Extrapolating from US data on waterborne disease, University of Alberta ecologist David Schindler estimates that, here in Canada, contaminated water may cause 90 deaths and 90,000 illnesses each year.

If such estimates are correct, the associated costs would be staggering. In an analysis of the costs of the Walkerton tragedy, economist John Livernois identified $64.5 million in hard costs and an additional $90.8 million in the less tangible costs of illnesses suffered and lives

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lost. Such figures would pale in comparison to a calculation of cross-Canada costs.

Of course, the Walkerton tragedy and subsequent revelations about drinking water quality across the country also cost millions of Canadians their trust in their water systems. A national survey conducted in September found that one-third of Canadians have little or no confidence in their drinking water.

Why have our water utilities—and the governments that oversee them—let so many of us down? The problem lies largely in the fact that neither the systems' owners and operators nor their regulators have the tools or incentives to ensure that our water is safe.

Too often, ill-trained workers struggle to operate inadequate equipment in underfunded systems. A municipal worker in North Battleford, Saskatchewan, said of the system that last spring made more than 8,000 people ill, "You're running a lot of times by the seat of your pants" (Fluney, Testimony to the North Battleford Water Inquiry, Sept. 20, 2001, p. 144, lines 19-20). Such a description fits hundreds of systems across the country.

Even well run utilities often lack the funds to make critical improvements, thanks to tight budgets, limited borrowing capacity, and politicians' long-standing reluctance to require consumers to pay the full costs of the water they use. In 1998, the Canadian Water and Wastewater Association estimated that we would need to invest $27.5 billion in water treatment and distribution systems over the following 15 years. As improvements are put off and water standards become tougher, our infrastructure deficit can only increase.

Only now are the public and politicians beginning to appreciate the high costs of cheap water. BC's Drinking Water Review Panel concluded in February that consumers are paying too little for water. It proposed rates that reflect the true costs of the water supply system.

Late last year, the Ontario government introduced a bill that will require service providers to calculate the full costs of extracting, treating, and distributing water—including the costs of improving infrastructure—and to report on how they intend to recover those costs. The bill stipulates that regulations may specify permitted sources of revenue. If regulations require users to pay the full costs, the province will be well on its way to a more sustainable water regime.

Equally promising is the growing interest in the privatization of water utilities—which in other countries may mean the sale or lease of water treatment systems but which in Canada generally takes the form of the contracting out of their operation and maintenance. Privatization has in many other jurisdictions helped solve problems similar to our own. It has encouraged enormous investments in infrastructure. It has brought water rates in line with costs. It has made available great expertise. It has boosted innovation. It has promoted efficiency. And it has improved regulation by separating responsibility for financing and operating utilities from responsibility for enforcing health and environmental standards. Freeing governments from the conflicts of interest that inhere in their multiple roles, privatization has enabled them to focus on their regulatory responsibilities. As a result of all of these factors, privatization has improved performance and brought greater compliance with health and environmental standards.

While Canadian experience with water utility privatization remains limited, it shows considerable promise. Canada's largest private drinking water project can be found in Moncton, New Brunswick, where a firm operates and maintains the water filtration plant that it financed, designed, and built.

Prior to the plant's construction, Moncton had struggled with discoloured, bad tasting, sub-standard water for many years. Unable to obtain provincial or federal funding for a water treatment system, the city turned to the private sector for help. In 1998, after a competitive bidding process that initially saw expressions of interest from nine consortia, the city signed an agreement with Greater Moncton Water, a company owned by USF Canada and the Hardman Group. The company offered considerable expertise: parent United States Filter manages over 260 facilities in North America and is a subsidiary of the French water giant Vivendi, which has operations in over 100 countries. Moncton is delighted to gain access to the company's patented technologies, computerized systems, and resulting efficiencies.

Privatization brought immediate financial benefits to Moncton. The arrangement relieved the city of having to make any up-front capital investment. Equally important were the substantial cost savings. Greater Moncton Water built the plant for $23 million—between $8 million and $10 million less than a publicly designed and built plant would have cost. Operating costs will also be lower than they would have been at a publicly-run plant. All told, the city expects to save between $14 million and $17 million in capital and operating costs over the course of the 20-year lease.

Moncton's privatization also brought dramatic health benefits. The contract

requires the operator to meet—or, in some cases, exceed—Canadian drinking water guidelines. Ron LeBlanc of the city's engineering department has boasted, "We believe the water that we have specified will be the best in Canada," adding, "If they don't meet the specs, then they ain't getting paid" (Forster, *Moncton Times and Transcript*, Oct. 21, 1999).

Mr. LeBlanc's comment highlights one of the greatest benefits of water utility privatization: accountability. In a publicly operated system, accountability is rare. Even Walkerton's notorious Koebel brothers—the operators who falsified records and drank on the job—have thus far escaped punishment. In contrast, punishment comes swiftly in the private sector. As one water company executive explained, "People who jeopardize the company are not tolerated." Poorly performing firms are likewise held accountable, be it by the municipalities with which they have contracts, by their shareholders, or by a marketplace in which a tarnished reputation may prevent them from winning other business. Such mechanisms provide powerful incentives to perform well.

Despite its many benefits, privatization continues to meet strong resistance from some quarters, most notably from labour unions. Some of the unions' concerns—especially those regarding the staffing cuts made possible by the private sector's more efficient operations—may be addressed by contract provisions protecting workers' interests.

Other issues, such as the reluctance to trust something as essential as water to a profit-driven firm, must be countered with a close look at reality. Public institutions brought us the tragedies in Walkerton, North Battleford, and the hundreds of other communities whose water has been poisoning people. Those institutions, with their inherent problems of politically constrained funding, insufficient performance incentives, and compromised oversight, have served us poorly. In contrast, private firms have demonstrated that they can deliver clean, safe water. Properly structured agreements give them the tools and incentives to do so.

References

Bourden, Scott (2002). Quoted in "People Not Told of Arsenic in Nfld. Drinking Water." *CBC News Online.* February 1.

British Columbia Provincial Health Officer (2001). *Drinking Water Quality in British Columbia: The Public Health Perspective*. Provincial Health Officer's Annual Report 2000. October.

Fluney, Patrick (2001). Testimony to the North Battleford Water Inquiry. *Transcript*. September 20.

Forster, James (1999). "Water treatment begins," *Moncton Times and Transcript*, October 21, 1999.

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Compensation in the *Species at Risk* Act

by Tracy Wates

Canada, home to an estimated 70,000 species, according to the Canadian Endangered Species Conservation Council (CESCC), is on the verge of enacting destructive legislation to protect endangered species. Bill C-5, the Species at Risk Act (SARA), has been winding its way through parliament since last February and will be law within the year unless something unexpected occurs. The federal Liberal government claims that SARA is a necessary and important step in protecting endangered species in Canada, but evidence from the United States (which enacted a similar law in 1973) tells us that SARA will not only fail in its mission, but will hasten the demise of many species.

The main reason for the lacklustre performance of endangered species legislation in the US is failure to account for negative incentives created by the command-and-control law that robs landowners of their ability to use and enjoy their land if it contains an endangered species. The law makes it illegal to kill or harm an endangered species and, if the listing contains regulations pertaining to the species habitat, no one may alter the habitat, thus significantly affecting resource users and landowners. Moreover, the regulations often drastically decrease land values without any compensation. Instead of encouraging a stewardship ethic, this often pits landowners against endangered species. Landowners are motivated to make their land unattractive for endangered species as a precaution, and in some cases, may kill or harm species if they are already present.

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Incentives matter—in both the US and Canada

The disincentive for conservation is clearly illustrated by the story of Ben Cone, who owns 7,200 acres in North Carolina. Deforested in the 1930s, the land gradually regained healthy stands of long-leaf pines which were ideal for wildlife, including songbirds, deer, quail, wild turkey, and the endangered red-cockaded woodpecker. Cone carefully managed his land up to 1991 by initiating frequent controlled burns and small timber sales. However, in 1991, the US Fish and Wildlife Service identified 1,560 acres of Cone's property as woodpecker habitat, and Cone lost the right to harvest timber within a half-mile radius of each bird. The value of his land fell to $86,500 from a previous value of $2,230,000—a 96 percent loss. The 29 red-cockaded woodpeckers who took up residence in Cone's forest cost him $73,914 each—a cost he has borne alone (Simmons, 1999). Cone now clear-cuts around the woodpecker colonies to prevent them from spreading to more of his property and he has changed his rotation of harvesting timber on the rest of his land from 80 years to 40 years to avoid attracting more woodpeckers to the old trees they prefer (O'Toole, 1996). Cone's neighbours, alerted by him of possible losses should woodpeckers nest on their land, also began clear-cutting their timber adjacent to Cone's property.

Similar examples of unintended consequences can be found in Canada. The blue racer snake, for example, can grow up to two metres in length and can travel at a speed of seven kilometers an hour. It can only be found on Pelee Island in Canada. About 300 snakes live on the 4,000-hectare Pelee Island, of which about 810 hectares remain undeveloped (Jaimet, 2001).

In 1993, the Ontario Ministry of Natural Resources and the World Wildlife Fund funded a study of the blue racer. The researchers were concerned about nesting and hibernating sites and convinced some landowners to voluntarily let them construct domes of earth and vegetation on their land for the snakes to use. The island's hunting club was one of the landowners to agree to house an artificial snake habitat on its land.

The trouble began in 1999 when the Ontario government blocked a proposed development on the island on the grounds it would disturb blue racer habitat. The province produced a map showing blue racer habitat to support its claims. When landowners on Pelee Island who had voluntarily helped with snake conservation discovered that their

property was included on the map, they were insulted and angry. Some landowners promptly bulldozed the sections of their property that were identified as blue racer habitat to ensure that the government wouldn't interfere with future farming or development plans. The snake hibernation site built at the hunting club was also destroyed.

Compensation in Canada's law?

The Canadian iteration of the Endangered Species Act seems to acknowledge this incentive problem by containing a section discussing compensation. However, it is very vague, and leaves compensation almost entirely in the hands of politicians, thus creating insecurity and disincentives for conservation and cooperation. The Liberal government rebuffed efforts during the committee review of SARA to make compensation full and mandatory, instead leaving the language ambiguous as to when and how much compensation will be provided.

Compensation programs that have been established have demonstrated that when you remove economic pressures, landowners tolerate, and even welcome, endangered species to their land. One example is the Wolf Compensation Trust in the US, established by Defenders of Wildlife in 1990 following the reintroduction of wolves to Yellowstone National Park and surrounding areas. The most ardent opponents of the wolf reintroduction scheme were ranchers who feared for the lives of their most precious economic asset—their livestock. But by instituting a compensation program for livestock losses due to wolf predation, Defenders removed the economic reasons for ranchers to hunt down wolves, and thus have significantly reduced the amount of illegal wolf killing (Fischer, 1998).

The rhetoric surrounding SARA emphasizes the role of partnerships, voluntary stewardship, and cooperation. However, the actual text of the act shows little similarity to the government's published and verbal descriptions. For instance, the available on-line version of the act is 77 pages, but only two pages describe stewardship, while more than 20 pages are devoted to compliance, investigations, penalties, and the like. Only half a page is dedicated to compensation.

Section 64 stipulates: "The Minister [of Environment] may, in accordance with the regulations, provide compensation to any person for losses suffered as a result of an extraordinary impact of the application [of the prohibitions pertaining to habitat]." Terms such as "extraordinary impact" and "may … provide compensation" give the government the prerogative to deny claims later on the basis that the act's impacts were not extraordinary, or simply that the governmental also "may not" choose to provide compensation.

Fairness and compensation

All Canadians benefit from endangered species protection and recovery—even if that benefit is just the value of knowing that the burrowing owl, swift fox, or Vancouver Island marmot continues to exist—so why must a select few bear the burden?

Approximately 22.2 percent of Canadians live in small towns or rural settings (Pitblado, 1999)—where the vast majority of species at risk also live. Putting the monetary burden on members of that group does not decrease the costs—they are simply borne by a smaller segment of the population. How is that fair, either to the landowners or to the species themselves, whose presence creates bitterness?

Full compensation would counter incentives inherent in the legislation for landowners not to report a species on their property and instead to dispose of it or destroy its habitat before restrictions can be placed. While compensation may not *completely* reverse those incentives—especially if the procedure for claiming compensation is bureaucratic and frustrating—it may alleviate them, especially for well-meaning citizens who sincerely care about protecting species—which the vast majority of Canadians do.

All Canadians benefit from endangered species protection and recovery... so why must a select few bear the burden?

Will ranchers who now participate in programs like the Burrowing Owl Project or the Swift Fox Program continue to do so when they know that attracting endangered species to their land might lead to restrictions and could criminalize land improvements they wish to make? Many groups such as the Canadian Federation of Independent Businesses and the Canadian Cattlemen's Association (CCA) have sent let-

ters and petitions to Ottawa disapproving of SARA and calling for changes that include voluntary conservation measures and full compensation. The CCA's letter is blunt and clear: "…incentives, including compensation, will achieve far more for species at risk on private land than will "sticks." After all, if biodiversity is good for Canada, then Canadians should be prepared to pay for the cost of preserving it!" (CCA, Sept. 17, 2001).

Recommendations

The federal government should make full compensation and voluntary stewardship its focus in any legislation dealing with conservation on private land. Though it claims it is doing so already, the government must truly show a willingness to pay for its policies by defining clear rules for full and fair compensation. It is also important that a large fraction of the budget for protecting endangered species goes directly towards concrete conservation and stewardship programs, and does not get funneled away in the costs of bureaucracy. (It is troubling to note that though $90 million has been allocated for species at risk over the next three years, only $45 million of that is earmarked for stewardship efforts.)

Many Canadians are very concerned about species at risk. However, if species are indeed at risk and need protecting, the solution is not federal legislation that employs command and control techniques while paying lip service to the concept of voluntary stewardship. Rather, a system of directed conservation that engages landowners and resource users while providing a complete system of compensation would be much fairer and more effective.

Bibliography

House of Commons of Canada, 1st Session, 37th Parliament, 2001. Bill C-5. Available on the Internet at *http://www.parl.gc.ca/37/1/parlbus/chambus/house/bills/government/C-5/C-5_1/C-5_cover-E.html.*

Canadian Cattlemen's Association (CCA) (2001). Letter to Jean Chretien, Prime Minister. Sept. 17.

Canadian Endangered Species Conservation Council (CESCC) (2001). *Wild Species 2000: The General Status of Species in Canada*. Ottawa: Minister of Public Works and Government Services Canada.

Canadian Federation of Independent Businesses (2000). "Species at Risk Act: A Declaration of Principle." Letter to David Anderson, Environment Minister. March 13. Available on the Internet at *http://www.cfib.ca/agri/5092.asp.*

Fischer, Hank (1998). *The Wolf Settles in at Yellowstone.* Defenders of Wildlife. Summer.

House of Commons debate (2001). Second Reading, Bill C-5. February 28.

Jaimet, Kate (2001). "How not to protect a creature at risk." *The Ottawa Citizen.* Aug. 29. Posted to *www.kingsnake.com/forum/law/messages/5239.html.*

Jones, Laura and Liv Fredricksen (1999). *Crying Wolf? Public Policy on Endangered Species in Canada.* The Fraser Institute, Vancouver, BC.

Ministry of Environment, Lands and Parks, Province of British Columbia. Habitat Conservation Trust Fund. On the Internet at *http://www.hctf.ca/*

O'Toole, Randal, ed. (1996). *Different Drummer: The Endangered Endangered Species Act.* Oak Grove, OR: Thoreau Institute. Vol. 3, no. 1.

Pitblado, J. Roger et al. (1999). *Assessing Rural Health*, Laurentian University, Health Canada: The Centre for Rural and Northern Health Research, June.

Simmons, Randy T. (1999). "The Endangered Species Act: Who's Saving What?" *The Independent Review.* Vol. 3, No. 3 (Winter).

A Measurement of the Real State of the World

Review of *The Skeptical Environmentalist: : Measuring the Real State of theWorld* by Bjørn Lomborg, Cambridge University Press, 515 pages

by Paul Coninx

The reception of *The Skeptical Environmentalist* has revealed the environmentalist community's dark side.

The book's author, Bjørn Lomborg, an associate professor of statistics at the University of Aarthus, Denmark, argues meticulously that the current state of the world is not as bad as most people believe. The environment still has problems, but not catastrophes; the human condition needs improving, but it is still vastly better now than it has ever been. For the world to waste resources addressing exaggerated or non-existent threats only slows further progress in improving both the human condition and the environment, especially the developing world. Lomborg writes: "The point here is to give us the best evidence to allow us to make the most informed decision as to where we need to place most of our efforts" but that "… frequently the offered solutions are grossly inefficient" (*Skeptical Environmentalist*, p. 5).

Lomborg does not rant on about exaggerations and dishonesty found in current environmentalist dogma, but coolly and clearly presents the evidence. The book is divided into 25 distinct chapters that deal with such topics as human welfare, hunger, air pollution, water pollution, and global warming. Each chapter is a stand-alone; readers can open the book to whatever topic interests them. In addition, the book comes with an extensive index, 173 informative graphs, 9 tables, and 2,930 references that frequently include the same research commonly cited by environmentalists.

Although many of Lomborg's critics accuse the Dane of distorting research findings and using selective examples to make his points, they seldom provide convincing examples to make their own points. Instead, the scientists and activists themselves shamelessly quote Lomborg out of context and resort to insults and innuendoes; one even threw a pie at Lomborg at a bookstore in Oxford.

Whether or not global warming is at least partially human driven (Lomborg believes that it is) and whether it will produce human, environmental, and economic costs (Lomborg believes it will), there still remains the question as to what exactly we can do about it. There are too many people on earth for us to go back to living like our ancestors, chopping down trees for fuel and using renewable bows and biodegradable arrows to shoot animals for food. Greenhouse emissions would probably continue to increase and most of us would die. The earth can support so many of our species only because human ingenuity makes it possible. Even most professional environmentalists pay lip service to the need for science and technology by encouraging governments to give generous handouts to their allies in the solar, wind, and hydrogen fuel fields.

Many of Lomborg's critics agree with him that the arbitrary provisions of the Kyoto treaty will have only a miniscule effect on reducing global warming. One researcher Lomborg quotes as saying "it might take another 30 Kyotos over the next century," does not address, let alone deny, the statement in his scornful review of Lomborg's book.[1] Even the man who threw the pie agrees: "Specifically with regard to Kyoto, Lomborg makes great play of the fact that if implemented, the cuts it mandates in CO2 emissions will have almost no effect on the climate. Well, we all knew that already, which is why many people (including myself) have criticised [sic] it as being inadequate. Since greater cuts, involving more countries, are likely to be agreed to take effect during the 'second compliance period' after 2012, Lomborg's exercise of calculating Kyoto's effect on the climate by 2100 is

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at best irrelevant and at worst intentionally misleading." Clearly, Kyoto's adherents see it as only a first small step towards much greater restrictions. But why is there so much support in the environmentalist community for Kyoto when it provides so little benefit while threatening the economies of the very countries most able to develop ways to avoid or mitigate environmental challenges?

Profit and self-interest of those who see Kyoto as a meal ticket may have something to do with it. But Kyoto is also attractive to people who distrust what they see as greedy capitalism and still believe in the virtue of the extensive international central planning and redistribution of wealth ("social justice") that Kyoto represents for them. Of course, if large-scale central planning and egalitarianism actually did work, the Soviet Union would have been an environmental paradise rather than the disaster it was, but there will forever be those who believe that even though a policy has always failed in the past, it will do the job if only given one more try. For them, environmentalism is just another way to limit or control what they deem to be the antisocial (or antiglobal) activities of others. That is why many self-described environmentalists also tend to support leftist causes, activist governments, and attempt to change human behavior through laws and regulations more than through example and persuasion. This distrust of the masses is illustrated by the negative comments made by prominent environmentalists in the *Los Angeles Times* in 1989 when so-called "cold fusion" appeared to offer virtually unlimited cheap, clean energy. While one might think this would be a great thing for mankind, Paul Ehrlich is quoted as saying that cold fusion would be "like giving a machine gun to an idiot child," and Jeremy Rifkin reportedly said, "it's the worst thing that could happen to our planet."[2]

The Skeptical Environmentalist is essential reading for anyone interested in the environment—although it is clear that the environmentalist establishment does not want it to be read—and the bibliography alone is worth the price of the book. Critically comparing the tone and the substance of the book to that of its critics (much of it can be found on the internet) also gives a person important but often depressing insights into the values and goals of the environmentalist community. A fair reading of *The Skeptical Environmentalist* will reveal that environmentalist establishment claims that Lomborg is anti-environment are absurd. While Lomborg is careful to keep facts separate from value judgements, nothing is stopping a person or a country from choosing to spend substantial amounts of money to save a species of tiger or butterfly, to designate a nature preserve, provide safer water, or to reduce urban air pollution. However, to avoid waste and misdirection of resources, the facts must be clear, as must be the environmental goal, the reasons for pursuing the goal, and the most effective means to achieve the goal. Ultimately, the exaggerations of risk, distortion of fact, and general fear mongering found in matters concerning the environment will always be distracting and counterproductive.

References

Ciotti, Paul (1989). "Fear of Fusion: What if it Works?" *Los Angeles Times.* April 19. Quoted in *The Skeptical Environmentalist*, p. 321.

Mahlman, Jerry D. (2001) "Global Warming: Misuse of Data and Ignorance of Science—A review of the "global warming" chapter of Bjørn Lomborg's *The Skeptical Environmentalist: Measuring the Real State of theWorld.*" Available on the Internet at *www.ucsusa.org/ environment/mahlman.pdf.*

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Why Fewer Farms Means Greater Prosperity

by Hymie Rubenstein

The number of Canadian farmers has now declined to about one percent of the population, according to a recent Statistics Canada report (*The Daily*, February 22, 2002). Only 313,000 people are employed growing crops or raising animals, a 26 percent drop since 1998.

This, of course, is part of a very long-term trend. In 1891, one in five Canadians was a farmer; by 1951, the full-time farming population had declined to about one Canadian in 12.

Members of the farm lobby and their nostalgic urban supporters have repeatedly decried this trend, arguing that a rich and vibrant rural way of life is inexorably being destroyed by the cruel forces of market competition, mechanization, and rural-urban migration. There have been repeated calls over the years by organized farm-lobby groups, dramatized by noisy demonstrations at provincial legislatures and tractor caravans to Parliament Hill, to "save the family farm" by increasing agricultural subsidies to compete with the huge pay-offs given to farmers in the United States and Western Europe.

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The federal government would be wrong to accede to any more calls for farm aid. Past bail-outs have done nothing to reverse the flight from farming, and agricultural supports represent an unfair cash transfer from the average Canadian household—worth about $250,000 when its net worth is added up—to the average farm household— still worth about $1,000,000 after its debts are subtracted (Solomon, 2001).

But there are more compelling reasons to ignore concerns about declines in the farm population: national economic growth and individual standards of living both increase as people move out of primary agrarian production. These benefits can be easily seen by comparing Canada's socio-economic situation and division of labour with countries that have high ratios of farmers. Such a comparison shows that the lower the proportion of farmers, the higher the levels of economic prosperity and social well-being.

... agricultural supports represent an unfair cash transfer from the average Canadian household ...

The large West African country of Angola is one of the most impoverished nations on earth.[1] Per capita GDP is a paltry $US 1,000, average life expectancy is a mere 39 years, at least 50 percent of Angolans are unemployed or underemployed, and only 42 percent can read and write. But even though only two percent of the country's land mass is under annual cultivation, fully 85 percent of Angolans are small-scale farmers barely eking out a hand-to-mouth existence on small plots of land. Despite its huge proportion of primary food producers, a dearth of modern technology and off-farm employment means that productivity is so low that Angola has to import most of its food.

The mid-sized Western Caribbean country of Haiti is also a very poor country, probably the poorest in the Western Hemisphere. Per capita GDP is only $US 1,800, average life expectancy is under 50 years of age, and a mere 45 percent of Haitians are literate. Some 20 percent of the land is classified as arable and 70 percent of Haitians depend on agriculture (mainly subsistence cultivation using simple hand tools), which employs about two-thirds of the economically active work force. About 80 percent of the population lives in abject destitution.

The minuscule eastern Caribbean nation of Barbados is well on the road to developed-country status. The per

capita GDP is an impressive $US 14,500, average life expectancy has climbed to 73 years, unemployment is only around 11 percent, and nearly 98 percent of Barbadians can read and write, one of the highest literacy rates in the world. Although 37 percent of the country's land base is planted in annual crops (mainly sugar cane), less than 10 percent of the people are farmers or farm workers. This represents a huge decline since the early 1950s when Barbadians began to reject the backbreaking work of manual plantation labour under a sweltering tropical sun for more lucrative, comfortable, and prestigious employment in the emerging service sector, including piece work in the multinational "sweat shops" that foes of globalization so love to demonize.

Canada is one of the richest nations on earth with a per capita GDP of over $US 25,000. The average life expectancy of Canadians is 80 years, unemployment stands around 7 percent, and basic literacy is 97 percent. Massive mechanization and an adherence to economies of scale mean that Canada has one of the most efficient systems of on-farm food production in the world.

Finally, the tiny south-east Asian island-state of Singapore is even more prosperous than Canada with a per capita GDP of $US 26,500, the fifth highest in the world. Average life expectancy is 80 years, unemployment is a mere 3 percent, and 94 percent of Singaporeans are literate. Only two percent of the land is planted in non-permanent crops. According to census reports, the agricultural sector is so small that it makes up a negligible part of GDP and employs an inconsequential part of the labour force.

Scores of other examples from every corner of the world could be cited to show the strong inverse correlation between many positive social and economic indicators—per capita wealth, literacy rates, life expectancy, employment levels, poverty rates, etc.—and the proportion of the population working the soil or rearing animals.

This relationship between socio-economic well-being and the size of the farming population reminds me of a ride I took past several agricultural properties in Southwestern Manitoba with a farming friend of mine a few years ago. As we drove past the farms, he distinguished between profitable and marginal operations. The latter, he told me, were either undersized or under-cultivated, suffered from poor soil conditions, or lay in the hands of conservative cultivators too timid to experiment with grains other than wheat.

What struck me was his uncompromising emphasis on entrepreneurship. A farm, he repeatedly told me, is first and foremost a business enterprise. His mantra, "No enterprise, no business," is still fresh in my mind. A grateful ex-recipient of Crow Rate subsidies and a current beneficiary of tiny rural property taxes (a few hundred dollars for thousands of acres), he nevertheless laughingly viewed both as boondoggles that rewarded "bad business sense." He also dismissed the idea of "attachment to the soil" as starry-eyed sentimentality, noting that his own operation, like all those around him, was supported by occasional bursts of seasonal labour comfortably cocooned in an air-conditioned tractor. All agricultural inputs, he reminded me, including all tools, machinery, fuel, seed, fertilizer, pesticides, and herbicides, not to mention all food, clothing, and shelter for him and his family, came from off-farm, mainly urban sources.

He also pointed out that there were far more people involved in the storage, shipping, processing, packaging, advertizing, and sale of agricultural products than were involved in its primary production, an assertion that suggested that the traditional claim that one Canadian farmer feeds 40 people should be turned on its head.

My friend also mocked the idea of the "family farm." None of his children aspired to a career in agriculture, his wife ran an on-farm (but non-farm) business, and though he was still in his mid-fifties, he had made enough money in only 25 years of farming to take semi-retirement on the idyllic Caribbean island where he and his wife took their annual three-month holiday.

Canadian farmers and their families are generally well educated, hardworking, and ambitious. If agricultural subsidies in Europe and America are producing a worldwide glut of cheap food, even more of them should be encouraged to seek other career opportunities.

When it comes to socio-economic development and high levels of living, fewer Canadian farmers is something we should all applaud.

Note

[1]All the country statistics in this article come from 2001 figures given in the CIA *World Factbook*. Per capita GDP statistics are calculated based on Purchasing Power Parity.

References

CIA *World Factbook*. Available on the Internet at *www.cia.gov/cia/publications.factbook*.

Solomon, Lawrence (2001). "Dairy Farmers are Milking Canadian Consumers." *National Post*. January 16.

Statistics Canada (2002). *The Daily*. February 22.

And the Survey Says?

by Neil Seeman

Ask Canadians whether they welcome a bilingual and multicultural population and they will nod their heads enthusiastically. But does that mean they support *government-funded* bilingualism and multiculturalism policies? Not necessarily. Even slight nuances in poll questions can have a profound effect on results.

In an Environics poll commissioned by the Association of Canadian Studies (ACS), an umbrella group for college and university Canadian studies departments, 76 percent of respondents felt English and French should be "the official languages of Canada"; 78 percent said the two languages should have "equal status, rights and privileges." The *National Post* reported: "Language policy has wide backing, poll says" (March 4).

Yet support for linguistic equality is not synonymous with support for Canada's current "language policy." Canada's language policy has meant subsidies to a panoply of Heritage and Treasury Board programs, some devoted to quotas for French-speaking civil servants, others to "infrastructure plans" to boost "French culture."

To the limited extent that the study gauged Canadians' support for subsidies, the results were unclear. Few respondents wanted to boost "federal support"; 21 percent said "federal support" to Francophone minorities outside Quebec should be reduced; 16 percent felt the same about "federal support" to anglophone minorities inside Quebec.

The survey failed to define "federal support" (e.g., does it mean the accommodation of existing, private initiatives or the creation of new, public ones?) Had it clarified this issue, the survey might have found that a majority of Canadians reject current "language policy."

Another poll, also by Environics for the ACS, purported to show that Sept. 11 hadn't shaken Canadians' support for multiculturalism policy. "Multiculturalism policy working, national survey says," rang the headlines in some Southam papers (Feb. 18). But the survey didn't say that. It measured Canadians' tolerance, not their support for the policy of multiculturalism, which shepherds tax dollars to organizations that promote "cultural awareness," affirmative action in hiring, and "anti-racism" programs in public schools.

Although the ACS analysis acknowledged in its preamble that "various meanings have been attributed to multiculturalism," the survey didn't distinguish among them. Respondents agreed overwhelmingly (82%) with the statement: "The preservation and enhancement of the multicultural heritage of Canadians is an objective that the government should support." But these are slippery words; "support" can be interventionist or passive (e.g., "I support the use of seatbelts; I don't support seatbelt laws"). "Multiculturalism" is distinct from "multicultural heritage." Historically, the word "heritage" has been alternately associated with divine right, legal rights to property, even retribution in the afterlife.

Environics asserts that the poll shows how "the vast majority does not agree with the many arguments suggesting that multiculturalism is in conflict with other important objectives of Canadian society." But respondents weren't presented with all those "many arguments." Government financing wasn't mentioned. No economic arguments were advanced against multiculturalism policy, for instance, the idea that public financing for ethnic and cultural groups crowds out private contributions or creates dependencies on government largesse.

In those instances where respondents were presented with (limited) arguments against multiculturalism policy, support dipped considerably. Asked whether emphasizing the multicultural heritage of Canadians was a threat to "social unity and solidarity," 64 percent said no and 32 percent said yes. Would support have dipped further had respondents been questioned about employment equity practices in the public sector?

So what do these surveys really say? They shouldn't have made headlines. For all we can conclude from these two studies is that Canadians are a tolerant people: They embrace English and French equally; they welcome people from different cultures. Didn't we already know that? It will take a more sophisticated survey to determine what Canadians truly think of state-funded multiculturalism and language policies.

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Dead Capital in Ontario's Hospitals

by John R. Graham

One option for Canadian health care reform is to increase the ability of for-profit hospitals to provide services to publicly-insured patients.

Opponents of increased choice predict that costs will be higher in such hospitals than in ones capitalized by governments, simply because they include profits. For example, Maude Barlow of the Council of Canadians estimates that investors demand returns of 15 percent (Barlow, 2002, p. 69). She erroneously believes that this is simply tacked onto operating costs. However, in a competitive hospital market, profits would not be determined by what investors demand, but by what is left over after the hospital pays its expenses and taxes. Investors have the last claim on the cash flow, not the first.

Furthermore, private hospitals, either for-profit or non-profit, often provide better value for money than those funded by governments (Zelder, 2000). Nevertheless, sustainable for-profit hospitals would have to earn returns for their investors. However, these profits would be a benefit to Canadians, because they would bring to life much of the dead capital trapped in our health care system. Canadians would be able to invest in these hospitals and increase the assets available to them when they retire.

These potential investors are not fat cats. In 1998, people who earned under $60,000 made 79 percent of all contributions to Canada's RRSPs and RPPs, comprising 56 percent of the dollars invested (Emes, 2001, p. 35). The Canadian government already punishes them through a regulatory system that limits their ability to diversify their assets adequately, and imposes unnecessarily high transaction costs on their investments (Clemens and Mihlar, 1999). The government further punishes them by prohibiting their investment in valuable assets, namely, hospitals.

A recent report by the Change Foundation, the Canadian Imperial Bank of Commerce, and the accounting firm Deloitte & Touche LLP shows the financial state of 137 of Ontario's 157 hospital corporations as of March 31, 2001 (Change Foundation, 2001). The hospitals' revenues were $11 billion, of which 78 percent came from the provincial health ministry. Other charges to patients, research grants, and miscellaneous revenues (e.g. parking) accounted for the rest (Change Foundation, 2001, p. 7). The group reported a net deficit of about $8 million. However, there was a large variance in the results: 71 hospitals reported deficits, for a gross loss of $101 million, and 66 hospitals reported surpluses, for a gross gain of $93 million (Change Foundation, 2001, p. 11). The book value of the assets was almost $10 billion dollars, of which about three quarters is claimed by liabilities and one quarter by the "fund balance," or retained earnings (Change Foundation, 2001, pp. 31-32).

Comparing these figures to comparable ones from a jurisdiction where a number of for-profit hospitals exist points towards an estimate of what Ontario's hospitals are worth. The Federation of American Hospitals represents the interests of for-profit hospitals in the United States. Thirteen of its 22 members are listed on the stock market. Table 1 compares consolidated financial results for those corporations to those in Ontario reported by the Change Foundation.

The first thing to notice about the two sets of financial data is how similar the structure of assets and capital is in both systems. Both hold about one quarter of their worth in current assets. The Ontario hospitals hold a significant share of assets in investments, whereas the US hospitals do not. These investments may be attributable to funds advanced by the Health Ministry for uses including capital projects not yet completed (Change Foundation, 2001, p. 22). Investors in the American hospitals do not appear to tolerate managers' investing in financial assets rather than their hospitals' core resources. This gives optimism that, under profit-ori-

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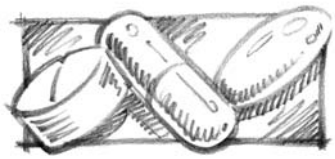

ented management, Ontario's hospitals would be quicker to invest in needed capital assets such as MRI machines, CT scanners, and other diagnostic equipment which Canada's public system so woefully undersupplies (Harriman, McArthur, and Zelder, 1999).

The Ontario hospitals are more highly leveraged than the US ones, with liabilities comprising 76 percent of assets versus 64 percent in the US, perhaps because Ontario's hospitals' debts are explicitly or implicitly guaranteed by the province. However, the largest American company in the sample, HCA Inc. has liabilities of 74 percent of assets, indicating that investors would accept the degree of leverage in Ontario's hospitals. As well, many of the 137 Ontario hospitals would have less leverage than the consolidated figure.

The market value of the US hospital corporations' equity is over US$67 billion, implying an equity multiplier of 3.6 times book value. This points to the market value of the Ontario hospitals' fund balance, were it converted to equity.

All things being equal, the fact that the Ontario hospitals are more highly leveraged than the American ones implies a lower equity multiplier than 3.6. However, the equity multipliers for the US hospitals range from 1.37 to 6.18, and are driven by earnings as well as capital structure. These multipliers imply a value between $3 billion and $15 billion for the equity trapped in the 137 Ontario hospitals analyzed. If Ontario's hospitals were privatized, not all would become profit-seeking companies. According to the Federation of American Hospitals, only 15 percent of US hospitals are such companies (Federation of American Hospitals, 2001, p. 8). This level of conversion would still free up somewhere between half a billion to two-and-a-half billion dollars of opportunity for investors.

Maude Barlow worries that hospitals, when operated as businesses, "will be squeezed for profit all down the line" (Barlow, 2001, p. 70). The American experience contradicts her fears. Of the 13 US hospital corporations analyzed, 11 were profitable in 2001. However, only one paid a dividend. For the other 10, shareholders preferred not to take any earnings out of their companies. Of a total of US$2.5 billion of earnings, 99.66 percent was reinvested in the hospitals.

Allowing Ontario's (and Canada's) hospitals the option of converting to for-profit status will launch a virtuous circle where individuals have more options for investing for their retirement, hospitals' managers have better incentives to use resources effectively, and patients enjoy the benefits of more capital investment.

Table 1: Comparative Financial Data for Hospital Corporations in the US and Ontario, March 31, 2001

	United States		Ontario	
	'000s of US$	% of Assets	'000s of CDN$	% of Assets
Current Assets	13,023,883	25%	2,394,335	24%
Fixed Assets	37,797,716	73%	6,002,177	61%
Investments	475,140	1%	1,406,835	14%
Other	430,860	1%	58,307	1%
Total Assets	51,727,599	100%	9,861,656	100%
Liabilities	33,103,852	64%	7,454,014	76%
Equity ("fund balance" in ON)	18,623,747	36%	2,407,641	24%
Market Cap, March 15, 2002			67,111,000	
Price/Book Value of Equity			3.6	

Sources: US financial data consolidated by author from *Wall Street Journal Online* (wsj.com) for Beverley Enterprises, Community Health Systems, HCA, HCR Manor Care, Health Management Associates, HealthSouth, Lifepoint Hospitals, SunLink Health Systems, Province Healthcare, Select Medical, Tenet Healthcare (nb: balance sheet of Feb. 28), Triad Hospitals, and Universal Health Services. Ontario data from *The Change Foundation*, 2001, pp. 31-32.

References

Barlow, Maude (2002). *Profit is not the Cure*. Ottawa, ON: Council of Canadians.

Clemens, Jason, and Fazil Mihlar (1999). *The 20% Foreign Property Rule: Increasing Risk and Decreasing Returns on RRSPs and RPPs*. Critical Issues Bulletin. Vancouver, BC: The Fraser Institute.

The Change Foundation (2001). *Financial Review of 137 Ontario Hospitals*. Toronto, ON: The Change Foundation (Nov).

Emes, Joel (2001). "September Questions and Answers." *Fraser Forum* (December): 35-37.

Federation of American Hospitals (2001). *Building Healthy Communities, One Patient at a Time*. Annual Report. Washington, DC: Federation of American Hospitals.

Harriman, David, William McArthur, and Martin Zelder (1999). *The Availability of Medical Technology in Canada: An International Comparative Study*. Public Policy Source No. 28. Vancouver, BC: The Fraser Institute.

Zelder, Martin (2000). *How Private Hospital Competition Can Improve Canadian Health Care*. Public Policy Source No. 35. Vancouver, BC: The Fraser Institute.

April

QUESTIONS & ANSWERS

by Joel Emes

Q: *Has BC lost its status as one of the three "have" provinces? Has BC always been a "have" province?*

A: Yes, as British Columbia received equalization payments in 1999/00 and is expected to receive them in 2000/01 and 2001/02, it is currently a "have-not" province. According to the most recent data from the federal Finance Department, British Columbia received $94 million in equalization payments in 1999/00 and is expected to be eligible for $132 million in 2001/02, and $327 million in 2002/03. Table 1 shows equalization payments by province for 1999/00. British Columbia has received equalization payments in only three of the last 40 years: 1960/61, 1961/62, and 1999/00, so for the other 37 years it was a "have" province.

Q: *How are equalization payments determined?*

A: Equalization payments are calculated based on the difference between each provinces' tax take and the average take of the five "representative" provinces: British Columbia, Saskatchewan, Manitoba, Ontario, and Quebec. The first step in determining equalization payments is to find the average tax rate for Canada for each of the revenue sources in table 2. Next, the *per person yield* for each revenue source in each province is calculated using these average tax rates. The equalization from each revenue source is calculated by finding how much the *average per person yield* in the representative provinces differs from the *per person yield* in each province. These positive and negative differences are summed; the provinces that have a net deficiency get equalization payments equal to the sum multiplied by provincial population. Ontario, Alberta, and in most years, British Columbia, are often described as the "have" provinces because, as a result of their relative prosperity, they are the source for the other provinces' equalization payments.

Table 1: Equalization Payments, 1999/00

	Equalization Entitlements ($Millions)	Percent of Total	Equalization Per Capita (dollars)
NF	1,142	10.1	2,127
PE	255	2.4	1,848
NS	1,276	12.4	1,356
NB	1,178	11.3	1,560
QC	5,165	44.1	700
ON	—	n/a	n/a
MB	1,220	11.3	1,065
SK	387	5.1	379
AB	—	n/a	n/a
BC	94	3.2	23
Total	10,717	n/a	n/a

Source: Finance Canada; calculations by the author.

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Table 2: Revenue Sources Used in Determining Equalization Payments

- Personal income taxes
- Business income revenues
- Capital tax revenues
- General and miscellaneous sales taxes
- Tobacco taxes
- Gasoline taxes
- Diesel fuel taxes
- Non-commercial vehicle licenses
- Commercial vehicle licences
- Alcoholic beverage revenues
- Hospital and medical insurance premiums
- Race track taxes
- Forestry revenues
- New oil revenues
- Old oil revenues
- Heavy oil revenues
- Mined oil revenues
- Domestically sold natural gas revenues
- Exported natural gas revenues
- Sales of Crown leases
- Other oil and gas revenues
- Minerals—asbestos
- Minerals—coal
- Minerals—other
- Potash revenues
- Water power rentals
- Insurance premium taxes
- Payroll taxes
- Provincial and local property tax revenues
- Lottery revenues
- Miscellaneous provincial and local taxes and revenues
- Shared revenues: offshore activities
- Shared revenues: preferred share dividend

Source: Canadian Tax Foundation, *Finances of the Nation, 2001*, table 8.4.

Table 3: Estimated Major Federal Transfers to the Provinces and Territories, 2001/02 (in $ millions, unless otherwise indicated)

Province	General Purpose Transfers		Canada Health and Social Transfer		Total Major Transfers	Total Major Transfers Per Person (dollars)
	Equalization	Territorial Formula Financing	Cash Transfers	Tax Transfers		
NF	1,074	n/a	331	261	1,549	2,879
PE	260	n/a	86	67	387	2,774
NS	1,326	n/a	590	454	2,244	2,366
NB	1,202	n/a	474	364	1,914	2,520
QC	4,719	n/a	4,638	3,566	12,367	1,666
ON	0	n/a	6,393	6,735	13,128	1,105
MB	1,207	n/a	720	554	2,369	2,053
SK	398	n/a	637	489	1,358	1,322
AB	0	n/a	1,753	1,635	3,388	1,103
BC	132	n/a	2,627	1,909	4,535	1,102
YT	n/a	346	21	12	379	12,552
NT	n/a	510	8	47	565	13,418
NV	n/a	611	23	8	642	22,947
TOTAL	10,318	1,467	18,300	16,100	44,825	1,439

Source: Finance Canada; Canadian Tax Foundation, F*inances of the Nation, 2001*, table 8.1; Statistics Canada, *Provincial Economic Accounts*; calculations by the author.
Note: Equalization associated with the CHST tax transfer is included in both CHST and Equalization. Totals have been adjusted to avoid double counting.

Q: *How much money does the federal government transfer to other levels of government?*

A: In the 2001/02 fiscal year, the federal government expects to transfer $44.8 billion in cash and tax transfers to the provincial and territorial governments (see table 3). The major transfer programs are: equalization, territorial formula financing, and the Canada Health and Social Transfer (CHST). The CHST replaced Established Program Financing (EPF), and the Canada Assistance Plan (CAP) at the beginning of the 1996/97 fiscal year. The CHST is a block fund to cover the federal government's share of spending on insured health services, post-secondary education, and social assistance programs. Equalization payments are intended to enable the provinces to provide their residents with reasonably comparable levels of public services at reasonably comparable levels of taxation. These payments are unconditional, which allows the province to direct the money to its highest spending priority.

Commanding Identity?

Canadian Cultural Policies Within the North American Perimeter

by Sylvia LeRoy & Barry Cooper

Canadians have long been preoccupied with questions of sovereignty and identity. Indeed, many Canadians confuse the two. But as Northrop Frye (1971) pointed out a generation ago, the first is a political concept, and the second is an expression of the many local and regional cultures of this country.

The political realities following the terrorist attacks of last September have both reinforced the logic of North American security integration, and provoked cultural nationalists into arguing that Canadian sovereignty depends on the financial commitment of the federal government to Canada's so-called cultural industries. As Finance Minister Paul Martin argued in defense of the new spending priorities in December's budget, "In an era where the borders are essentially shrinking, when the world is becoming smaller, one of the ways that you manifest your sovereignty is … in fact, to support your cultural industries." The new support is lavish: $120 million for CBC, $200 million for the Canadian Television and Cultural Production Fund, and an additional $562 million for other cultural initiatives.

The rhetoric of preserving Canadian culture sounds a lot like the rhetoric of Quebec nationalism. It evokes the alarming matter of *la survivance*. Fear of outsiders prompted the Quebec government to pass laws restricting freedom of choice regarding language usage, and now Canadian cultural protectionists are advocating stricter Canadian content rules and greater restrictions on foreign media ownership so as to protect what they call Canada's "cultural sovereignty." But such policies confuse culture and politics. They are antithetical to political liberty, to genuine sovereignty, and to authentic cultural expression.

An on-going House of Commons committee review of Canadian broadcasting policy, for example, took as its main themes the issues of Canadian content and cultural diversity. Unfortunately, the review is becoming a lost opportunity to examine the legitimacy, the costs, and, considering the advancements in new technologies, even the ability of the federal government to regulate Canadian culture and public taste.

For years, Canadian content and broadcasting rules have been promoted as an industrial development policy, and so an expression of the mercantilist orientation of Ottawa's cultural mandarins (Stanbury). For instance, a few years ago an advisory committee to the Heritage Minister, Sheila Copps, proposed that both private broadcasters and CBC be compelled to feature Canadian movies during prime time. A taxpayer-endowed fund of between $150 and $200 million would be required to underwrite the production of the new feature films for which no discernible demand could be detected.

About the same time, the WTO declared that Bill C-103, which would confiscate 80 percent of the revenues from advertising in Canadian editions of US publications, to be illegal. The government responded with Bill C-55, which proposed to make it a criminal offence to sell ads in these "split-run" magazines. At the time, *Sports Illustrated Canada*, which had no Canadian competition, was the target. In the face of evidence to the contrary, the argument was made that if *Sports Illustrated Canada* continued to exist, millions of Canadian advertising dollars would end up in American pockets. Then dozens of Canadian magazines would disappear, depriving Canadians of the capacity "to tell ourselves our own stories." Without this government protection, Canadian culture would disappear!

The Heritage Minister likened the whole dispute to the War of 1812, which, she said, "never really ended." This was cultural nationalism writ very large. The War of 1812 claimed some 20,000 lives. No lives were even at risk over this trade dispute. Besides, the Minister of Culture got her history wrong: the War of 1812

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ended with the ratification of the Treaty of Ghent on 17 February, 1815.

More recently, the CBC, which is also supposed to tell us our own stories, has come under fire. Izzy Asper told the Canadian Club not too long ago that "CBC TV no longer has a constituency" even though it receives about a billion tax dollars a year. As a result, CBC is in a position to outbid private broadcasters such as Mr. Asper's own CanWest Global from programs that the private sector would otherwise bring to air. At one time public funding was needed because there was simply no way for people to pay only for what they wanted to watch. But, as Asper said, "CBC is attempting to function in a world that no longer exists."

Earlier this year, a Liberal member of the Commons Heritage Committee, Roger Gallaway, said that CBC was a waste of money because "its viewership is like chemical traces." Even the CBC-loving Friends of Canadian Broadcasting admit that the share of viewers has fallen 40 percent over the last 10 years. And Robert O'Reilly, a 30-year veteran of broadcasting who once ran Radio Canada International, argues that CBC TV should be shut down ASAP. Its audience, he said, has drifted away because CBC has become a "specialty service," not a broadcaster but a very narrowcaster. Yet it still commands the budget of a full-spectrum broadcast network even though 19 out of 20 Canadians tune in elsewhere.

One way to support CBC and the specialized programs it delivers has been mentioned time and again: let those who want to watch it pay for it. That is how PBS works. That is how pay-per-channel and pay-per-view works. There is no reason to exempt CBC and compel millions of Canadians who don't watch it to subsidize the precious few who do.

For the defenders of cultural protectionism, however, the same logic that would end publicly-financed broadcasting is the only reason to keep it. No less an authority than the His Excellency J.R. Saul has explained that private broadcasters are focused on profits, not content. "Any attempt to make public broadcasting like private broadcasting," he said, "misses the point of why the thing exists," which is the content, the ability to tell us our own stories. That CBC swallows a billion dollars a year thus becomes another reason to keep it.

In short, for the cultural protectionists, people who don't watch CBC clearly don't know what's good for themselves. That makes them just the people who should pay—so that those who do know what's good for themselves don't have to.

All this interference with Canadian culture has significant and adverse non-monetary consequences as well. Perhaps the greatest cost from compulsory taxpayer support of Canadian culture is that dependence on government grants and subsidies stifles the creative and imaginative potential of Canadian artists, filmmakers, writers, and publishers. In the December issue of *Policy Options*, for example, Robert Fulford criticized the *déformation professionnelle* that afflicts both the cultural bureaucrats empowered to distribute these millions in subsidies and the applicants who have grown to depend on them (Fulford). But tax dollars do not create culture. The reason is obvious, and it reinforces Frye's point: culture is an expression of local and regional experiences, not a policy brokered by governments.

Unfortunately, policies designed to protect an imaginary cultural sovereignty have undermined Canada's real autonomy. If "cultural sovereignty" is a metaphor for anything, it means that individual Canadians—not the CRTC, the Canada Council, the CBC, or the multitude of their grant-giving organs within the Department of Canadian Heritage—are free to chose what stories and cultural content best reflects their own lives. Now that is something the Commons committee could sink its teeth into.

... tax dollars do not create culture ... culture is an expression of local and regional experiences, not a policy brokered by governments.

References

Frye, Northrop (1971). *The Bush Garden: Essays on the Canadian Imagination*. Toronto: Anansi.

Fulford, Robert (2001). "Cultural Dreams, Policy Schemes." *Policy Options*. Montreal: IRPP (December).

Lusztig, Michael (1999). "Canada's Long Road to Nowhere: Why the Circle of Command Liberalism Cannot Be Squared." *Canadian Journal of Political Science* vol. 32, no. 3. (September): 451-70.

Stanbury, W.T. (1998). *Canadian Content Regulations: The Intrusive State at Work*. Fraser Forum Special Issue (August).

The Superiority of Market Solutions for Capital Market Problems

by Neil Mohindra

There have been several calls for Canadian securities regulators to take steps to restore investor confidence in the aftermath of the Enron scandal. In the US, the Securities and Exchange Commission (SEC) is already moving towards tightening the regulatory environment. It has proposed several new disclosure rules while serving notice that these proposals are the beginning of a new regulatory agenda.

However, it has become increasingly evident that market participants are fully capable of addressing post-Enron concerns without any help from securities regulators. Investors have served notice that inadequate financial disclosure is no longer acceptable. In the period after Enron's collapse, companies with questionable accounting practices were punished by investors who signaled their displeasure by selling off their holdings.

In response to investor pressure, numerous companies, including heavyweights such as General Electric and IBM, have committed themselves to expanding the financial information they disclose. This behavior is consistent with academic literature that questions the value of mandated disclosure. Because companies must compete against each other for investors who have other alternatives, they have powerful incentives to voluntarily disclose information in order to lower their cost of capital (Romano, 1998). Amongst other evidence, Romano cites empirical studies that show European firms listing in London typically comply with higher United Kingdom disclosure requirements even though they are not required to do so under EU directives, which allow them to comply with the lower requirements of their own jurisdictions (Romano, 1998).

Evidence of changing company behaviour is also evident from the adoption of new corporate policies on giving their auditing firms consulting work. Several large companies, such as Unilever and Walt Disney, have announced they will not give their auditors any more consulting work. In Canada, the Canadian Imperial Bank of Commerce has made a similar commitment.

In recognition of the changing attitudes of their clients, the large accounting firms are responding to the conflict of interest issues. Although the previous SEC chair failed in his efforts to force accounting firms to spin off their consultancy businesses, two firms had already voluntarily done so before the Enron controversy. Since then, two more firms have announced plans to do the same. When Deloitte Touche announced its decision, it indicated that it believed that issues of auditor independence were ones of perception only, but it still felt that splitting the company was in the interests of its clients. The remaining large firm, Andersen, has announced that it will no longer take on consulting business from its audit clients.

In Canada, accounting and auditing standards are set by a private organization, the Canadian Institute for Chartered Accountants (CICA). The CICA has recently announced the formation of a sub-committee to explore whether any shortcomings or vulnerabilities exist within Canadian accounting standards that would facilitate an Enron situation in Canada.

So what steps do Canadian securities regulators need to take? If anything, regulators should be asking themselves whether securities regulation can be better designed to facilitate the ability of market forces to efficiently resolve problems and issues that crop up in the market.

However, David Brown, Chair of the Ontario Securities Commission (OSC), appears to have other ideas. After a recent speech, Mr. Brown indicated that unless the OSC sees quick improvements, it will use its powers under the *Ontario Securities Act* to override accounting principles and auditing standards (Stewart, 2002). Taking this step would clearly damage Canadian capital markets. To start with, it would mean that companies that file financial statements in both Ontario and other Canadian jurisdictions would face

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the cost of preparing an additional set of financial statements. Far from being better off, Canadian investors would be confused if different rules exist in Ontario for preparing financial statements. Canadian companies that list their shares on foreign capital markets may encounter difficulties with the local regulator if they file financial statements that are not in accordance with generally-accepted Canadian accounting principles.

Canadian securities regulators deserve credit for not reacting as zealously as their US counterparts. The post-Enron performance of equity markets suggests that it is unnecessary for securities regulators to work to restore public confidence. However, public confidence in Canadian markets could deteriorate if securities regulators continue to threaten regulatory actions that will damage capital markets.

References

Canadian Institute for Chartered Accountants (CICA) (2002). News Release. "Accounting Standards Oversight Council Establishes Sub-committee to Consider Enron Failure Implications for Canadian Standard-setting." Feb. 22. Available electronically at *http://www.cica.ca/cica/cicawebsite.nsf/public/E_02Feb22.*

Deloitte Touche Tohmatsu (2002). News Release. "Deloitte Touche Tohmatsu Announces Separation of Deloitte Consulting." February 6. Available electronically at *http://www.deloitte.com/vc/0,1029,sid=1018&cid=3658,00.html.*

The Economist (2002). "When the Numbers Don't Add Up." February 9, p. 57.

Romano, Roberta (1998). "Empowering Investors: A Market Approach to Securities Regulation." *The Yale Law Journal* 107: 2359.

Stewart, Sinclair (2002). "OSC Vows Crackdown on Accounting Firms: Ensure Auditor Independence or We Will Act, Brown says." *Financial Post.* March 8.

We're More Equal Than Ever

by Chris Sarlo

One of the enduring claims of the social welfare community is that we have in Canada (and elsewhere in predominantly market economies), a growing "gap." "The rich are getting richer and the poor, poorer" is the common refrain. Is it true?

The evidence simply does not support this claim. In fact, there are compelling reasons to believe that we are getting *more* equal.

Income is frequently used as an indicator in studies of inequality. While this is understandable, especially given the easy availability of income information over the years, there are problems with the interpretation and reliability of income. Briefly, income data is based on self-reported information from a sample of households. Internal Statistics Canada reports, reconciliation checks, and various Auditor-General reports tell us that some incomes are substantially underreported and that this is a growing problem. The numbers we see in the income database are not necessarily true. As well, some incomes, even if correctly reported, are not an accurate reflection of the real standard of living of the household. This is the case with students (government loans and gifts from parents are not counted as income but surely make a difference in the way students live); with those who enjoy subsidized or rent-free accommodation; and for those thousands of households whose incomes are negative due to favourable business deductions and write-offs.

In *Measuring Poverty in Canada* (a Critical Issues Bulletin published by The Fraser Institute in 2001) I made the point that the problems with income tend to result in an overstatement of both the amount of poverty and the degree of inequality in the country. I have urged Statistics Canada to consider making appropriate adjustments to help Canadians get a more accurate picture of how we are doing.

However, despite the serious and growing flaws with income, there still does not appear to be any evidence of growing income inequality in Canada. For example, if we examine the degree of inequality of total household income using a popular measure called the gini[1] coefficient, it is essentially unchanged over the past 25 years (1973-1998). As well, the gini for total household consumption has changed only slightly (from .30 to .32) in the 29 years between 1969 and 1998. This is remarkable sta-

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bility despite the fact that the proportion of single parent families has doubled and post-secondary participation has substantially increased over the past 30 years. The increases in transfers have surely offset, to some extent, changes in these other areas. Nevertheless, the gap is not growing.

I tend to put significant weight on the manner in which people live and not just their income. The comforts and conveniences that people enjoy count a lot in any judgement of standard of living. And the fact is that household appliances, devices, and conveniences are far more prevalent today than they were a generation ago. These items (referred to as "facilities" by Statistics Canada) have permeated into almost all of society, where once they were the preserve of the well-off.

The automatic dishwasher is an example. This wonderful innovation reduces the drudgery of a major household chore and frees up time. It makes a real difference in the comfort and convenience of everyday life. In 1973, only 11 percent of Canadian households owned a dishwasher. By 1998, 51 percent of households had one. Another example of an item that clearly improves the quality and standard of living is air conditioning. Not all Canadians will need or want air conditioning, but it will measurably improve comfort in some of the hotter and more humid areas. In 1973, only 7 percent of Canadian households had air conditioning. By 1998, fully 33 percent had it. Colour television is an example of an item that enhances the quality and enjoyment of life. By 1998, 99 percent of Canadian households had at least one colour television compared with only 43 percent in 1973.

The rate of acquisition of these and many other household facilities is much higher for lower income than for higher income households (Sarlo, 1998; Sarlo, 2001). While we might expect this, given that lower income households start from a lower base and given that household facilities fall in price as market penetration increases, the fact remains that there is less inequality relating to this aspect of the standard of living.

The differences in the manner of living between higher and lower income households is less than it used to be and this "equalization" is likely to continue as other facilities come down in price and find their way into more and more households. This surely constitutes greater equality between Canadian households in areas that really make a difference—comfort, quality, and convenience of living. We need to bear this in mind next time we hear (and we will hear it!) that the gap is growing.

Note

[1]The gini coefficient measures the degree of dispersion or variation between the various household units and is calibrated to be between zero (complete equality of income) and one (complete inequality where one person has all the income).

References

Sarlo, Chris (1998). *Canadian Living Standards.* Critical Issues Bulletin. Vancouver: The Fraser Institute.

Sarlo, Chris (2001). *Measuring Poverty in Canada.* Critical Issues Bulletin. Vancouver: The Fraser Institute.

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Giving Back

by Walter Williams

How many times have we heard people being applauded for "giving back"? People seem to believe that if you've been successful and made a lot of money, you're somehow obliged to give back by making donations to this or that cause, program, or people. Giving back is not only a nonsensical idea, but a dangerous one, as well. It reflects ignorance about the sources of income and at the same time provides fuel for demagogues and charlatans.

Depending on one's vision of the sources of income, giving back not only makes good sense but is a moral imperative as well. Suppose income was simply a huge pile of money that was meant to be distributed equally. The reason some people are rich and others are not is because greedy rich people got to the pile first and took an unfair share. Giving back would be the "right thing" to do.

Another vision of the sources of income might be that income is distributed. In other words, there is a dealer of dollars. In this case, the reason why some people are rich and others are not is that the dollar dealer is a racist, sexist, or a multinationalist. Those to whom the mean dealer dealt too large a share of dollars should give back some of their ill-gotten gains. If they refuse to give back, then it's the job of government to confiscate their gains and return them to their rightful owners. In a word, there must be a redealing of the dollars, what some call income redistribution.

In a free society, income is neither taken nor distributed; it is earned. Income is earned by pleasing other people. The greater your ability to please others, the greater is your claim on what others produce. This claim is represented by the size of your income.

In order to make a claim on what others produce, I must serve them. Contrast that principle to government handouts where a person is told, "You don't have to serve anyone..."

Suppose, for example, I mow your lawn. When I'm finished, you pay me $20. I go to the grocer and demand, "Give me 2 pounds of sirloin and a six-pack of beer that someone else has produced." The grocer asks, "What did you do to deserve a claim on what someone else produced?" I say, "I served my fellow man." The grocer says, "Prove it." That's when I pull the $20 from my pocket that I earned mowing your lawn. We might think of those 20 dollars as "certificates of performance," evidence of service.

Free markets—along with peaceable, voluntary exchange—are morally superior to other alternatives. In order to make a claim on what others produce, I must serve them. Contrast that principle to government handouts where a person is told, "You don't have to serve anyone. We'll just take what they produce and give it to you."

Michael Jackson is rich. So is Steve Jobs and Michael Jordan. Henry Ford was rich, and so was Jonas Salk—but not me. Why? I can sing. I can also play basketball. The problem is that others are not as pleased with my performance as they are with Michael Jackson's or Michael Jordan's. Henry Ford became rich by making it possible for the ordinary person to own a car, and Jonas Salk helped eliminate a dreaded disease. You tell me what else they owe anyone. They've already given.

In our society, there are people who should give back. These are the thieves and social parasites who live forcibly at the expense of others. They prey on others. Some do it privately through theft, fraud, and robbery. Others use the political mechanism whereby government enriches them at the expense of others. If giving back means anything, it should apply to thieves and social parasites, not to those who have become wealthy by serving us. 🕮

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