

WHAT IS THE NATIONAL INCOME? ~~FROM~~ WHENCE DOES IT SPRING? ✓

Economic issues in a changing society

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Outline Notes for remarks to Statistics Canada's 1997 Management Conference

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4. How are these changes reflected in what people are talking about as priorities, concerns?
 - (Random snippets only)
5. What responses--
 - Reporting function
 - Decision support function

Both functions require better measures of income, wealth and distribution more likely to be understood by community. [Wealth includes present value of social wage--memberships, eligibility determinations. Costanza on wealth; Hartle on memberships, categorical programs]

Also demand sensitivity to civil society--participation, ultimately the judgements must be acceptable--discursive democracy, communicative rationality; devolution and ASD.

These matters raise two process questions

--"science into policy; no objectivity" (Myrdal)

--access; participation--inclusiveness should stretch beyond Ottawa.

- *sc should not be data arm of federal govt.*

6. Conclusions

1. Introduction

It is a great pleasure to be here, and I would like to thank John Baldwin and the organizers for the invitation to participate. Let me also thank Pauline Leonard and Statistics Canada for their customary excellent logistics and hospitality.

Disclaimer--

Have had privilege to be member of NSC for several years now--may well be accused of having been brainwashed--in diplomatic parlance, 'gone native'; specifically, I do believe that Statistics Canada has itself been developing an excellent base for serving the needs of a changing nation in a changing global context.

I worried about this possible bias initially, but have decided to deal with it by simply skipping the praise and moving on. I would not want to suggest that you folks are either incompetent or complacent--unaware of the limitations of your numbers, or unconcerned about the consequences. [What's the difference between ignorance and apathy? I don't know and I don't care.] But I am going to suggest that, even with technical capacity as good as anywhere in the world, and the best will in the world, Statistics Canada is presently the source of numbers which are fundamentally misleading in reporting on the nation's performance, and provide a fundamentally flawed foundation for decisions about its future.

I do start from the expectation that this audience of Statistics Canada managers is probably way ahead of me in thinking about the particular issues of development in the statistical system. You do know the limitations of your numbers far better than I do. And more particularly, I will skim over a number of current questions and ideas about which some of my former students, now here, could have talked more knowledgably and articulately than I could.

So I will try to occupy the more speculative high ground, trying to suggest some links from the discussion of international and national trends this morning to an appropriate understanding of the proper domain of the "economics" component of the Bureau's activities. This may not be easier, or more useful, but with luck it will be harder for me to be found out.

Preview: In this presentation, I want to make three points.

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of main
sections
+ sub-sec
needs
differentiating

1. Statistics Canada, is doing, in my view, an excellent job fulfilling its mandate as traditionally interpreted. But that traditional interpretation reflects an inadequate conception of the proper domain of 'economics' in our changing society. With the best techniques and the best intentions, Statistics Canada is communicating a misleading account of our economic affairs and our social performance. ^{Misleading because incomplete.} What is left out is crucial. The new CESD in the OAG ought to be identifying Statistics Canada as publishing economic accounts which do not portray fairly the true state of the economy, the underlying wealth of the nation, or the real national income. The AG really ought to be saying that she or he can not, without qualification, certify our books as enabling us to know fairly ourselves and our works, or the state of the nation.

2. The turn of the millennium is maybe not a bad time to rethink the Statistics Canada mandate and the proper interpretation of it. I propose that Statistics Canada should take as its Millennium Project the creation of the capacity to construct national income and wealth accounts which do adequately reflect the current concerns with investment in human, social and natural capital, with the absorption and diffusion of innovations and changes in such stocks, and with the conservation of their value for future generations. The goal should be to construct the capacity to report sufficiently responsibly that the CESD could certify the reports as reflecting fairly the state of our national enterprise and our progress toward sustainability (or at least as providing a responsible estimate of national income as we know in our hearts and in our textbooks ^{it should be defined}), taking into account the non-market wealth of the nation. ^{True?} ^{because the classics}

3. To accomplish this goal, the economic statistics component of Statistics Canada will in the long term probably have to move to a different role, as a national statistical agency developing the conceptual framework, principles and standards for coordinated monitoring and maintenance of metadatabases built on records from governments, agencies and (presumably) corporations across the country. This role, constructing a 'hypertext' version of a national statistical system for an Internet world, would be very much in line with the vision of the Government of Canada as ^{analogy} ^{doesn't count} ^{principles,} ^{etc.} undertaking a design and facilitation role rather than operational functions. Statistics Canada could, I suppose, come to look more like that World Wide Web consortium at MIT than like the Census Bureau. And we might come to know more about our world as it truly is.

2. Purpose

The invitation to this meeting described it as an opportunity for senior managers in Statistics Canada, provoked by some comments of outsiders, to consider the adequacy of the product that they produce for the Canadian public. It was noted that statistical agencies are both servants to and products of their society, and mirrors of their environment, and must stay in touch with the changing world that they measure and serve. Hence my title--I'd like to look at key econ issues in changing society. On this point, it is perhaps useful to start by noting that Keynes, over 70 years ago, said "I believe that in the future, more than ever, questions about the economic framework of society will be far and away the most important of political issues." Clearly if one looks at current controversy in Canada, that observation is correct. ✓

So also, I think, is an important warning, also by Keynes. (I recognize that quoting scripture, especially from a religion thought by some to be outmoded or obsolete, is perhaps not politically correct here, but I suppose my right to do so is protected by some Charter of Fundamental Freedoms.)

"Instead of using their vastly increased material wealth and technical resources to build a wonder-city, they built slums because slums on the test of private enterprise 'paid', whereas the wonder-city would, they thought, have been an act of foolish extravagance, which would in the imbecile idiom of the financial fashion have 'mortgaged the future'; though how the construction today of great and glorious works can impoverish the future no man can see until his mind is beset by false analogies from an irrelevant accountancy.... ✓

But once we allow ourselves to be disobedient to the test of an accountant's profit, we have begun to change our civilization. And we need to do so very warily, cautiously and self-consciously. For there is a wide field of human activity where we shall be wise to retain the usual pecuniary tests. *It is the state, rather than the individual, which needs to change its criterion. It is the conception of the Chancellor of the Exchequer as the chairman of a sort of joint-stock company which has to be discarded.*" [Extract from a 1933 speech "National Self Sufficiency"; Collected Writings of John Maynard Keynes, Vol XXI, pp. 240-242. D.E. Moggridge (ed). Quoted in Moggridge, Keynes (3rd Edition, 1993). My italics.]

Numbers do not speak for themselves. Statistics Canada's mission, it seems to me, has to be seen as turning a flood of numbers into a flow of information. More fully, Statistics Canada has the task of turning floods of numbers and avalanches of records into clean, stable banks of data; of turning those stores of data into flows of information; and of facilitating the further transformation of those flows of information into stocks of knowledge.

To turn big banks of data into usable information flows of course demands considerable analytical and modelling work. In many cases, the most informative and economical packaging may be as econometric models or simulation systems. Of course these are judgemental, not objective and value-free. But so is all work in economics, as we have often been taught. Gunnar Myrdal is particularly clear on this point. "This implicit belief in the existence of a body of scientific knowledge acquired independently of all valuations is, as I now see it, naive empiricism. Facts do not organize themselves into concepts and theories just by being looked at; indeed, except within the framework of concepts and theories, there are no scientific facts but only chaos. ... Questions must be asked before answers can be given. The questions are an expression of our interest in the world; they are at bottom valuations. Valuations are thus necessarily involved already at the stage where we observe facts and carry on theoretical analysis, and not only at the stage where we draw political inferences from facts and valuations" [Myrdal, Gunnar. *The Political Element in the Development of Economic Theory*. 1930. From the preface to the English edition, 1953, p. vii].

So Statistics Canada should not be shrinking back from the process of providing relevant and useful information merely because it is not in the business of policy-making. The only response to this problem, it seems, is to be explicit and transparent about the judgements made and the procedures followed in developing the information base. When it comes to drawing more value-laden political balances, of course, Statistics Canada has no particular role or expertise. And the more mysterious process by which all this transformation of numbers into knowledge actually leads to wisdom in action is a question we should, I guess, leave to others--maybe the departmental advisors who hover around Ministers, or the media gurus who need not wait for any numbers because they know the answers already on the basis of their direct pipeline to the genius of the market.

← complete

caution -
could expect better political call with full info

But doesn't the failure to ask some of the questions identified in this note, and commit energy and resources to responding to them, push the whole discussion toward that 'irrelevant accountancy' by which the social debate over the last two decades has unfortunately been driven?

Let me turn to considering how the society in which all this is happening is changing, and to commenting on Statistics Canada's dual role of serving the community first by measuring and reporting on social developments and social performance (enabling us "to know ourselves") and second by providing the knowledge base supporting individual and social decisions and policy debate (enabling us "to shape our future").

I will speak a little later about the significance of the democratic surge and the growth of civil society in Statistics Canada's strategy for the future, but I can't resist one aside. I arrived here this weekend directly from Mexico City, where I discovered considerable euphoria (initially very flattering) about the arrival of ROD. My own rush subsided a bit when I found that ROD was not me but "rapid onset democracy". In the words of one commentator, Mexican society now feels that with the results of the July 6 election it has what it has never had before--"an outcome of our own choosing". (On the other hand, there was also a concern expressed that with too much ROPE--Rapidly Opportunistic Pluralist Engagement--a community can hang itself. But leave that aside.)

Canada has had the luxury of clean elections for a long time, but still faces some severe problems in the need to find suitably participatory and inclusive means "to choose a future". And the adequacy of the information base on which we can choose to act is crucial. I argue here that it's not yet adequate. *by [signature]* ✓

Let me outline the basic argument in a few simple propositions:

1. We live in a complex formal market economy which in theory can be almost self-regulating.
2. But the most crucial elements of the new forms of valuable capital which make up the wealth

of nations--human ingenuity or commitment, social capital, natural capital--fall outside this formal market economy and pose major conceptual, measurement and policy problems.

3. Access to much of this capital cannot be rationed by market mechanisms; prices are absent; there is market failure; Coase theorems don't apply because transactions cost and contracting difficulties are dominant. So for management purposes we must go over to various forms of self-governing institutions which face all sorts of dilemmas of collective action, compliance problems and the like. ✓

4. We can't distribute returns to this capital via market mechanisms, but do need to have incentives to encourage and compensate acts of investment in and conservation of this valuable capital. So on one hand, we may need to devise basic income mechanisms for distribution of the returns to these forms of common property, and find alternative mechanisms to recognize and reward socially useful roles in creation and preservation of this capital, on the other. [There have been arguments for some time about the need to separate participation in the formal economy--e.g., in the fishery--from the distribution of returns flowing from those activities. See, for example, Kennedy,].

5. Many of the most important boundaries between significant systems are natural, not political or jurisdictional, so need to go over to the mechanisms of global civil society, compliance-oriented, relying on 'high context' (Hall) associations and shared cultural background to achieve effective management.

6. The global atmospheric commons is geochemical, so we might hope to control discharges and emissions through market mechanisms--permits, World Atmosphere Fund, etc. But oceans and global marine resources are biological, forming part of a very complex interdependent web--so cannot offer ownership of components, or control harvesting through market mechanisms alone. ✓
We need mgt systems to mediate between a complex natural system and a complex human social and institutional system. (In this, an over-riding issue is competition for habitat and the role of a dominant human species as predator. See Vitousek...) ✓

7. The communications revolution has made possible the growth of integrated global markets and all the phenomena of globalization which are so widely discussed. But perhaps more important in the longer run is the development of global civil society which is also made possible. I do not go

into this story here (see Dobell, 1997 for one view). But the key point is that growing appeal to participatory mechanisms and consultative processes creates demand not just for more comprehensive information flows and perhaps broader sets of indicators, but for decision support systems and dissemination machinery which can serve non-government organizations and other civil actors in ongoing multi-stakeholder processes.

Thus, in the congested global village, the policy issues include:

- ownership, access, compensation, appropriation
- eligibility, membership, service delivery
- identification of resilient systems and robust policies.

In summary, can argue that the world with which Statistics Canada must deal, and on which it must report, is changing in at least five basic ways.

1. Infotech
2. Which makes possible integrated markets
3. And global civil soc
4. And it's happening in a world now 'full'
5. Alternative service delivery and new inter-institutional arrangements

Massive wealth redistribution occurs as a result of new administrative arrangements for the dispensing of bureaucratic justice--that is, for the determinations of eligibility for various categorical programs, or in other words for the size of the social wage enjoyed over time by individuals, or determinations of rights of access to open access resources. Large corporations and multi-national enterprises see this and, in the MAI, are negotiating rules to protect their claims for compensation for possible capital losses. The property of the poor, on the other hand, is facing confiscation without notice, and without record. (And one can hardly be happy--to say the least--with the conduct of the Government of Canada in being open with Canadians about what is going on in these negotiations.)

} omit ?

There is a more general argument about the nature of change in the full world.

Uncertainty...

What is significant about this changing society? Let's look at some indications of concerns.

4. Priority concerns in Canadian society

Five brief comments about what our society thinks might be central or key issues here (and which hence are crucial as part of a reporting function).

A) The Policy Research Committee, created in mid-1996 as part of a PCO project to understand the policy environment, produced a report about a year ago which I imagine is familiar to many of you. Indeed, we've already heard a lot about it. Interestingly, although it contains an extensive section on environment and sustainable development, it leaves out those questions altogether in its discussion of policy pressure points, focussing instead on growth, human development and the very important issue, largely neglected till now, of social cohesion.

B) The 1997 SFT--key investments, key roles--how well are we doing in responding to these priority concerns?

"The Government has regained the ability to address priorities of Canadians...is now in a position to make strategic investments in our children and our youth, our health, our communities, and our knowledge and creativity...The future belongs to societies ...who invest in knowledge, education and innovation; whose population is healthy...Canadians have already set these priorities for this new Parliament...by investing now in the well-being of today's children, we improve the long-term health of our society..The Government...will build creative partnerships between the private and the public sectors to accelerate the adoption of innovative technologies...

And further,

"Canadians are both the beneficiaries and the stewards of a land that holds nine percent of the Earth's fresh water, 10 percent of its forests and 25 percent of its wetlands...[The SFT should have mentioned also, but didn't, the crucial resources of vast coastlines on three oceans.]

...Maintaining what is good, and improving what has been degraded, requires constant effort. It is an effort that the Government will make...The Government is committed to working in the international community to promote sustainable development....The Government is also

committed to practical measures to reduce its domestic contribution to these problems.”

I leave aside any comment on when the Government is going to be held to account for its failures to meet these commitments. The point is how central the issue is as a priority concern on which presumably we need information as to our progress and performance.

C) Ursula Franklin--every society needs to keep three sets of books

In the closing portion of her remarkable 1989 Massey lectures, Ursula Franklin suggests some directions. “In order to make socially responsible decisions, a community requires three sets of books. One is the customary dollars and cents book...The second book relates to people and social impacts. It catalogues the human and community gains and losses as faithfully as the ongoing financial gains and losses documented in the first book. In the third book, ...[are]...detailed accounts of the gains and losses in the health and viability of nature, as well as of the built environment. Decisions on expanding, reducing or changing particular activities in the real world of technology will require access to and consideration of all three books.”[p. 129]

D)In 1992, the National Roundtable on the Environment and the Economy established a Task Force on Reporting. In its 1993 Report to the Prime Minister, that Task Force concluded that “Canadians do not have adequate information on which to base sound decisions concerning sustainable development.” A subsequent 1996 draft document suggests that monitoring and reporting capacities may have been substantially reduced in the interim.

E) Costanza et al estimates of value of ecological services

In the journal Nature earlier this year (issue 387) Robert Costanza and a large group of colleagues set out estimates of the value of ecological services, estimating their aggregate value at 1 to 3 times the recorded value of global gdp. [An interesting aside: this 9 page article had a note at the bottom pointing out that a 6 page spreadsheet and an accompanying 18 pages of explanatory footnotes on methods can be found at www.nature.com. The image of the Statistics Canada site--independent of the Canada site itself--as the source of the ‘hot links’ to the vast underlying base of data--both statistical and administrative--and methods throughout the country springs to mind,

and it is one to which I return at the end of these remarks.]

There was in the same issue an important reservation expressed about the methodology and indeed the overall purpose of the Costanza et al exercise, calling into question the desirability of trying to reduce all ecological services to a common monetary value. Ultimately it is a set of ethical principles, not a set of prices, which will dictate our decisions on many aspects of our interactions with the natural world. But even here there is--or may be--a reporting role for Statistics Canada, in supplementary information identifying where, in effect, prospects for sustainability might be threatened because critical stocks of natural or social capital are approaching critical thresholds or otherwise at risk. Or perhaps this is a place where the responsibilities of the federal government for reporting on progress toward sustainability might be assumed by other bodies. (The British Columbia Commission on Resources and Environment, for example, released, just before it was disbanded, an illustrative draft report on progress toward sustainability, and a successor organization, the B.C. Council for Sustainability has considered the possibility of pursuing further reporting efforts modelled on that example. See Hodge, ...))

I guess the point of my comments here is that without looking at the value of social capital and natural capital and ecological services, even the basic estimates of economic wellbeing and social performance captured in wealth and income measures are likely to be irreparably distorted and misleading.

[I don't know whether to be elated or discouraged that, after all this was written, there came to me this weekend a Conference Board of Canada briefing which quite matter-of-factly reported on the need to measure 'genuine savings' and quoted the World Bank as assuring us that Canada enjoyed in 1993 a rate of 'genuine savings' (net of depletion of natural--and, I suppose, social--capital) of 7.5% of gdp.]

taking into account
^? on the opposite?

Many more references could be cited, and obviously should be, if any representative sense is to be obtained. But I'm looking only for straws in the wind to suggest directions, not a representative sample. Let me just mention a few other fragments suggestive of contemporary policy concerns.

- In August 1997 the Halifax Daily News carried a story on the controversies around poverty measures and LICOs, and Statistics Canada's conclusion that the appetite for LICOs was too strong to permit considering their abandonment, even given the risks of misinterpretation to which they are obviously subject.
- In a paper prepared for a North American Institute Forum on Social Policy in Winnipeg this past June, Ken Battle suggested that the litmus test for judging social security systems: ^{he} How successful are they in reducing the gross income inequalities produced by a market economy? (He noted that in Canada social programs so far have managed to fully offset increases in market income inequality.)
- In a recent working paper, Murphy, Riddell and Romer conclude that progress in the development of new general purpose technologies may have adverse distributional consequences by virtue of increasing the relative demand for skills (and suggest that perhaps there is, as a result, an important role for government in promoting increased supplies of skilled labour).

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In all three of these examples, Statistics Canada has in fact provided important contributions to the necessary information, and is in many ways leading the debate by virtue of its innovative work on the statistical foundations. But somehow these information flows seem to be viewed as peripheral social issues, not part of the fundamental economic program of the agency and the society.

The key point here is that policy decisions on questions like this are basically, fundamentally, economic. They are not part of a formal market, often, but they are part of economic life. For purposes of policy analysis and political decisions, they demand more than just year-to-year aggregates of market transactions, or even of market and administrative transactions together. To start from some reasonable sense of national circumstances and social performance, we need some knowledge of the wealth of the nation, and the income from it, and the distribution of that income and wealth. And that entails consideration of all these social processes just mentioned, and more.

Now Keynes and SNA are perhaps the most impressive success story in social sciences--fulfilled a highly relevant need at the time--a priority concern, as we might say now. But, as noted above,

Keynes also emphasized the need to be careful about finding the appropriate framework, the right 'accounting stance'.

In the congested global village, the sphere of human activity covered by the SNA is truly the hole in the donut (See Dobell, 1993; 1997). Questions at least equally important, on which the SNA is (largely) silent, include:

The value of human capital, skills, ingenuity;

The value of social capital, cohesion, intergenerational solidarity (or tension)

The value of ecological services

The value of access to common property resources

Dynamics, diffusion, distribution and depletion of knowledge, ingenuity, technologies.

All these topics are crucial in understanding our economy, probably more important than the numbers on physical and financial capital which are reported in excruciating detail. And they lead to basic questions of organizational and individual birth and death processes, ^{time use} mobility, absorptive capacity...

So perhaps we need to go back to some of the basic thinking about income and wealth concepts as we rethink an approach to Statistics Canada's mission.

Indeed, if we go back to the basic Hicks or Fisher-Haig-Simons definition of income, we find that it requires us to determine the level of consumption flow in any period which could be achieved without reducing the value of the capital stock from which to produce a consumption flow in future periods. Sounds a lot like the much quoted Brundtland definition of sustainable development: Development which meets the needs of the present without compromising the ability of future generations to meet their own needs. We need much clearer estimates as to the extent to which present policy is compromising future potential for future generations to meet their own needs.

Shouldn't it be crucial--an outstanding national priority--to have a system of economic statistics which enables us to estimate the level of national income according to this definition--the

sustainable national income, the national consumption flow which is sustainable without reducing potential income in the future?

In order to do this, of course, one would need a full identification of the sources of income (which isn't much different from an identification of the sources of growth in income, I suppose). But that requires looking at the value of natural capital, and the value of social capital, and the value of human capital, as well as the value of physical capital and intellectual property or knowledge (and the dissemination and diffusion processes by which they spread). The interesting thing is that the value of physical and intellectual capital can be pretty well estimated from market observations, I suppose, because they can legitimately be appropriated privately as the product of individual effort or action. Human capital in the sense of skills and individual capacity is already pretty well embodied and individually appropriated, and again throws off a stream of services which have market valuations. But when we come to social capital, as a property of networks of individuals, and natural capital, the problems get more difficult, as you already all know.

[And if future potential is the result of stochastic diffusion processes, we need to know how policy interventions will affect those processes and hence the distn of income (Joel Cohen)]

5. Response.

If these are the questions dominating debate in the changing society, what to do? How far can Statistics Canada move toward designing an overall synthesizing analytical framework to organize the data collection and monitoring activities of many agencies. Is there an EMAN role like the Canadian Institute of Health Information (with CCME, provincial participation). How far can this go beyond satellite accounts? What are the info needs of Cabinet? Agencies? Citizens? Is there some chance of finding the hypertext statistical system analogous to the WWW here, with some sort of process of standard setting for collection, diffusion and dissemination.

What is the point?

View the system comprehensively; recognize the many forms of capital not now recognized--think

of economic issues and the economic component of the statistical system as extending so far. Face up to the consequences of missing prices and market gaps, which dominate the congested economy where the struggle for access to renewable resources and ecological services can only increase.

Look to the dynamics of diffusion, distribution, ...

Think about memberships, categories, eligibility determinations as key forces in determining behaviour (or at least the distribution of income and wealth, property rights)

Recognize that what we conventionally look at as the formal economy is a small part of the economic activity of individuals (when this is interpreted to include the buildup and drawdown of all relevant forms of capital), and we cannot ignore the rest as economic concerns.

In particular, note that the failure to price flows adequately means serious distortions in concepts of 'efficiency' --with serious consequences in the management of fisheries resources, wetlands, forests,...everywhere where by-catch, discards, spillovers are serious, and ignored. The failure to confront the gaps in the system leads us to serious errors in the assessment and adoption of technologies, and serious waste of human, social and ecological capital in a misguided pursuit of 'competitiveness'.

Statistics Canada should not be serving the glass bead game of academic economics...it should be serving the civil society whose most effective critics thus far have been the women who, feeling themselves outside the formal economy, perhaps, can voice some practical and penetrating criticisms--see, for example, Franklin, Waring, Finlayson, Henderson.

? ref to 'bean-counting'

Can Statistics Canada fix the market and complete the price system? Should it even imagine this to be any part of its job?

I suppose the only answer to that is to recognize that there aren't many other entities that could try, that it does have to do with creating an accurate picture of our economy, and that to date Statistics Canada has done a pretty good job of putting in place some information on important issues where we have had only gaps before:

LICO, Microsim, SLID, birth/death, distribution of earnings and hours, for that matter the demographic projections which have been popularized in boom,boom bust,bust or whatever

6. Conclusion

Much more could be said, but I suppose in summary I would like to leave with all you smart people the challenge to develop the system of economic statistics which will simply assure us

- 1) Sound measures of the real capital stocks which constitute the wealth of the nation
- 2) A good measure of the real national income it throws off
- 3) A good description of the distribution of that national income and changes in the distribution from time to time, including those resulting from new institutional arrangements.

Of course, if these simple descriptive indicators could be delivered in the context of models or software which illuminated causal (or probability) relationships among them, and in a manner which permitted judgements as to whether they are reflecting improved social performance or not, that would be even better. But even good answers to those three simple descriptive questions would enable us to say that Statistics Canada is helping us to understand the central economic issues of this age of change, rather than permitting people to focus on the ‘imbecile idiom of the financial fashion’ created by ‘false analogies from an irrelevant accountancy’ as Keynes described it in 1933.

I conclude with a proposal for a Millennium project for Statistics Canada: Create the capacity for full reporting on progress toward sustainability--or, in other words, for full accounting for the extent to which current policies are really compromising future potential. By this I emphatically do not mean “mortgaging the future” in the Fraser Institute/BCNI sense, but rather, arriving at a valid estimates of real income for the nation.

Of course it would be altogether silly to try for the grand accounting matrix in the sky, in which all these issues would be captured at once.

But Statistics Canada might see its future role as

- 1) Monitoring more fully and more consistently the social and natural capital about which we all talk.
- 2) Writing the qualifications to their national and social accounting estimates much more explicitly, with much more of an eye to preventing the misinterpretations which lead to social complacency, if not Stats Can complacency
- 3) Focussing supplementary statements on the critical thresholds in the estimates missing from the accounting framework
- 4) Providing independent autonomous information systems accessible to civil society
- 5) Providing the conceptual framework, standards and coordinating mechanisms to guide the cooperative, distributed, national monitoring and reporting system, the hypertext framework for the overall system, and the 'hot links' to the underlying individual participating agencies.

So, finally, three recommendations or suggestions for your consideration.

1 (immediate and attitudinal): Confront the contradictions. Listen to Ursula Franklin on the proper scope of the books, and work toward that goal with recognition that what is offered now is a dangerously ^{incomplete + therefore} misleading and complacent foundation for decision.

2 (medium term and tactical): The Statistics Canada Millennium Project should be to create the capacity to report on national income and wealth sufficiently responsibly as to head off the risk that the CESD will be forced to write a qualified opinion on the extent to which the books fairly portray the state of affairs in Canadian society. [I say 'responsibly' or 'fairly' rather than 'accurately' because we all know that accuracy is impossible and that to search for it risks a misplaced precision.] ^{The Govt / Dept. of} Mr. Martin should fund this effort generously over a multi-year effort. ^(in case Martin changes roles)

3 (long term and strategic): The goal of Statistics Canada should be to develop the core steering function in a national statistical system, creating the design and standards for the 'hypertext' statistical framework through which the flood of numbers and the avalanche of administrative records generated by an information economy can be transformed into usable knowledge for a sustainable knowledge-based society.