

Testimony of Jonathan Rowe Before the United States Senate Committee on Commerce, Science and Transportation, Subcommittee on Interstate Commerce, on “Rethinking the Gross Domestic Product as a Measurement of National Strength,” March 12, 2008

Mr. Chairman and Members of the Committee:

Let’s suppose that the head of a federal agency came before this committee and reported with pride that agency employees had burned 10% more calories in the workplace than they did the year before. Not only that – they had spent 10% more money too.

I have a feeling you would want to know more. What were these employees doing when they burnt those calories? What did they spend that money on? Most important, what were the *results*? Expenditure is a means not an end; and to assess the health of an agency, or system, or whatever, you need to know what it has accomplished, not just how much motion it has generated and money it has spent.

The point seems obvious. Yet Congress does this very thing every day, and usually many times a day, when it talks about this thing called “the economy.” The administration and the media do it too. Every time you say that the “economy” is up, or that you want to “stimulate” it, or get it going again, or whatever words you use, this is what you actually are saying. You are urging more expenditure and motion without regard to what that expenditure is and what it might accomplish – and without regard to what it might crowd out or displace in the process.

That term “the economy”: what it means, in practice, is the Gross Domestic Product or GDP. It’s just a big statistical pot that includes all the money spent in a given period of time. (I’m simplifying but that’s the gist.) If the pot is bigger than it was the previous quarter, or year, then you cheer. If it isn’t bigger, or bigger enough, then you get Bernanke up here and ask him what the heck is going on.

The *what* of the economy makes no difference in these councils. It never seems to come up. The money in the big pot could be going to cancer treatments or casinos, violent video games or usurious credit card rates. It could go towards the \$9 billion or so that Americans spend on gas they burn while they sit in traffic and go nowhere; or the billion plus that goes to drugs such as Ritalin and Prozac that schools are stuffing into kids to keep them quiet in class.

The money could be the \$20 billion or so that Americans spend on divorce lawyers each year; or the \$5 billion on identity theft; or the billions more spent to repair property damage caused by environmental pollution. The money in the pot could betoken social and environmental breakdown – misery and distress of all kinds. It makes no difference. You don’t ask. All you want to know is the total amount, which is the GDP. So long as it is growing then everything is fine.

We aren’t here today to talk about an obscure technical measure. This isn’t stuff for the folks in the back room. We are talking about what you mean when you use that term “the economy.” Few words induce such a reverential hush in these halls. Few words are so laden with

authority and portent. When you say “the economy” is up then no news is brighter. When you argue that a proposal will help the economy or hurt it, then you have played the ultimate trump card in your polemical decks, bin Laden possibly excepted.

As I said it isn't just you. The President does it, the media, the reporters sitting at that table over there. They do it too. How many of them, or of you, asked during the recent debate over the “stimulus” package, exactly what it was that would be stimulated. How many of them say, when Bernanke comes up here to report on the nation's growth, “Hey wait a minute. What exactly are we talking about here?”

Doesn't it matter whether it is textbooks or porn magazines, childbirths or treatments for childhood asthma born of bad air? Doesn't it matter whether the expenditure comes from living within our means or from going into financial and ecological debt? Don't we need to know such things before we can say whether the increase in transactions in the pot – what we call “growth” -- has been good or not?

This is not an argument against growth by the way. To be reflexively against growth is as numb-minded as to be reflexively for it. Those are theological positions. I am arguing for an empirical one. Let's find out what is growing, and the effects. Tell us what this growth is, in concrete terms. Then we can begin to say whether it has been good or not.

The failure to do this is insane, literally. It is an insanity that is embedded in the political debate, and in media reportage; and it leads to

fallacy in many directions. We hear for example that efforts to address climate change will hurt “the economy.” Do they mean that if we clean up the air we will spend less money treating asthma in young kids? That Americans will spend fewer billions of dollars on gasoline to sit in traffic jams? That they will spend less on coastal insurance if the sea level stops rising?

There is a basic fallacy here. The atmosphere is part of the economy too – the real economy that is, though not the artificial construct portrayed in the GDP. It does real work, as we would discover quickly if it were to collapse. Yet the GDP does not include this work. If we burn more gas, the expenditure gets added to the GDP. But there is no corresponding subtraction for the toll this burning takes on the thermostatic and buffering functions that the atmosphere provides. (Nor is there a subtraction for the oil we take out of the ground.)

Yet if we burn less gas, and thus maintain the crucial functions of the atmosphere, we say “the economy” has suffered, even though the real economy has been enhanced. With families it’s the same thing. By the standard of the GDP, the worst families in America are those that actually function as families – that cook their own meals, take walks after dinner and talk together instead of just farming the kids out to the commercial culture.

Cooking at home, talking with kids, talking instead of driving, involve less expenditure of money than do their commercial counterparts.

Solid marriages involve less expenditure for counseling and divorce.

Thus they are threats to the economy as portrayed in the GDP. By that

standard, the best kids are the ones that eat the most junk food and exercise the least, because they will run up the biggest medical bills for obesity and diabetes.

This kind of thinking has been guiding the economic policy minds of this country for the last sixty years at least. Is it surprising that the family structure is shaky, real community is in decline, and kids have become Petri dishes of market-related dysfunction and disease? The nation has been driving by a instrument panel that portrays such things as growth and therefore good. It is not accidental that the two major protest movements of recent decades – environmental and pro-family -- both deal with parts of the real economy that the GDP leaves out and that the commercial culture that embodies it tends to erode or destroy.

How did we get to this strange pass, in which up is down and down is up? How did it happen that the nation's economic hero is a terminal cancer patient going through a costly divorce? How is it that Congress talks about stimulating "the economy" when much that actually will be stimulated is the destruction of things it says it cares about on other days? How did the notion of economy become so totally uneconomic?

@@@

It's a long story, but for the present purpose it probably starts in Ireland in the 1640s. British troops just had repressed another uprising there, and the Cromwell government had devised a final solution to put its

Irish problem to rest. The government would remove a significant portion of the populace – Catholics in particular – to a remote part of the island. Then it would redistribute their lands to British troops, thus providing compensation to them, and also an occupational presence for the benefit of the government in London.

The task of creating an inventory of the lands went to an army surgeon by the name of William Petty. Petty was a quick study, and also a man with an eye for the main chance. He classified much land as marginal that actually was quite good. Then he got himself appointed to the panel that made the distributions, and bestowed much of that land upon himself.

Petty's survey was the first known attempt in Western history to create a total inventory of a nation's wealth. It was not done for the well being of the Irish people, but rather to take their lands away from them. It was an instrument of government policy; and this has been true from that time to the present. Governments have sought to catalogue the national wealth for purposes of taxation, confiscation, planning and mobilization in times of war. They have not designed these catalogues to be measures of national wellbeing or of quality of life.

Yet that is how the national wealth inventories have come to be used, and especially the GDP. Somehow, a means of policy has become the end of policy. The tool has become the task. This part of the story begins with the Great Depression.

In the early 1930s, as the U.S. sank deeper into an economic slough, Congress faced an absence of data to help guide the way out. It didn't really know exactly what was happening, and where. There were no systematic figures on unemployment or production. Then-President Hoover had dispatched six employees from the Commerce Department to travel around the country and file reports. These were anecdotal and tended towards the Hoover view that recovery was just around the corner.

Members of Congress wanted more. Senator Robert LaFollette, a Republican, introduced a resolution to require the Commerce Department to develop a spreadsheet – as we would call it today – of economy with its component parts. LaFollette was a Progressive in the original sense. He believed in “scientific management and planning;” and the resolution was to produce a tool to that end. It passed on June 8th, 1932, and the work fell to one Simon Kuznets, a professor at the University of Pennsylvania who was working at the National Bureau for Economic Research in New York.

Kuznets was clear that he was producing a policy tool, and not a measure of living standards or wellbeing. As he put it later in his clinical prose, the goal was to help understand the “relations and relative importance of various parts of the productive system and their responsiveness to various types of stimulæ as shown by their changes in the past.”

The project was a marvel by today's standards. Kuznets had virtually no budget, and a tiny staff. Data sources were fragmentary. But about

a years and a half later, Kuznets submitted his report to Congress. It is Senate Document 124, 73rd Congress, 2nd Session, January 4, 1934, and I urge you to read it. The national accounts were a first, but even more remarkable was the report that came with them. With a brevity and candor that are rare today, Kuznets laid out for Congress the limitations of the accounts he had constructed. He took particular pains to tell you why you should not use these accounts the way you – and the media – have come to use them.

For one thing, the national accounts leave out a crucial dimension of the economy – namely, the part that exists outside the realm of monetary exchange. This includes both the ecosystem and the social system – the life-supporting functions of the oceans and atmosphere for example, and work within families and communities that isn't done for money. The GDP takes no account of these. The result is that when the monetized economy displaces them – as when both parents have to work, or when forest clearing eliminates the cleansing function of trees – the losses are not subtracted against the market gain.

Kuznets was under no such illusion. “The volume of services rendered by housewives and other members of the household towards the satisfaction of wants must be imposing indeed,” he writes. There's also the question of what he called “odd jobs,” or what we would call the “underground economy.” He knew that these played a large role in the economy. He also grasped, more broadly, that the quality and importance of a function does not depend upon the amount of money

paid for it – or whether any money was paid at all. The care of a mother or father is not inferior to that of a day care worker just because they do not charge a price for their services.

This recognition undercuts a basic assumption behind the GDP – namely, that the contribution of an activity can be gauged solely from its market price. But there’s a practical problem, Kuznets observed. Accounts require data; and there is by definition little data on the underground economy and on non-market exchange. As a result, the national accounts include only the slice of economic reality that falls within the bandwidth that economists are able to grasp – that is, recorded expenditures of money.

Then there’s the thorny question of constructive versus destructive activities within the realm of monetized exchange. Once you have decided to count only that which is transacted through money, do you make the further assumption that everything transacted for money counts on the plus side of the ledger? Is something beneficial just because money changes hands when it passes from a seller to a buyer?

The mentality that lies behind the GDP assumes that it does. We all are “rational,” and so any choice we make in the market is by definition one that makes our lives better. Kuznets focused on one obvious exception: activities that are illegal, such as gambling (when it is) and drugs. To assume that such expenditures add to the national wellbeing would undercut the rationale for making them illegal in the first place.

The GDP is an instrument of the state, after all, and so Kuznets drew the line there.

He was aware of how arbitrary this is from an economic standpoint. Why exactly does legal gambling add to well being if the illegal kind does not? Or what about alcohol? Given the assumption that legality confers benediction, the economy had a huge boost at the end of Prohibition, simply because the drinking that formally was illegal now was deemed okay. But booze still was booze. If the government can increase the growth rate by jiggering the metrics in this way, that does not increase confidence in the validity of measure.

But legality is the easy part. Just beneath it lies a deeper issue – namely, the assumption that every purchase is beneficial simply because someone has paid the purchase price. The exclusion of illegal activities, Kuznets said, “does not imply ...that all lawful pursuits are necessarily serviceable from the social viewpoint.” He left the question there, a chasm that an honest inquiry has to address.

There are so many examples of expenditure that goes into the GDP that has a questionable claim to the stature of growth and good, even from the standpoint of those who make it. For example, much consumption is compulsory, in that buyers have little choice. There is fraud, such as the way seniors are cheated in reverse mortgage scams. There’s also products that are designed to lock buyers into an endless stream of high-priced replacements, such as inkjet printer cartridges that are designed to resist refilling.

Or what about car bumpers that are designed not to bump, so that a mild fender bender turns into a \$5,000 repair bill? Or the usurious charges and fees that are built into credit cards. Not all Americans confronted with these regard them as “consumption choices” that propel them further up the mountain of more.

The toughest case for the economic mind is addiction. The GDP assumes, as most economists do, that people are inherently “rational.” What they buy is exactly what they want, and so their purchases must make them happy in exact proportion to the prices paid. Yet addiction has become pervasive. It has metastasized far beyond the usual suspects – gambling, Tobacco, drink and drugs – and come to roost on such things as eating, credit cards, and shopping itself.

How can anyone assume that buying makes people feel better when those very people are engaged in a mighty struggle to do less of it? Kuznets didn’t explore all of these problems. But as I said, the terse language of his report suggested an awareness of them. It’s another reason that the national accounts bear little relationship to a tally of economic well-being.

Yet another reason is what economists call “distribution.” The GDP makes no distinction between a \$500.00 dinner in Manhattan and the hundreds of more humble meals that could be provided for that same amount. An Upper East Side socialite who buys a pair of \$800.00 pumps from Manolo Blahnik, appears to contribute forty times more to the national well being than does the mother who buys a pair of \$20.00 sneakers at Payless for her son. “Economic welfare cannot be

adequately measured unless the personal distribution of income is known.”

As included in the national accounts, an accretion of luxury buying at the top covers up a lack of necessary buying at the bottom. As the income scale becomes more skewed, as it has in the U.S., the cover up becomes even greater. In this respect the GDP serves as a statistical laundry operation that hides the suffering at the bottom – when used as a measure of national wellbeing.

Another problem has to do with work, and the toll it takes on those who do it. Kuznets called this the “reverse side of income, that is, the intensity and unpleasantness of effort going into the earning of income.” That earning comes at a cost of wear and tear upon the body and psyche. If the GDP subtracts depreciation on buildings and equipment, should there not be a corresponding subtraction for the wearing out of people?

What about the loss in the value of their skills as one technology displaces another? In the current accounting, this toll often gets added to the GDP rather than subtracted, in the form of medications, expenditures for retraining, and day care for children as parents work longer hours. Most workers would regard such outlays as costs not gains.

Had Kuznets been writing today, moreover, he probably would have added another kind of depletion – that of natural resources. It sounds incredible, but when this nation drills its oil and mines its coal, the

national accounts treat this as an addition to the national wealth rather than a subtraction from it. The result is like a car with a gas gauge that goes up as the fuel tank gets lower. The national accounts portray a nation getting richer, when in fact it is draining itself dry.

Kuznets concluded his report with words that ought to be inscribed on the walls in every office on Capitol Hill, and over every computer screen within a twenty mile radius. “The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income as defined above.”

I’m going to repeat that in case anyone missed it:

“The welfare of a nation can, therefore, scarcely be inferred from a measurement of national income as defined above.”

That’s what the man who invented the GDP – its predecessor, more precisely – told Congress regarding the use of his invention. Yet Congress has done exactly what Kuznets urged it not to do. Congress and everybody else.

How exactly that came about is another long story. It began with the gradual seep of the new accounts into the political arena. In his 1936 re-election campaign, Franklin Roosevelt noted that the economy – as defined by the national accounts – had increased under his watch. It was a number: who could resist? The likely source was FDR’s close advisor Harry Hopkins, whose office was a hub for the young economists who came to Washington to join the New Deal. But in the passage across 15th Street from the Commerce

Department to the White House, Kuznets' numbers were turning in to precisely what he said they shouldn't be.

Then came World War II, when the national accounts played a central role in the mobilization effort. A bitter debate erupted in Washington over the nation's production goals. Corporate leaders insisted that the mobilization must come out of the existing level of production. They didn't want to be stuck with excess capacity when the war was over. Kuznets and others argued to the contrary that the U.S. had vast troves of untapped capacity; and they used the national accounts to prove it.

FDR sided with the "all-outers" as this group was called. They appealed to his belief in the energizing effects of challenges; Roosevelt took their high estimates and made them even higher, the better to make his point. (The planners then had to shift gears argue the case for system limits, which the national accounts also helped them do.) Then the accounts helped to coordinate the war production so as to prevent bottlenecks and snafus. By 1944 war production alone had surpassed the nation's entire output just ten years before.

It was as close as the nation ever has come to pure economic planning; and though much reviled, it helped to win the war. Post-war surveys revealed that Germany had no such planning tool, and Hitler's production program had been greatly hindered as a result. America had become the "arsenal of democracy" in part through a top-down approach made possible by the national accounts. A paper published by the Russell Sage Foundation called the use of these "one of the great technical triumphs in the history of the economics discipline."

This was heady stuff, and it was just a start. As the war was winding down, the accounts served again to guide the shift back to a peacetime basis without relapse into the dreaded Depression. Consumption was the key; the Cold War, with its Pentagon spending, was not yet in prospect. As war production diminished, shoppers would have to pick up the slack. The national accounts showed exactly how it could be done. As John Kenneth Galbraith put it in a series of articles for *Fortune Magazine*, “One good reason for expecting prosperity after the war is the fact that we can lay down its specifications.”

The new Keynesian economists such as Galbraith were now the Merlins of prosperity, and the national accounts were their magic wand. Consumption itself was taking on a heroic stature; the returning troops were handing off the mantle of national purpose to the shoppers who would replace them in keeping the industrial machinery in motion. (The heroic imagery persists in media accounts today, as when we read that consumers will provide the “engine” for recovery, or that they will “pull” the nation out of its recession.)

In this atmosphere, it was perhaps inevitable that the map of the nation’s capacity would become a totem to its economic success. But Simon Kuznets watched it happen with increasing dismay. (Galbraith came to have second thoughts as well.) Kuznets was a quiet academic who was loathe to mount a soapbox. But he asserted over and over that those who had seized upon his handiwork had missed the point.

In 1962 he wrote an article in the *New Republic* magazine on the question of growth. In evaluating growth, he said, “distinctions must be kept in mind between quantity and quality of growth, between its costs and return, and between the short and the long run.”

Kuznet's continued, "goals for 'more' growth should specify more growth of what and for what. It is scarcely helpful to urge that the over-all growth rate be raised to x percent a year, without specifying the components of the product that should grow at increased rates to yield this acceleration." If you are going to "stimulate" the economy, in other words, could we at least have a little debate over what exactly you are going to stimulate?

That is the challenge that you face today. You might think of it as a broken feedback loop. If you had a gas gauge that went up as you drove, eventually you would run out of gas. If you have an index of economic well-being that goes up as families and communities cease to function, then you will keep doing the things that cause this dysfunction to increase. If your measures portray resource depletion as wealth increase, then you will continue to narrow from the future and to drain America first.

Better measures will help lead to better results not by way of top down planning, but through the feedback they provide regarding when current policy is going off the tracks. I doubt that it is possible to include all the needed information into one single indicator. There are too many apples and oranges. To value a parent's work in the home at the going market price, for example, is both insulting to parents, and an exercise in self-parody for an economics profession that cannot see beyond the realm of market price

But at the very least there needs to be an array of indicators that connects such hidden forms of economic function to a larger economic whole. Here are some principles you might find useful.

1. The Future Matters

Herman Daly, the economist, says that the national accounts look at America as a “business in liquidation.” The more we drain our natural resources, and the more we burden the natural dump space in the air and sky, the better we say we are doing. The same goes with the financial debt we are heaping upon the future and therefore upon our kids. You must weigh the burden these activities impose upon our kids and grandkids, against the temporary gains – if gains they are – they yield for us today.

2. Time Matters

Time is perhaps the most basic form of wealth. Yet Americans, for all their wealth, are the most time-impoorished people on earth. The time they spend both working and consuming – that is, the time absorbed into the market – comes out of the time available for their families and communities; and both are going wanting as a result.

Time is a finite resource, just as coal and oil and dump space in the sky are finite resources. To take more of it for work or consumption is to take it from someplace else. You need to look not just at the money and stuff that people have, but also at the time they have.

3. The Non-Market Economy Matters

Most of the crucial life-supporting functions take place outside the realm of monetized exchange. They are not part of the market or the government – both of which function through money – but rather occur through natural or social process. The help and care of parents and neighbors; the cooling and cleansing functions of trees; woods in which to hike and hunt; clean water in which to fish and swim; these all are off the books. They do not register in the GDP until something destroys them and people have to buy substitutes in the market.

This is insane. A tally of economic wellbeing needs to reflect reality, not just the portion of it that is convenient for economists to measure.

4. Distinguish Positives From Negatives

This is tricky but there is no avoiding it forever. Not everything that is called “consumption” represents advance up the mountain of more. Here are a few examples:

--Compulsory expenditures that are built into products, such as cars designed to cost a fortune to repair, and inkjet printer cartridges designed to resist refilling.

-- Fraud and abuse, such as exorbitant fees built into credit cards that issuers increase whenever they want.

-- Medical bills incurred because of other activities that increase the GDP but degrade the environment. An example is medical bills to treat asthma in children brought on by bad air.

-- Addictive consumption, which is shopping that the shoppers themselves which they could drop. It is hard to see how this could add to wellbeing, when the people are doing it thinks it adds to their own misery instead.

--Defensive consumption, such as the double-pane windows that city dwellers buy to keep out noise from boom box cars and the like on the street.

It is not possible to parse out every single expenditure for its plusses and minuses. But neither is it tenable to assume that every expenditure represents a plus for the individual and society, just because somebody has made it. Yet the GDP starts with just that assumption; or more precisely, the people who interpret the GDP that way do. It is time to begin to make distinctions.

5. Measure Results Not Expenditures

This is the most important thing. The purpose of an economy is to meet human needs in such a way that life becomes in some respect richer and better in the process. It is not simply to produce a lot of stuff. Stuff is a means, not an end. Yet current modes of economic measurement focus almost entirely on means.

For example, an automobile is productive if it produces transportation. Yet today we look only at the cars produced per hour worked. More cars can mean more traffic and therefore a transportation system that is less productive. The medical system is the same way. The aim should be healthy people, not the sale of more medical services and drugs. Yet today, we assess the economic contribution of the medical system on the basis of treatment rather than results.

Economists see nothing wrong with this. They see no problem that the medical system is expected to produce 30-40% of new jobs over the next 30 years. “We have to spend our money on something,” shrugged a Stanford economist to the New York Times. This is more insanity. Next we will be hearing about “disease-led recovery.” To stimulate the economy we will have to encourage people to be sick so that the economy can be well.

These hearings could help to prevent that fate from befalling us. They are a big step. Thank you.