The Prosperity of Economies and the Poverty of Economics: Why has the economics profession failed?¹

Peter Lewin
Prepared for the Friedberg Economics Seminar
Jerusalem, October 2014

Introduction
Thesis: As a profession economics has failed to deliver. The prosperity we have achieved is in spite of not because of what we teach students of economics. All around the world, the ideas and models that form the basis of economic policy, of what economic advisors tell the policy makers is hopelessly incomplete at best and is often dead wrong.

I will talk to you today about two stories, a story of success and a story of failure. The story of success is the story of economic prosperity. The story of failure is the inability or reluctance of economists to understand the story of success.

We all know, or should know, that in 1776 Adam Smith published a book that we call *The Wealth of Nations*, and we date the birth of modern economics to the appearance of this work. The full title of the book is *An Inquiry into the Nature and Causes of the Wealth of Nations.* In other words the book is about a double question, namely, what exactly is wealth and why do some nations have it and others do not?

Part 1: The Economics of Prosperity

The qualitative nature of changes in wealth
What is this wealth that some nations have? Today we use aggregate statistics like GDP to try to capture the many aspects of wealth and well-being, but Adam Smith did not have GDP statistics. He was reacting to the obvious and significant change that was occurring in the lives of ordinary people, especially in England at the beginning of the Industrial Revolution. The extent of this change is difficult to express. In terms of any indicator of prosperity you can think of, the improvement from about 1750 onwards is quite simply astounding, completely unprecedented. Anticipating the cadence of Winston Churchill, Adam Smith might have accurately and dramatically said, *never before in the history of humanity have so many lived so well.* Adam Smith’s inquiry is decisively not about why so many people are still poor. By modern standards most people have always been miserably poor. His question is rather about the miracle of the escape from poverty.

To gauge just how miraculous it is see Figure 1 – the “Hockey Stick”. The population explosion shown there basically tells the story of life expectancy, health, nutrition, infant mortality, etc. but, perhaps most importantly, it portends a quantum increase in the range of goods and services available to the common people. If we were to reduce the many qualitative changes to some quantitative measure like GDP, it would amount to a few thousand percent over a period of about 300 years. Obviously, people did not spend this increase on food and shelter. The most obvious and impressive manifestation of the miracle of wealth creation is the bewildering variety of useful goods and services available to everyone in the economy. The most important changes are *qualitative* in nature and using some sort of *quantitative* equivalent cannot completely capture this. The wealth of a nation is very much qualitative in nature.

¹ My title is not meant to suggest that economists are materially poor, or that Economics as a discipline has no value. Paradoxically, it is because the economics espoused by most prominent economists is so technical and irrelevant that they are indeed materially rich.
Figure 1 – The Hockey Stick of Economic Development

The Hockey-Stick of Economic Development
World Population, 1000,000 B.C. - Present

(From Douglas North, Understanding the Process of Economic Change Princeton University Press, 2005 - data from works by Kremer 1990, QJE, 683; Fogel (2003))

Life expectancy
Health
Nutrition
Infant mortality
Etc.
The causes of wealth miracle  

According to Adam Smith

If there were a simple formula we could apply to produce this miracle, then surely we would not still have so many desperately poor people in the world. There is no such simple formula that can be applied. Yet, we do have some idea of what it takes to make a nation wealthy and, while it still remains a highly contentious subject, many accept the basic answer that Adam Smith gave, albeit with many variations and extensions as to the details. The most well-known explanation for the achievement of prosperity is the adoption in productive projects of what Smith called the division of labor. In a famous passage Adam Smith talks about how the productivity of pins had been increased dramatically as a result simply of the dividing up the stages of what we would today call the supply-chain into many more finely identified stages. Dividing the tasks to be performed into ever more finely specified sub-tasks, results in an explosion in the quantity produced and, it should be said, in an improvement in the quality of the product. He gives three reasons for this. One, it saves on time to have workers specialized to the production of one or a few things and not have to shift from one thing to another. Secondly, it saves on resources – tools, raw materials, etc. – insofar as each worker needs to have only those tools necessary for his specific task and need not carry an inventory of materials to be used for many different tasks. Having many workmen perform the same multiple tasks in parallel meant that they all had to carry tools for multiple tasks implying unnecessary duplication. And, thirdly and most importantly, workers specializing in particular tasks tend to learn how to do them better, they become experts, and frequently introduce qualitative and quantitative innovations that result in the aggregate in technological progress. So, the division of labor is a big part of Smith’s story.

But there is more to it: wealth creation is value creation.

Among the many critical examinations of Smith’s thesis was that found in the work, almost one hundred years later, by the Austrian economist Carl Menger, the founder of the Austrian School of Economics. In 1871 he wrote a book, in German, *Principle of Economics*, which is famous because it provided, together with the work of two other economists at that same time, the basis for the so-called Marginalist Revolution in economics. Those other economists were Leon Walras in Switzerland and William Stanley Jevons in England. All three argued, that contrary to the teachings of the classical economists, from Adam Smith onwards, value was not something that was to be found in things as determined, for example, by their costs of production. Rather value was a subjective phenomenon. The value of anything, without exception, reflected the appraisal of its worth to the person who was evaluating it. The prices that we observe in the market in turn reflect the value to the buyer and the seller of the last, the marginal, unit purchased. Say we observe that one hundred shirts of a new design are purchased in a given period (long enough for all buyers to complete their desired transactions). Assume that the price paid for each shirt is $5. Then we can say that the value of the shirt to the marginal buyer, that buyer who would pay no more than $5, is, indeed $5 – or, more accurately it is a good reflection of the value to him of the shirt, since he would have to give up $5 worth of anything else he could have bought. Price does not equal value in this way in general, but only at the margin, because some buyers would have been prepared to pay more for the shirt. So they pay less that the shirt is worth to them.

This theoretical insight was a major innovation in economics. It marks the birth of what we call neoclassical economics. It is characterized by two important insights only one of which is emphasized by modern economic theory.

1. **Value is expressed at the margin of choice.** As already explained, price reflects the value to the marginal buyer and seller in the market. Another way to see this is to look at it at the individual level. If I buy four cups of coffee per day, each costing $2, what is the value to me of that coffee? Well, the first cup is probably more than $2 – I would probably still buy it at a higher price, and maybe so for the second cup, and so on. But I buy four cups. Why not five? Surely because the fifth cup is not worth
my giving up the $2 to get it. So we may say, in this sense, value is determined at the margin, hence, the name Marginalist Revolution. This is well known and widely applied.2

But the second implication, though implicit in this and sometimes acknowledged, is mainly glossed over.

2. Value is subjective. Until 1871 it was thought that value was something that was objective, to be found in “nature”. Menger, in particular, emphasizes the error of this view. Simply put, we may say value is the mind not in the thing contemplated by the mind. Value “goes” form the mind to the thing, not the other way round. Value is not something you can touch, it is a mental state, like an emotion, like love and fear. Cost of production does not determine value, value determines cost of production. A productive resource, a worker or a machine, is valued according to the value to consumers of what it can produce. And, most important, value can be created and destroyed. Unlike mass-energy which is governed by strict covering laws of conservation and is fixed in nature, value can be created. And, wealth creation is exactly that. Wealth creation is value creation. Wealth creation is the result of the transformation of physical matter from one form into another higher-valued form. And Adam Smith claims that the division of labor helps us do this better.

Whence the division of labor? The system of natural liberty – let it alone, don’t interfere.
Though agreeing in principle, Menger felt that Smith’s story was incomplete. How he wondered did this fortuitous division of labor arise? The division of labor is, after all, an organizing principle, a way of organizing productive activities. How does this get done? Who has the knowledge to do this? Who directs people to engage in those activities that prove most productive? Menger emphasized that this must entail the advance of “human knowledge” which he felt Smith had neglected. Somehow the society gets the benefit of a tremendous amount of learning, of the production of new knowledge that goes along with this division labor. How does this happen?

To be sure Adam Smith does provide an answer, a famous one, and this is the second part of his explanation of the miracle of wealth. He speaks of a system of “natural liberty”, by which he meant a society in which certain individual rights were guaranteed, taken for granted, among which were private property rights, protection from violence and coercion, the right to trade and to establish contracts of one’s own choosing, the right of free expression of association of movement and of belief - as long as these rights did not conflict with those of others. These are the familiar components that we associate with the tradition of classical liberalism which informed the rhetoric of the declaration of independence of the United States of America, that people have inalienable rights among which are life, liberty and property (changed in the final draft to “the pursuit of happiness”). With these rights intact, the creation of value will proceed automatically. As in Adam Smith’s perhaps most famous pronouncement.

Give me that which I want, and you shall have this which you want, ... it is in this manner that we obtain from one another the far greater part of those good offices which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. (Smith 1776: http://www.econlib.org/library/Smith/smWN1.html).

And in another place (in a different context, but pertinent to our own) he talks of man acting in such a manner that

2 It is used to explain for example the famous diamond-water paradox.
he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. (Smith 1776: http://www.econlib.org/library/Smith/smWN13.html).

Resources tend to be automatically allocated to their highest value-creating uses because it is in the self-interest of their owners to find those uses. This system of natural liberty thus provides the fertile environment for the automatic development of an extended division of labor that results in the creation of value. People by following their own interests are led to serve the interests of others. The butcher’s profits is a reflection of the value he has created for his customers. He serves them, he benefits them, because it benefits him to do so. In this way the system of natural liberty harmonizes the interests of the individual with the interests of society, in other words, with the interest of all individuals. The strength of open, free markets according to Smith is that they do not need good intentions in order to function for the benefit of everyone. In fact, good intentions, that attempt to improve upon the spontaneous unintended outcomes that emerge from market trading, are very likely to do more harm than good. The unintended consequences of trying to do good in this way are most often bad.

This “invisible-hand” explanation identifies the market system as a particular kind of system, of which there are many, that are complex self-organizing systems, sometimes - in modern terminology - called complex adaptive systems. In itself, without any further explanation, this is a remarkable phenomenon, sufficient to bias the case in favor of free markets as it did in the generation after Adam Smith – the age of so-called laissez faire. Yet by the end of the nineteenth century the climate of opinion was turning against classical liberalism toward interventionism of various kinds and ultimately towards an embrace of socialism. By the 1920’s and 1930’s Menger’s question of how society came by the knowledge necessary for the economy to work, emerged as the most important question for an understanding of the market system. And it is in the works of the later generation of the disciples of Carl Menger that we find the most complete investigations of this. The names of Eugen von Böhm-Bawerk, Ludwig von Mises and Friedrich Hayek are most notable in this regard.

The most influential and insightful statement about the role of knowledge in markets is perhaps to be found in an article by Hayek published in 1945, The Use of Knowledge in Society - one of the most cited articles in all of social science. Hayek goes further into Adam Smith’s invisible hand story and how it works.

In a dynamic, innovative economy conditions are always changing and information about those changes is widely disbursed and subject to interpretation. People necessarily have incomplete information. The knowledge that one person has will be different from and perhaps even contradictory to the knowledge of other people. Furthermore, every individual has some specific knowledge of the “particular circumstances of time and place”, knowledge that not only no one else has, but that no one else could have, tacit knowledge, knowledge that they are able to use but which they are not able to effectively communicate to others. Hayek notes that while people often think of knowledge in the sense of scientific knowledge, a great deal, most likely the major part, of our knowledge consists of tacit knowledge gained from experience and observation, that provides the basis for our actions and decisions. Such knowledge cannot be summarized by writing it down or explaining it to someone else. We see this all the time in economic life most especially in successful business ventures bearing the stamp of the particular methods and visions of the entrepreneurs who establish and manage them. It is central to a key question in modern business studies in the field of organizational behavior and business strategy, though, most notably, not
in economics, namely, how can organizations be structured so as to make the best use of the specialized, unique knowledge of their employees?

At the societal level, Hayek realized that Adam Smith’s extensive and complex division of labor implied a concomitant and equally complex division of knowledge. It is worth quoting Hayek at length on what he sees as the fundamental feature to be explained.

The economic problem of society is thus not merely a problem of how to allocate ‘given’ resources - if ‘given’ is taken to mean given to a single mind which deliberately solves the problem set by these ‘data’. It is rather a problem of how to secure the best use of resources known to any of the members of society, for ends whose relative importance only these individuals know. Or, to put it briefly, it is a problem of the utilization of knowledge which is not given to anyone in its totality. (Hayek 2014 [1945]: 93-94).

This tells us that economics, certainly at the macro level, and arguably even at the micro level, is fundamentally not a solution to a specifiable quantitative problem. The knowledge upon which the “solution” to the macro allocation problem depends does not exist in the absence of the process of allocation itself. It is continually generated by that process, the market process of continual change in which resource owners dynamically self-adjust as they learn. There is no pre-coordination of disparate individual activities that could inform any central-planner or policy-maker.

**Prices and markets**

According to Hayek, the way in which this emergent knowledge gets to be effectively utilized is through the price system. For Hayek, equilibrium means the coordination of individual plans. Different individuals have different, sometime contradictory plans, because they have different knowledge and expectations. The complete coordination of these plans is impossible, but the market process provides for a tendency toward such coordination through the establishment and movement of prices. Prices act as both signals and incentives to buyers, sellers, and entrepreneurs. They provide information about the relative scarcity of goods and services and incentives to respond effectively to this. And much of this information is summarized in the form of profits (or losses). We know the system works because we do not observe chaos or disorder. On the contrary where the institutional structure of property and contract is secure, we observe that the market process results in an ordered structure of prices, quantities and activities of incredibly complexity and dynamism.

By way of summary we may express this as follows.³

---

³ My thanks for this to Peter Boettke. The usual disclaimer applies.
Part 2. The Poverty of Economics

What did I learn in economics school today?

The closing of the economist’s mind – equilibrium theorizing

Though Hayek’s article proved to be very popular and widely read, neither it, nor many related works by Hayek and others, has had any significant influence over the path that economics as a discipline has taken in the decades following its publication. That path in fact is characterized by the progressive tailoring of the subject into a framework of quantifiable problem-solving, specifically, of constrained maximization problems in which known outputs (preferences, production values) are maximized subject to known constraints (measurable resource quantities).

There are two obvious reasons for this. The first is what has been called “physics-envy”. Economists want to be seen as “real scientists” and in the post-war period this came more and more to mean people who engaged in quantitative investigations and made quantitative predictions. In fact it is a kind of quantitative fixation. Economics as a profession is still largely in the grip of this viewpoint. Hayek described this as “scientism” – basically the dogmatic reduction of all scientific knowledge to only that which is measurable. It is a term meant to connote the abuse of science and from the perspective of the discussion above it certainly is and it is responsible for the neglect by professional economists of much of the research program suggested by Adam Smith's pioneering vision. So the first reason for the closing of the minds of economist is the entrenchment of scientism.

Scientism includes the following propositions that have at times characterized the practice of economics and still characterize it.

- If you can’t measure it, it doesn’t exist
- If you can’t measure it, it is not science – we won’t publish it we won’t teach it
- If you can’t write it in mathematics it is not science - we won’t publish it we won’t teach it

The second reason is “statism” the expansion of the power of the governing authority into the economy. Statism connotes the use of the state (governing power) to try to achieve specific social agenda items – based on faith in the benevolence and omnipotence of the leaders. Statism comes from scientism and from insufficiently constrained democracy. Scientism encourages the view that all of the world can be quantitatively modelled, and that the model is a sufficient blueprint for both understanding and manipulating the world. It encourages ambitious and intrusive economic policies in pursuit of improving the imperfections left by the market process, by what has been called “market failure”. Political democracy encourages politicians and those whom they employ to compete for votes and interest group support by promising to fix all problems and improve the lot of all who feel deprived. And economists who sign on to this utopian program make much more money than those who don’t. A majority of economists in the post-WWII era have fallen for the “socialist allure” the attractive belief the enlightened and informed policy-makers can solve any or most social problems by sufficiently financed government programs. An obvious example of this is Keynesian macroeconomic policy, but there are many others.

The result is that economics as it is now taught, and as it is now found in the authoritative, expensive textbooks, is basically a series of constrained maximization models in which the coordination of the actions of the individual economic agents that are in the model is the model’s “solution” and is assumed to characterize some real-world state of affairs. This is equilibrium theorizing and it represents the closing off of economics from the dynamics of real-world value-creating innovative economies.

Thought pursues action and scientism has resulted in statism. Economics does not teach the basics of value-creation and economists sign on to policies that inhibit it.
What is seen and what is not seen

Let me be clear. I am not saying that equilibrium economics has not value. Clearly it provides a valuable window into the interconnectedness of economic decisions and into the pure logic of choice, the calculus of simple economizing. The problem is that today’s education in economic science produces graduates competent in technique but lacking in understanding. They are ill-equipped to offer policy advice and imbued with dangerous illusions about the effectiveness of grand policy initiatives.

<table>
<thead>
<tr>
<th>WHAT YOU WILL LEARN – TRADITIONAL ECONOMICS</th>
<th>WHAT YOU WON’T LEARN – ALTERNATIVE ECONOMICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logic of choice, the interconnectedness of markets, the determination of prices by S and D, subjective consumer preferences determine all values in production and exchange, trade creates value.</td>
<td>The importance and nature of knowledge – tacit and dispersed. How markets work by economizing on knowledge making in unnecessary for anyone to know much about the products they buy and use.</td>
</tr>
<tr>
<td>Externalities and public goods represent market failure</td>
<td>The costs of government failure</td>
</tr>
<tr>
<td>Efficient solutions - profit ➔ inefficiency, failure to exploit all the gains from trade - imperfect information, moral hazard, asymmetric information – anti-trust policy is recommended – the new paternalism.</td>
<td>Entrepreneurship as the response to ignorance and dispersed expectations -profit ➔ value added – anti-trust policy is destructive and counterproductive - the new paternalism ignores government failure and market solutions</td>
</tr>
<tr>
<td>Probabilistic risk</td>
<td>Genuine uncertainty – ignorance, disparate expectations</td>
</tr>
<tr>
<td>Institutions are ignored</td>
<td>Institutions matter a lot</td>
</tr>
<tr>
<td>No history</td>
<td>History matters a lot -history without theory is impossible -theory without history is useless</td>
</tr>
<tr>
<td>No history of thought</td>
<td>History of thought matters a lot</td>
</tr>
<tr>
<td>The economy can be characterized by measuring aggregates. These aggregates can be used for macroeconomic policies of control and stabilization.</td>
<td>The pitfalls of relying on aggregates and how they may mislead policy – what they fail to capture – structure – the possibility that macro policies themselves are responsible for most instability</td>
</tr>
<tr>
<td>Capital is a homogeneous factor of production K that functions by working with labor to produce a homogeneous output.</td>
<td>Capital is heterogeneous and capital accumulation inseparable from technological change and innovation – new products, new methods of production and organization. Innovation cannot be predicted.</td>
</tr>
</tbody>
</table>

Conclusion

As a profession economics has failed to deliver. The prosperity we have achieved is in spite of not because of what we teach students of economics. All around the world, the ideas and models that form the basis of economic policy, of what economic advisors tell the policy makers is hopelessly incomplete at best and is often dead wrong.