

## **Keynote Address**

### **Discretion in Economic Research**

**Dr. Nimal Sanderatne**

*Former Visiting Senior Fellow*

*Post Graduate Institute of Agriculture, University of Peradeniya*

*“If a professor thinks what matters most  
Is to have gained an academic post  
Where he can earn a livelihood,  
And then neglect research,  
Let controversy rest,  
He’s but a petty tradesman at best,  
Selling retail the work of other men.”*

*-Kalidasa, the classical Indian poet*

Having spent about one half century in economic research, you have given me the opportunity to reflect on what is good economic research. I have chosen as my theme: Discretion in Economic Research, as there are some fundamental flaws in the selection, relevance, methodologies, integrity and quality of economic research. I hope my observations before this audience of mostly young economists and researchers would improve the relevance, quality, and methodologies of their research.

By discretion in research, I mean good judgement, good sense, carefulness, honesty and integrity in the selection of research areas, undertaking of research, choice of techniques and careful interpretation of research findings.

The purposes and objectives of economic research are to understand economic behaviour, factors that determine economic decisions, economic processes and economic and social outcomes and to comprehend the causes and consequences of economic policies and performance.

### **Relevance and Usefulness of Research**

Let me first deal with the issue of relevance and usefulness of economic research. For economic research to be useful, research must address issues

of relevance. Researchers should select fields of research that are relevant and useful. There is little use in expending resources and time to find out what is known, or self evident or of no practical use. There is no need to do research, however sophisticated to find out self-evident facts.

For instance it is a waste of time to do a sophisticate analysis of data to find out whether trade is important for the Sri Lankan economy. A mere examination of data on the structure and performance of the economy would make it clear that trade performance is an important determinant of economic growth.

On the other hand, an analysis of how an increase in the exportable surpluses of different commodities would affect the economy through increased export earnings and backward and forward linkages is very relevant and useful. It could enable the direction of investment to the production of commodities that have higher impacts on the economy.

An example of irrelevance in research is to consider whether the production of certain goods would have an impact when there is no possibility of producing such goods. It is obvious and irrelevant to research on how a large aircraft manufacturing plant in Sri Lanka would affect the country's economy when there is no realistic possibility of establishing such an industry. Similarly, why undertake a study on the economic benefits of wheat production in Sri Lanka, when it is not possible to grow wheat extensively due to agronomic conditions in the country.

My proposition is that when you select an issue for research, select one that is of relevance and useful and one that would elicit some new ideas and suggestions for the development of the economy. Research should advance the understanding of the economy and provide useful guidelines for economic policy whether at the macro or micro level. Although this appears to obvious, the fact is there are many research papers here and abroad that are not relevant or of little usefulness.

### **Good Understanding of the Subject**

A closely related important issue is that before undertaking any research study, the researcher should get a thorough understanding of the area being researched. Far too often researchers rush to do research on a subject they do not have a broad understanding. They do not have

adequate knowledge of the issues involved and have little acquaintance with other research done in the field. Researchers must read the available literature, explore what other research has been done in the area and grasp the problems that require to be investigated. Avoid doing research and finding out something that others have already found out.

I would go so far as to suggest that you cannot formulate a relevant and useful research project without understanding the subject thoroughly. Since time is scarce, you should select an area of research in which you are already familiar rather than one that you have to study afresh. Meet others who are familiar with the subject and discuss the issue. Access previous research work and get a comprehensive understanding of the issue that you want to research.

### **Use of Statistics**

It is said that if you can put some numbers into your inquiry, then you know something about the issue you are studying. There is no doubt that statistics, statistical analysis and econometrics can refine economic inquiries and deepen one's understanding of economic phenomenon and ensure objectivity in economic research.

Yet there are certain pitfalls in the use of statistics. One is that if the original statistics are faulty then by their use you could draw false conclusions. Therefore when one uses statistics from published sources, one has to look carefully to determine whether they have been collected in a scientific manner. Has the sample from which the statistics have been obtained adequate? Were there any biases when collecting the data? For instance many of the statistics in the calculation of the GDP are of doubtful quality.

Some statistics could be purposely distorted in order to support a point of view. Therefore researchers must make sure that the statistics they use are of good quality and reasonable accuracy. Blind use of available data could result in faulty conclusions.

### **Spurious Correlations**

While the use of statistical techniques could enhance findings and enrich economic analyses, the misuse of statistical techniques is a serious flaw.

One of the most used statistical techniques in economic research is regression. This is particularly so now as computer programs make it very easy to feed a large amount of data and variables and obtain results quickly. If one uses faulty or inaccurate data, then the conclusions could be false. As it is often said, “garbage in garbage out”. The statistical results are only as good as the original data used.

Sometimes researchers use variables in a regression analysis that are not relevant. One has to realise that there is a vital difference between a correlation and a causal connection. One could find correlations between variables that have no causal connection. One could for instance do a study on numbers of university students and GDP growth and have a result that higher the number of students, higher the economic growth. The implication of such a study is that more university students should be recruited to achieve rapid growth. This is a totally misleading conclusion that has arisen due to a lack of understanding of the nature and sources of growth.

There could be a very good fit between the independent and dependent variable even though there is no causal connection. Surely one knows from commonsense that however statistically significant student numbers and growth is, it is a spurious relationship.

There is a vital difference between a correlation and causality. Therefore before doing a correlation or regression analysis, it is important to ascertain whether there is a causal relationship. And that is based on your understanding of the subject. This example is somewhat of an obvious one. But the point I want to make is that one must carefully study the issues involved and select relevant variables that have a causal relationship before undertaking statistical and econometric analysis.

### **Honesty and Integrity**

The honesty and integrity of the researcher is very important. If all you want is to produce a paper to be published in a journal and get credit for your promotion then you could manufacture figures, manipulate statistical techniques and have acceptable conclusions. This is a travesty of the objectives of research. In the best of universities and research institutions it happens. It is left to your personal honesty and integrity to desist from such types of dishonest research.

In this connection a very important issue is dishonesty in research in the form of plagiarism that is common. Important persons, as well as students, have been guilty of plagiarism. I have personally come across many instances of plagiarism in theses in several universities that I have been examiner. There are books and journal articles where authors have copied extensive sections from the work of others'. It is very important that you resist copying from others work. It is dishonest; it is not research.

## **Qualitative Research**

The growing emphasis on statistical and econometric research has resulted in less and less research on qualitative research. This is regrettable for in as much as statistical analyses and econometrics can enlighten an issue, qualitative analysis of comparative and contrasting economic experiences could give useful insights to economic and social developments.

History is the laboratory of the social scientist and economist. Some of the most profound revelations and theories in economics have been based on historical experiences. The names of Karl Marx, Karl Polyani, Joseph Schumpeter, Albert Hirschman, Johan Maynard Keynes, Alfred North and many others come to mind. These researchers advanced the frontiers of knowledge without the use of econometric analyses.

## **Conclusion**

In conclusion let me say that good research is difficult. There are many difficulties one has to face. There are difficulties in finding the necessary data. There is loneliness in carrying out your research as you may not find other interested in your inquiry. There are unforeseen difficulties in the analysis of data. And yet if one is able to overcome these, there are rewards for good research. These rewards may not be in material form but in the maximisation of satisfaction.

The very process of doing research and finding out new explanations is the reward of research. The real satisfaction from research lies in contributing to what John Maynard Keynes called "the gradual encroachment of ideas".

I wish all researchers gathered here rich experiences in economic research.