

*Speech***ECONOMISTS AND PUBLIC POLICY*****Y.V. Reddy**

I deem it as a great honour to be here to deliver this valedictory address. I am grateful to innumerable friends of my alma mater, Osmania University, and in particular Vice Chancellor Ramakistayya, who have so kindly given me this opportunity. My association with Osmania University dates back to August 1960, with registration as a full time researcher for Ph.D. Later, as a lecturer in this campus, I learnt a lot before joining the Administrative Service in 1964. The University took me back again under UGC Scheme, as a full time Visiting Professor in the late 'eighties on a spell of deputation from being Secretary to Government. I never missed and can never miss an opportunity to be in this campus - more so when there is an affectionate invitation to address an august gathering such as this.

The Conference has already deliberated in detail the scholarly works of eminent economists here, and one should not go over the same ground. In fact, my comparative advantage perhaps lies in saying something relating to public policy.

Role of Economists in Public Policy

Edmund Burke called the Eighteenth century as the "Age of the Economist". The remark is perhaps far more appropriate for our own times than the earlier centuries. Let us recall the oft-quoted remarks of Keynes : "practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist".

The question is : Is there life without the economist? The answer is best provided by Dr. I. G. Patel in his Fourth Dr. D. T. Lakdawala Memorial Lecture (1996) in the following words. "The fact that economic rationality has to filter through a given political and social framework makes our task that much more difficult and our contribution that much less dramatic in the public eye. Since everyone has a view on economic matters, the subject looks deceptively simple in most eyes and is thus prone to much contention. Add to this the fact that in a subject which concerns everyone so

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intimately and which is almost always in the headlines, the temptation for the economist to play to the gallery and to seek the limelight by simplification, exaggeration and even glamorisation is not easy to resist. But with all that, it is difficult to imagine life without the economist."

But then, life with the economist is not very simple either. Economics is perhaps the only field in which two people can share a Nobel Prize for having divergent viewpoints - to cite Myrdal and Hayek. Often, people hold that economics is as definitive a science as astrology is, and the more charitable of them place an economist between a physicist and a sociologist. For example, in the Preface to his book "Peddling prosperity: Economic Sense and Nonsense in the Age of Diminished Expectations" (1944), Paul Krugman says that an Indian born economist once explained his personal theory of reincarnation to his graduate economics class. "If you are a good economist, a virtuous economist," he said, "you are reborn as a physicist. But if you are an evil, wicked economist, you are reborn as a sociologist". Economics is not an exact science and it means that advice is tentative or circumspect or contingent upon non-economic factors or assumptions. This makes the life of policy maker not exactly comfortable. A statement attributed to the chief executive of a country reads: "I am stuck with a hundred economists. I have to listen to all before any policy decision. Only one tells the truth but it is never the same one."

In public policy, the practitioner asks the economist "what is to be done?" A pure theorist may decline to answer because he feels he is not competent to do so and in any case what is to be done in a specific situation is never a simple corollary of theoretical conclusions. Also, theorists themselves differ even on technical issues.

Secondly, there is the problem of facts with reference to which theory has to be considered and prescriptions for action formed. As Sir Alec Cairncross (1985) put it in Richard T. Ely lecture "Economic theory has always to be mixed with a large dollop of fact before prescriptions for action can be framed; but the facts are usually obscure, disputed, seen through different eyes against a different experience of life and stretching far beyond the limited economic context within which the economist seeks to analyze them."

Thirdly, the theorist is in control of his starting point and is free to make his own assumptions. The practitioner is never quite sure where he is. Apart from the possible delays in getting data one has to reckon with the rewriting of the preliminary estimates into final estimates ! In a way, for the practitioner, on a real time basis, not merely the future, even the past is uncertain. So some judgments become inevitable.

Fourthly, economic relationships keep changing, and at times they change fast. How a thing that worked in the recent past can perhaps be explained but there is uncertainty about the continued relevance of such observed economic relationships.

Fifthly, the practitioner has to be specific in terms of magnitudes and timing and often reacts very promptly to emerging situations. Theory helps in indicating directions, occasionally broad orders of magnitude, but seldom on timing.

Finally, and closely related to timing is the issue of non-economic factors - particularly, institutional and legal factors.

With all these limitations, those who analyse the economics of economics refer to

economics as having become an industry. To quote Herbert Stein's (1986), Richard T. Ely lecture, "Probably few economists know that in the Standard Industrial Classification, there is an industry called "Economic Research." It is a six-digit industry, 739210. We don't even know how many economists there are in the United States. The BLS has estimated that there were 110,000 economists in 1984. Every economist to whom I have mentioned this figure has been amazed at it." I presume that Indian Economic Association has some estimate of the number of economists in India!

One can distinguish between economic theorists, economic analysts, economic policy advisers, economic administrators or managers and economic journalists. Among these, economic analysts catering to the market of policy makers in business have one advantage, *viz.*, goal of policy is clear - usually, maximise profit or turnover etc., and in any case it is well defined. Analysts dealing with public policy have a more complex task. Unfortunately, in matters relating to public policy, goals themselves may not be always clear and relevant instruments have to emerge out of a broad consensus. Further, in business, the focal point for decision making is usually clearer than in Government.

One should also make a distinction between economic ideas and economists' ideas. After all, economic systems and related issues predate the birth of economics as a discipline. That policies of Government are strongly influenced by economic ideas is undeniable, but as David Hendersen explained in the 1985 Reith Lectures, this was happening by the phenomenon of "do-it-yourself economics". This phenomenon is best explained in his own words: "Over wide areas of policy, the judgments of politicians and their officials, as also of public opinion

in general, have been and still are guided to a large extent by beliefs and perceptions about the working of the economic system, and about national interests and the welfare of the community, which owe little or nothing to the economics profession. In so far as the world is indeed ruled by economic ideas, these are often the intuitive ideas of lay people, rather than the more elaborate systems of thought which occupy the minds of trained economists. The history of national economic policies down the years bears witness not only to the influence of economists, whether defunct or alive, but also to the power of what I call 'do-it-yourself economics'."

Following this approach, one can identify a role for a trained economist in public policy *viz.*, in clarifying and dispelling notions which appear intuitively right but actually result in adverse consequences (i.e., counter-intuitive but rational) and in evaluating the consequences of lobbies for various causes (interest neutral analysis or counting the cost). In the ultimate analysis, however, economic reasoning is one of the many inputs in public policy.

There is often, an observable lag between economic analysis and social or institutional change. I recall, President Ronald Reagan saying, "if something succeeds in practice, economists start wondering whether it will work in theory." But, there is a real difficulty for an economist to capture institutional changes in his reasoning. Moreover, the first steps to bringing institutional changes within the framework of economic analysis are invariably tentative, oral rather than mathematical and lacking the elegance of a methodological innovation. Hence, they are readily dismissed by the men of scientific reputation on the pretext of being rather sloppy.

Sometimes, policy makers express frustration (in utilising services of professional economists) at the fact that the approach of many professional economists is technique-oriented rather than problem-oriented. I wondered whether it was a problem peculiar to India, but I notice that a study in the USA showed similar tendency and explains why it happens. The relevant part of the observation by Colander and Klamer in the article "The Making of an Economist," (1987) reads as: "There are also tensions between the emphasis on techniques and the desire to do policy-oriented work. What students believe leads to success in graduate school is definitely techniques; success has little to do with understanding the economy, nor does it have much to do with economic literature. We hope that this information leads to discussion within the profession of whether this focus is good or bad."

Any presentation on the role of economists in public policy will be incomplete without a reference to recent economic reforms in the developing world, and the role of "Technopols." The term 'technocrats' has been used to describe the economic technocrats who assume positions of political responsibility (and Professor Manmohan Singh is cited as an example). A technopol is, in many ways, an instrument of translating economics into public policy. John Williamson, the editor of the book "The Political Economy of Policy Reform" (1994), describes the skills needed for the success of technopols.

"A successful technopol needs to combine two very different types of skills. One is that of a successful applied economist, able to judge what institutions and policies are needed in specific circumstances in order to further economic objectives. The other is the

skill of a successful politician, able to persuade others to adopt the policies that he or she has judged to be called for."

Many of my economist friends are frustrated that eminently sensible economic solutions do not find acceptance in public policy. Economists should keep trying to influence public policy, but economists should recognise that economic policy is only one element of public policy, and in fact, they should be prepared to be influenced to some extent by public policy.

I had started this section by quoting Edmund Burke that it is the "Age of an Economist", but as Daniel Fusfeld in his book titled, "The Age of the Economist" (1966) says, "The age of the economist continues, along with the quest for the good life." As explained by him, the problems one generation has been able to solve lead to difficulties that another must face. He adds that "answers in economics keep turning into more questions". Well, today, in many developed countries, we notice high productivity and low inflation benefiting ninety per cent of workforce, virtually on condition that about ten per cent remain unemployed. Is it a contribution of economists to public policy, or is it a concession? The answer depends on who is responding - the ten per cent or the ninety per cent?

Role of Economists in Government

On the role of economists in Government - the fountainhead of public policy - the best statement I can think of was made by John Henderson in his article entitled "Professional Standards for the Performance of Government Economist" (1977): "It is my contention that Government economists perform their most effective professional work when they speak plainly and do not

trim their views to suit the presumed wishes of those who consult them; in other words, when they deliver their best analysis of reasonable policy options in fair and comprehensible terms. This is easier said than done. There is a great diversity of professional positions in the federal Government. In some cases, the professional commitment of economists is strong and is expected to be so; in others, it is not of paramount importance even if it is never unimportant. Some positions are relatively secure, and others are dependent upon the retention of political favour. Some organizations encourage freedom of expression when the doors are closed, and others count upon a rather stiff orthodoxy. At any rate, the penalties visited upon the nonconformist are not at all uniform".

Economists are associated with Government in a variety of ways. First, there are economists in the permanent employment of Government such as our Indian Economic Service. Second, there are economists who make lateral entry at senior levels after a distinguished academic or policy research and remain in permanent employment. Third, there are academic economists from Universities or research/training institutions, who are inducted, on deputation for a fixed period - somewhat rare in our country. Fourth, there are such academics whose advice or service is sought in Government committees/advisory bodies, etc. One can add to this list, *ad hoc* sources of advice from the recently emerging academics-turned journalists, or academics-turned private consultants or retired official economists. Finally, we have generalist civil servants who specialise, by qualifications and/or experience, in matters relating to economic policy. It is useful to note that, just as a generalist civil servant may dabble in economics, economists may dabble

in administration.

Like any other profession, free and frank professional advice from economists would be ideal. It is said, of course in jest, that whatever conclusion you want, economists can supply on demand. In the same vein, it is said that an "acceptable" level of unemployment means that the Government economist to whom it is "acceptable" still has a job.

One of the ticklish problems confronted by an economist in Government relates to value judgments. Professor E.A.G. Robinson in his Foreword to the book "The Role of the Economist as Official Adviser" by W.A. John and H.W. Singer, (1955) addresses this issue. He maintains that an economist in sharing the shaping or administration of economic policy becomes a partner in the process of making value judgments. However, he feels that economists can shape policies with first rate analysis. At the same time, according to Professor Robinson, he should contribute actively to more general judgments. For my part, I found it extremely difficult not to trespass into value judgments, though the elected representatives representing the voice of people have a more credible mandate on value judgments than we as professionals in Government have. At the same time, the consequences and implications of alternate actions based on different value judgments, when quantified, analysed and presented did make some difference to the outcome. In the final analysis, an economist - even in Government - is a sensitive human being, and his advice or actions affect other people. He cannot but bring to bear on his work, his value judgments. In fact, it can be argued that there are no facts without values since one notices facts when one looks for them, and the process of looking for certain facts presupposes some

predilections reflecting one's values.

An economist in Government has no option but to deal with a large number of non-economists. It is, therefore, useful to make some general observations on economists' interactions with political executive or legislators and administrators.

First, in formulating any public policy, the economist should count not only economic opportunity cost but also political opportunity cost. As Charles L. Schultze says in the paper in honour of Arthur Okun, titled 'The Role and Responsibilities of the Economist in Government' (1982), "The calculus of consensus has many of the same formal rules as the calculus of welfare maximization. Those who engage in the latter cannot afford to look down on those who practice the former".

Second, advocacy may be needed to counter powerful lobbies in favour of certain vested interests. This may need not only logic but articulation and gathering support through consultations etc.

Third, what appear to be efficient solutions are mostly based on some assumptions relating to flexibility of institutional circumstances. The legal, procedural and other organisational aspects of any measure need to be assessed. This assessment is possible through interaction and constant communication with non-economists. In other words, the economic view is not the only legitimate view.

Fourth, having chosen a preferred course of action, there is a human temptation to overstate the benefits and understate the costs to ensure 'victory' in an internal policy debate - especially if others have no similar access to relevant economic facts. Access to facts and

analysis is often restricted. I suspect that such actions would get exposed sooner than later.

Fifth, there are issues of packaging some economic measures for "effect", and canvassing public support for a proposal (as distinct from explaining or elaborating a proposal) - especially in the media or industry associations. There may be some merit in such actions but soon they can spill over into an alien territory viz., that of politicians.

As I see it, in real life, an economist in Government has to be less than an economist and also more than an economist; less than an economist since he has to improvise and respond to practical questions with approximate solutions based on inadequate, incomplete and outdated data; and more than an economist because he has to comprehend, interact and influence a host of non-economic factors, be it value-judgments or mundane reconciliation of conflicting interests. In fact, he has to be very much more than an economist since he has to convince a host of co-economists within and outside the Government.

The Indian Scene

It appears fashionable and in any case not entirely purposeless to attempt periodisation whenever possible, in spite of issues of overlap and over-simplification. So, how can we periodise the role of economists in public policy in India ?

The age of hope covering the thirties and forties was characterised by debates of political economy coupled with blueprints for action in the light of the freedom movement. There were three schools - the Gandhian self-sufficiency, the Bombay Plan involving the consensus of the private corporate sector and the Fabian socialism led by a number of

thinkers including Nehru.

The 'fifties and 'sixties can be described as the age of ideology. Among the development economists, two groups initially attempted to give direction to the pattern of economic development for Independent India. The Vakil-Brahmananda Model gave preference to the wage good sector, while P.C. Mahalanobis accorded top most priority to large scale industrialisation of heavy industries variety, based on the Soviet model of development; the latter found favour with the political authorities of the times. Events of the late 'sixties attributable to climatic conditions, neighbourly relations and political developments led to reappraisal of our capabilities. Given the rate of growth that appeared feasible, economists were focusing on distributional issues and the direct attack on poverty.

In the 'seventies, conformism in the thinking of economists was favoured and encouraged making it the age of conformism. Referring to this period, Dr. Ashok Desai makes his characteristically blunt comment in his book, "My Economic Affairs" (1994) "The twisted logic of this country's policies and the casuistry of their apologists entertained me year after year. But, this involvement could only be a diversion for none could make a living in India by criticising the Government. So, for a livelihood I developed specialties far removed."

The 'eighties were the age of doubt. Economic policy was under review. Scholars started questioning the policies but there was no crystallisation of opinion among leading economists. Various committees were appointed for reviewing economic policy but there was no serious dent in the mind-set.

The 'nineties is the age of pragmatism. Jolted into realisation after the Gulf crisis of August 1990, economic agenda has been elevated almost on par with the political agenda.

The above brief account shows that in our country, economists always held and continue to hold a special position - in fact, they enjoy positions of power, influence, publicity and financial support far superior than most other disciplines, including natural sciences. Take for example, the official positions in Government. There are quite a number of officials in the rank of Secretary to Government of India from the field of economics. All other disciplines put together will constitute only a fraction of those from economics alone. Of course, I am not including organised Civil services like IAS and IPS in the category of a "discipline". The number of research institutions and the amount of funding - both among all disciplines and within the framework of social sciences - attributable to the area of economics are easily the largest. Among disciplines in universities, though management science is somewhat prestigious, economics continues to wield significant clout. Dr. I.G. Patel, in his Presidential Address to the 49th Annual Conference of the Indian Economic Association (1966) makes a reference to this: "Teachers of economics in our universities enjoy a degree of esteem, publicity and financial support which is the envy of their colleagues in other departments. And yet, there are a great many among our fraternity whose attitude towards issues of economic policy is one of indifference or skepticism. Even in our more exuberant moods, we often bring to our profession an air of unreality or controversy which is hardly calculated to sustain the present boom in the demand of our skills."

Within the Government, most senior economists have been educated both in India and in prestigious foreign universities. While few entered Government sector direct from universities, many of them have had experience in multilateral institutions - like IMF, World Bank and Commonwealth Secretariat. Some have headed or had exposure to research institutions. Most of the economists who joined the Government are continuing with only a few, very few, reverting to academics after a tenure. However, the contribution of Indian universities to senior level positions in Government, as economists, is not very significant. It would be too simplistic to explain this away in terms of bias against pure Swadeshi economists. Of course, I am not denying the contribution made by universities in initiating these economists into the profession, in developing a cadre of Indian Economic Service and even in providing basic grounding to the distinguished non-resident economists.

There is another interesting factor in employment of economists and statisticians that we experience in the Reserve Bank. We are not bad pay masters by Indian standards. We in the Reserve Bank find that although a large number of candidates appear for the entrance examinations, the required number are not able to meet the minimum standards prescribed by us.

In an earlier section of this address, I had mentioned about the various categories of economists, viz., theorists, analysts, policy advisors, economic administrators or managers and economic journalists. There are, to my reading, three tiers in the Indian context, viz., theorists, policy advisers, and others. Professor Galbraith gives an interesting explanation as to why such a hierarchy could exist, in his book, "A

Contemporary Guide to Economics Peace and Laughter" (1971) : "The prestige system of economics is wholly in accord with these principles. It assigns, and for good reason, the very lowest position to the man who deals in everyday policy. For, this individual in concerning himself with the wisdom of a new tax or the need for an increased deficit, is immediately caught up in a variety of political and moral judgments. This puts him in communication with the world at large. As such, he is a threat to the sharp delineation which separates the tribal group from the rest of society and thus to the prestige system of the profession."

A good or a brilliant economist does not ensure good economic policy. Prof. B. S. Minhas as a Member of National Planning Commission semi-jocularly mentioned that in one State we have outstanding planners and slow growth, while in another there are poor planners and high growth. In a somewhat similar tone, referring to the role of economists in India's economic performance, Bhagawati made a telling comment in one of the three Radhakrishnan's lectures that he gave at Oxford at 1992 : "It is not entirely wrong to agree with the cynical view that India's misfortune was to have brilliant economists : an affliction that the far-eastern super performers were spared".

I will be failing in my duties if I do not present to this august audience the role of the Reserve Bank in building bridges between the academics and practitioners.

First, we have instituted the Development Research Group, a Division of the Department of Economic Analysis and Policy of the Bank. The DRG funds research studies in economics in collaboration with academicians and/or professional economists outside the Bank.

Second, we fund endowment Chairs in universities/institutions, giving them support and access to data.

Third, we give grants for specific research projects on specific subjects in economics.

Fourth, we have funded institutes like the Indira Gandhi Institute for Development Research, the National Institute of Bank Management and the Institute for Development and Research in Banking Technology.

Fifth, we extend academic support liberally by deputing our economists for lectures, participation in seminars and workshops at our own cost.

Sixth, we also benefit by inviting renowned (international and Indian) economists to deliver the C. D. Deshmukh Memorial Lecture, L. K. Jha Memorial Lecture and other special lectures.

Seventh, Governor, RBI, invites select economists for consultations before the monetary and credit policy announcements.

Eighth, the volume of the History of the RBI (1951-67) is due for publication very soon. This volume will give insights into the policy making process.

Some Thoughts on the Future Role of Economists in Policy

In the previous section, I spoke of economic tiers. Perhaps, a more conscious effort towards involvement of economic administrators, managers and economic journalists in academic pursuits as also policy advice would benefit all participants. I am only reiterating what Dr. Patel said last year, but I am providing this as a possible route to

ensure the much needed, more liberal entry of academics in policy arena in our country. To quote from Dr. Patel's lecture delivered on the occasion of the Silver Jubilee of the Indian Institute of Economic Growth (1984), "in India, the profession of economics has yet to try really hard to do all that it can do - may be because the theorists are better rewarded elsewhere and the analysts and advisers and administrators do not work sufficiently together or are not encouraged to do so by the environment. Within the limits of existing theoretical insights and even on the basis of the broad policy parameters the country has set before it in the past, much can be done by detailed statistical work and constant factual surveillance even of limited problems to improve the quality of our economic management."

We need to develop the concept of case analysis in order to learn from economic policy decisions. We had some critical and controversial decisions in the economic arena. While the controversy is on, there may be problems in explaining all the factors or nuances that went into a decision. But, after a lapse of time, it should be possible to analyse and explain. We have to develop - in co-ordination between Government and academics - some case studies of policy decisions taken in the past.

What I have in mind is not case studies or comparisons to draw a conclusion, or to narrate a particular event in order to illustrate a moral, but a case study which depicts the complex process of decision making and the analysis of the relevant factors and their interrelations which were considered but wrongly judged/interpreted or that were not considered at all.

When I advocate case studies regarding policy decisions, it is also meant to reflect how

some decisions are taken on the advice of and some in spite of the advice of economists in Government. Often, an economist in Government ends up defending in public the actions that he pleaded against in discussions within the Government. As an illustration, we quote from the introduction by the editors (Isher Judge Ahluwalia and Little IMD) of the book "India's Economic Reforms and Development : Essays for Manmohan Singh (1998)" : "It is difficult to identify the contribution of individual policy makers functioning as civil servants. For example, it is never possible to say what bad decisions are averted, or which good policy measures are initiated at the instance of an individual. In fact, it is a civil servant's 'dharma' to advise an elected Government freely and at the same time defend the policies that finally emerge".

Chronicling is yet another area needing attention. I recall a French team studying a village economy in Andhra Pradesh - as it changed over two decades. Again, I am tempted to quote from Dr. Patel's Address of 1966, which appears even more valid today : "I for one miss the kind of economist, who provides simple, honest-to-goodness descriptions of specific economic episodes - a kind of contemporary, economic chronicler who tells us the story of the operation of a particular control from the beginning to the end or describes the changing life of a village over ten years or narrates the story of a project from the time it was conceived to the time it needed to be replaced by a new one."

I had mentioned about our problem in getting young economists of the standards that we need. If it is accepted that we do not have within our country, enough identifiable world class institutions, we can attempt to locate or upgrade select centres as Indian Institute of Economics (IIE) on a pattern similar to the Indian Institutes of

Management and Indian Institutes of Technology. I have no doubt that such specific projects could be funded. This by itself would not be enough since real quality needs to be imparted even at the undergraduate level. Perhaps, a programme of upgrading the skills as well as infrastructural facilities in select postgraduate and promising undergraduate schools should be undertaken.

Incidentally, thanks to the economic reform, there is intense public debate on economic issues. Today, even regional language newspapers carry more coverage and analysis of economic issues than English papers did ten years ago. But, I am not sure how well informed the debate is. There is, often confusion regarding concepts or unchanging mindset. I believe that some people mix up standard of living with cost of living while others think reduction in inflation means reduction in prices - thus undermining the credibility of the index as also economists! Should not economists do something about it?

A number of approaches are possible - such as the use of media or short seminars/ courses. There is a demand from a large section, for what may be called, 'economics for everyday life'.

Recently, I read about the controversy behind our Government inviting a particular economist to advise us. Some, and this I believe, including some economists, felt we do not need a foreign economist to advise us, and definitely not an economist of a particular reputation. Somehow, this appeared to me to be a new development. We had foreign economists before - not simply to advise but physically located in Government offices and in Yojana Bhavan. Even as interactions are increasing among other countries, we seem to become defensive. I submit that we should

seek advice from all around, but keep our own counsel. In fact, speaking of how good our economists are, George Rosen in his book 'Western Economists and Eastern Societies : Agents of Change in South Asia 1950-1970' (1985) has this to say : "as far as India is concerned the myth of an implicit western superiority is no longer valid, if it ever was." Prof. Rosen, adds "India's economists today are making on balance a greater contribution to the economics profession in the west than India receives from western economists".

Often, we miss out significant economic ideas propounded by non-economists. I do not know whether this is unique to India but I have one illustration. Rajaji made the most eloquent case ever for abolition of license-permit raj and even sacrificed his political career. He practiced, well before he said this, what he believed in - by abolishing rationing of foodgrains in Madras as its Chief Minister. We should not hesitate to look for and acknowledge brilliant non-economists who can contribute to economic analysis and policies.

We talk of enormous investments needed in infrastructure, which point out to the need for specialists in regulatory economics or sectoral economics, especially in power, port or roads. Let me again quote from Dr. Patel's Presidential address to the Indian Economic Association (1966) : "Even the business of acquiring a broad-based training in related social fields can be exciting as also the need to develop familiarity with the technical aspects of different branches of the economy. An industrial economist or a power economist or even a defense economist can have a lot of fun apart from being useful; and if we mean business, we need in fact many more specialised economists of this kind than we have today." In fact, Dr. Patel reverts to the same theme after decades in 1996 where he

states, "I had pleaded for economists taking interest in specific factors such as power or transport or the oil or steel industry and having a large family of economists who know something about everything in an industry or activity. I am even more impressed now by the need for such diversified and specialised talent. If supply-side economics is so important and someone has to help the private and public sector, including the financial sector, in taking important decisions, how can an economist make a useful contribution in this role unless he knows as much, say, about energy as he does about economics?"

There is also a widely held view that in India we produce a few brilliant economists and most others are not active in their contributions. A similar view was in the past mentioned about UK, contrasting it with research in the USA, where it was widespread. More recently, another distinction is being made between European economists who play an important role in the policy process and their American colleagues who are oriented to academia. Personally, I would endorse the approach that distinguishes 'high tech' and 'human capital' economics. What is this approach? Let me quote from the introduction of a book entitled "Economic Science and Practice : The Role of Academic Economists and Policy-Makers" (1997) edited by Peter A G Van Bergeijk et al, "Indeed, the utility of geographically determined archetypes or role models is questionable. It is probably more appropriate to discuss the future development of economics, in terms of 'high tech' and 'human capital' economics. With 'high tech' economics, we mean a sterile, formalistic non-contextual approach. The 'human capital' approach involves high quality applied research that is transparently linked to the 'real world'."

To conclude, in our country, society expects a lot from economists. Due to increasing globalisation, rapid technological change, alert economic journalism, enhanced emphasis on problem solving rather than ideology, emergence of diversified patterns of ownership and regulation, high level of sophistication and sensitivity in markets, the demands on economists are daunting. I am confident that such demands will be met by adequate and timely supply in an internationally competitive scenario.

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