**ECONOMIC GROWTH AND INTELLECTUAL PROPERTY RIGHTS[[1]](#footnote-1)**

**ISHRAT HUSAIN**

For more than two decades, the economies of different countries have grown at a pace that greatly exceeds anything previously known in the long sweep of human history. What distinguishes this period from the earlier one is what we have come to know is the knowledge economy. This reflects a very real transformation in our understanding of the factors underlying long-run economic development.

In the 1950s economists discovered that there was a huge gap in their explanations of economic growth in terms of capital accumulation. Since then, other factors such as human capital, technological progress, internal organization and managerial practices have further refined our understanding of the notion of growth. For developing and emerging countries, studies showed that there was also a close correlation between good governance and equitable growth. But that still did not provide the whole explanation and fill the whole space.

More recent, empirical research has highlighted the importance of ideas and knowledge as the drivers of growth. We know that it is not labor, machines, land or natural resources – but ‘knowledge’ that is the main asset distinguishing successful economies from those lagging behind. At the heart of the ‘knowledge economy’ lies a complex, multi-faceted process of continuous, widespread and far-reaching innovation and technical change. How is knowledge created, accumulated, diffused and depreciated across different societies and cultures has become the moot empirical question. How are ideas absorbed and spread within a particular society has ramifications for its development. Capital is now differentiated between tangible and intangible capital. Intangible capital has become the key and this largely falls into two categories. Investment geared to the production and dissemination of knowledge, i.e. in training, education, R&D, information and coordination and investment geared to sustaining the physical state of human capital (health expenditure). In the U.S. the stock of intangible capital (devoted to knowledge creation and human capital) began to outweigh that of tangible capital (physical infrastructure and equipment, natural resources) in around 1973. Private sector R&D, software and information technologies since then have accelerated investment rates in the U.S. In Scandinavian countries, spending more on public education has been the main thrust. It is through the intangible capital route that the Intellectual Property Rights (IPR) enter the picture.

How is IPR linked to economic growth? The link is indirect, complex and not always linear. IPR regime is likely to affect growth indirectly by providing incentives that encourage innovative activity. Innovation is the source of improvement in total factor productivity that along with capital and labor determine the rate of growth. The other channels through which IPR could affect growth are the inflows of FDI, technology transfers and trade. East Asia’s rapid growth since 1960 can be attributed partly to their ability to initiate, absorb, assimilate and replicate foreign technology embodied in FDI. In early phases, these countries had weak IPR protection regime that allowed technological learning and reverse engineering. However, as per capita incomes grew and the economies became sophisticated and IPR regimes became stronger.

I would also like to caution that IPR regime is only one of the determinants of the technological capability building. There are many other factors including the policy environment for fostering entrepreneurship, nurturing innovation and encouraging risk taking that are crucial for such capability building.

The main component of the IPR regime is patents and the existing literature suggests that the effectiveness of patent protection varies from industry to industry and inventive activity is sensitive to protection only in a few industries such as chemical and pharmaceutical industries. I would like to illustrate this with the example of India.

In India, the chemicals and pharmaceutical industries have developed their capabilities over the past three decades as the process patents essentially served the purpose of encouraging domestic firms to adapt and cater to the domestic market needs. Subsequently, the industry spread its wings around the global market. The share of pharmaceuticals in national exports has increased from 0.55 percent in 1970-71 to over 4 percent by 1999 making India the second largest exporter of pharmaceuticals after China among developing countries. The drug prices in India at a fraction of those prevailing in the developed countries are among the cheapest in the world making them affordable to poor masses. Thus in this case the IPR regime in fact facilitated the emergence of a nascent industry into a full fledged mature competitive industry.

I also wish to emphasize that in economies such as ours knowledge-based investment should not be confined to the realm of high technology alone. For example, transferring the best agricultural practices of progressive farmers to the rest of the farming community can increase the national average yields from the same area of land anywhere between 50 to 70 percent. In India, the introduction of Bt cotton has doubled the production of cotton from 17 m bales to about 34 m bales in a short span of 5 years. We are still stuck with 11 – 12 m bales despite the fact that we in Pakistan have better ecological conditions. If we had protected the intellectual property rights of those companies who have developed and disseminated Bt cotton our textile industry would have generated about $20 billion exports rather than $10-11 billions currently. The proliferation of jobs in the industry – through direct or indirect employment would have made a major difference for the welfare of our people.

Let me conclude by saying that it is not only foreign investors and businesses that benefit from a strong IPR regime but local venture capital firms will also be attracted to finance new start-ups provided they are assured of the protection of the underlying intellectual property and enforcement of their rights, if they are infringed, violated or pirated.

1. Address on the occasion of the World Intellectual Property Day – April 26, 2011 at Jinnah Convention Centre, Islamabad, organized by the Intellectual Property Organization. [↑](#footnote-ref-1)