

**FEDERATION OF INDIAN CHAMBERS OF COMEMRCE AND INDUSTRY Extracts
from the official FICCI Executive Committee appraisal for GROSS DOMESTIC
KNOWLEDGE PRODUCT of INDIA : Engagement Appreciation**

The GDKP model of Umberto Sulpasso provides the first theoretical basis for calculating the GDKP and It will be the first time this data will be calculated for any country in the world following the model of Umberto Sulpasso.

It is now clear that the current global economic meltdown is likely to be protracted. The downside risks to a breakdown of global financial architecture (read Euro zone) remains significant. At home, India's impressive growth story (annual real GDP growth averaged nearly 8% during 2000-01 & 2008-09, prior to financial crisis) is under threat with official prognosis at 6.9% for the current fiscal.

Against this background, an alternate school of thought has emerged over the years regarding the importance of knowledge-based economy. More importantly, this school of thought (Corrado, Hulten and Sichel, 2006) argues, that businesses are spending much more on future-oriented investments and subsequently the conventional national account numbers don't capture such an emerging knowledge based economy. In fact, the proponents of such a knowledge-based economy even include Alan Greenspan and Ben Bernanke, who believe that intangible investments appear to be quantitatively important in the US economy resulting in saving and investment being significantly understated in the U.S (as per 2006 estimates \$3 trillion is missing from the US accounting estimate of capital stock) national accounts. In the OECD countries also an earlier estimate revealed that more than 50% of the GDP is now derived from knowledge. Given the relative importance of knowledge, measuring the performance of the same even poses a greater challenge. Knowledge is not a traditional economic input like steel or labour. When traditional inputs are added to the stock of economic resources, the economy grows according to traditional production function "recipes". New knowledge, in contrast affects economic performance by changing the "recipes" themselves – it provides product and process options that were previously unavailable. While new knowledge will generally increase the economy's potential output, the quantity and quality of its impact are not known in advance. There is no production function, no input-output "recipe" that tells, even approximately, the effect of a "unit" of knowledge on economic

performance. Knowledge, unlike conventional capital goods, has no fixed capacity. Depending on entrepreneurship, competition and other economic circumstances, a given new idea can spark enormous change, modest change or no change at all. Increased resources devoted to knowledge creation are likely to augment economic potential, but little is known as to how or how much. Thus the relationship between inputs, knowledge and subsequent outputs are hard to summarise in a standard production function for knowledge. In the knowledge-based economy, problems emerge with the conceptual framework of the national accounts. Not least is the issue of subsuming knowledge creation into a measurement system designed for traditional goods and services. The pace of change complicates the task of measuring aggregate output and raises questions about the use of input measures as output indicators. Factors which are not sufficiently incorporated into the national accounts framework include qualitative changes in products, the costs of change and rapid product obsolescence.

Objective of work

Given the relative importance of knowledge, FICCI proposes to estimate Gross Domestic Knowledge Product (GKDP) for India as a new measure of the most relevant wealth of nation. The objective of this estimate will be 3 fold, namely, 1. The GKDP estimate will optimize knowledge capital spending of private enterprises

2. It will facilitate Government of India budgeting decisions in terms of increasing Gross Domestic Product in areas where investment knowledge spending will provide better opportunities for functionality of public sector 3. It will define individual knowledge producing contribution to the wealth of country in city and rural areas by private companies as well the Government