## THE ECONOMIC TIMES

## Glittering univs are not churning gold

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WASHINGTON: A majority of immigrants from India and five other nations who started one fourth of the technology and engineering companies in the United States in the last 10 years were not educated in elite institutions, says a study.

The findings were part of a new study conducted by researchers at Duke University and the University of California, at Berkeley, as a follow-up to a report released in January which showed that in 25.3 per cent of the companies started between 1995-2005, at least one key founder was foreign-born.

Nationwide, these immigrant-founded companies produced \$52 billion in sales and employed 450,000 workers in 2005. The majority of these immigrant entrepreneurs came from India, Britain, China, Taiwan, Japan and Germany.

But these immigrant founders were educated in a diverse set of universities in both their home countries and across the United States. No single US institution stands out as a source of immigrant founders, the study noted.

Similarly, those who received their undergraduate degrees in India or China graduated from a diverse assortment of institutions. Even the famed Indian Institutes of Technology educated only 15 per cent of Indian technology and engineering company founders.

However, the study due to be released today by the Ewing Marion Kauffman Foundation that tracked the educational backgrounds of immigrant entrepreneurs shows a strong correlation between educational attainment (particularly in science, technology, engineering and math) and entrepreneurship.

It shows that 96 per cent of immigrant founders of technology and engineering companies held bachelor's degrees and 74 per cent held graduate or postgraduate degrees.

Seventy-five percent of the highest degrees among immigrant entrepreneurs were in STEM fields (Science, Technology, Engineering and Mathematics). Moreover, 53 per cent of the immigrant founders of US-based technology and engineering companies completed their highest degrees in US universities.

"Our research confirms that advanced education in science, technology, engineering and math is correlated with high rates of entrepreneurship and innovation," said lead researcher Vivek Wadhwa, executive in residence, Pratt School of Engineering, Master of Engineering Management Programme at Duke University.

"The US economy depends on these high rates of entrepreneurship and innovation to

maintain its global edge. Our higher education system has historically attracted talented immigrants from around the world to the United States to study.

"We now face a choice-to encourage more Americans to complete higher degrees in these fields, or to encourage foreign students to stay in the United States after completing their degrees. We need to do both," he said.

The new study noted that immigrant entrepreneurs tend to move to cosmopolitan technology centres. The regions with the largest immigrant population also tend to have the greatest number of technology startups.

On average, 31 percent of the engineering and technology companies founded from 1995 to 2005 in the 11 technology centres that were surveyed had an immigrant as a key founder. This compares to the national average of 25.3 percent.

"The responses paint an interesting portrait of America's immigrant entrepreneurs," said Robert Litan, vice president of Research and Policy at the Kauffman Foundation. "These are individuals who initially entered the United States either as students or as employees of corporations that sponsored their visas, but who eventually created new businesses.

These startup founders are very well educated, particularly in STEM disciplines, suggesting that research, technical education and thought leadership are drivers of new business generation."

In a research and policy guide for transforming the US economy toward an innovative entrepreneurial economy published earlier this year, Kauffman Foundation researchers said US could benefit from more enlightened immigration policies, designed to attract and retain highly skilled foreign workers and potential entrepreneurs.

## Highlights:

- \* More than half of the foreign-born founders of US technology and engineering businesses initially came to the United States to study. Very few came with the sole purpose of starting a company.
- \* Almost 40 per cent of immigrant founders entered the country because of a job opportunity, with only 1.6 percent entering the country with the sole purpose of entrepreneurship. They typically founded companies after working and residing in the United States for an average of 13 years.
- \* Technology centres with a greater concentration of immigrant entrepreneurs in their state averages include Silicon Valley (52.4 per cent), New York City (43.8 per cent), and Chicago (35.8 per cent). Three technology centres had a below-average rate of immigrant-founded companies: Portland (17.8 per cent), Research Triangle Park (18.7 per cent) and Denver (19.4 per cent).