Ladies and gentlemen:

Thank you for inviting me to the convocation ceremony at FLAME. I feel honoured to be here to share my thoughts with you.

Let me start by saying that I actually envy this graduating class. This is because this is such an exciting time to be starting a career. When I started my career over 40 years ago, we had limited opportunities and a limited level of growth to aspire to. Today, there are endless opportunities across sectors, where young, dynamic people can make a difference. India’s growth has to be supported by developments in infrastructure, financial services, healthcare, education, retail, logistics and transportation, technology and communications. The young generation of today is thus spoilt for choice at the beginning of their careers!

Today I am going to talk about some of these opportunities and about where I believe India is headed. But I think first it is important to put in context what we have already achieved. When I came back to India in 1996 after a few years abroad, the economy was facing many difficulties. But I believed that the country was on the right path and that we would in due course see transformation of the economy. There were many skeptics then. But India has demonstrated what this country can achieve. And so today, when we talk about what our country will be like 10 years hence or two decades hence, we do so on a much more firm foundation. Ten
years ago most of us could not have dreamed of what India is today – but that journey gives us the basis to
dream even bigger dreams for India and for all of us.

India has made remarkable progress over the last two decades and is viewed today as a land of opportunities.
This transformation had its genesis in the process of economic reforms initiated in the 1990s, which
unleashed the entrepreneurial abilities of India’s people. In addition to opening up to global competition, the
transition resulted in a positive structural shift within the economy. It saw the rise of a strong services sector,
the growth of new industries like information technology (IT) and biotechnology, and pushed traditional
sectors like pharma and automobiles to become globally competitive. While India’s potential as an emerging
economic power was clear even in the early 2000s, there was a lack of confidence to project where the
country would be ten years down the line. The onset of economic reforms implied growth was imperative,
but we could not have predicted the magnitude of economic expansion and growth till 2011. Today India’s
fundamentals are even stronger and the events of the past decade not only instill confidence but also enable
us to reasonably estimate that the next decade holds an even more exciting future for all of us. Among the
many transformational events of the last decade, I would pick four that were truly momentous and significant
in their long term impact.

First, we crossed per capita GDP of USD 500 and USD 1,000 in the same decade. While it took over two
decades to double our per capita GDP from around USD 260 in 1980 to USD 550 in 2003, it doubled again
in just five years and indeed today has crossed USD 1,500. This had tremendous implications for savings
growth, consumption demand and the ability to finance investment in the country. Suddenly so many
possibilities emerged, not only for growth in traditional business segments but also for building a whole new
set of businesses.

Second, the decade gone by saw the rise of the Indian consumer as a key driver of India’s growth. As per
capita GDP crossed USD 500, driven to a large extent by growth in the services sector, we saw rising demand
for homes, for consumer goods, for financial services and a range of other goods and services. These in turn
drove economic activity and upward migration of incomes, creating a virtuous cycle of growth.

Third, India quickly adopted and leveraged developments in information and communications technology, in
some cases leapfrogging intermediate stages of development. This enabled the quick scale up of new
paradigms of distribution and service delivery in a range of areas.

Fourth, the Indian corporate sector has today become operationally efficient and internationally competitive
with significantly stronger balance sheets. Operating cashflows increased over nine fold from 1995 to 2010.
This enabled the Indian corporate sector not only to leverage on growing domestic demand, but also to expand outside India, acquiring backward and forward linkages, making Indian brands known globally and also acquiring marquee global brands. The Indian corporate sector emerged from a period of restructuring and repositioning with healthy finances and globally competitive quality and cost metrics.

Globally, there is a shift in focus towards emerging market economies and the rebalancing was accelerated due to the impact of the 2008 crisis. The contribution of emerging market economies to the increase in global GDP over the period from 2001 to 2007 was about 40%, which accelerated to over 60% of the increase in global GDP over the period from 2008 to 2011. India today is one of the fastest growing economies in the world, with the domestic economy presenting a number of opportunities for growth and accompanying challenges emerging in step with India’s growth: the aspirations of a young population, an expanding corporate sector and the imperatives of inclusive growth. The disruptive impact of technology will play a critical role in meeting these opportunities head on.

In painting a picture of the India of the future, let me share the proxy of China. China grew at a CAGR of 9.5% for over 25 years since it began its economic reform process in 1979. The impact of such high growth was phenomenal. China’s GDP grew tenfold over this period. According to China’s official statistics, the poverty rate fell from 53% in 1981 to 2.5% in 2005. The wealth creation and infrastructure development in China is there for all to see. In many ways we are at the same stage as China was in 2003 and therefore the possibilities for the next decade for us are tremendous. Structurally we are in the same position as the economies of China, Japan and South East Asia were just prior to their growth phase and as such we do have the potential of achieving the same results as they have.

Demography has been and will be one of the most important drivers of growth in India. By 2020, the demographic advantage in India relative to the rest of the world, including China, will become even more significant. India is a young country with 50% of its population under 30 years of age. The median age of our population is 25 years – this is projected to be at only 30 years even in 2025. It is estimated that India will add around 11 million to the workforce every year for the next five years and will account for 25% of the global workforce by 2020. These are indications of the demographic dividend the country enjoys, creating a growing consuming class and the human capital to drive growth.

GDP per capita of USD 1,000 is the first important threshold beyond which an economy sees increased affordability and aspirations for a better lifestyle. With a per capita GDP just over USD 1,500 we are at the next inflexion point in terms of rising purchasing power and demand for goods and services. It is estimated that the next decade should see around 200-250 million people coming into the consuming class in India. It is
estimated that by 2020, the middle class population in the country would be close to 580 million and per capita income would be USD 4,000. The ramifications of this are immense resulting in demand for a better living environment and an accelerating consumption cycle. The consumption and savings dynamics the country has witnessed in the last few years are unprecedented in our history, and will only accelerate in the years ahead.

Economic growth leads to a demand for better services, better infrastructure and a spurt in consumption demand. Shift in income levels and lifestyle will lead the Indian consumer to fulfill his aspirations at a younger age with an optimal combination of debt and equity. With income levels poised to improve further and the favourable demographic profile ensuring that a large proportion of the population is in the economically active working age group, consumer finance will continue to grow in the coming years.

Economic growth and rising per capita income will lead to demand for better infrastructure, growing ability to finance projects and willingness to pay for infrastructure facilities. Infrastructure development will be a key priority and investment in infrastructure is projected to increase to over 9% of GDP. While just over 22,500 MW of power capacity was added in the five years from FY2001-FY2006, about 50,000 MW was added during the next five years FY2006-FY2011. The Twelfth Plan estimates capacity addition to the tune of 100,000 MW during FY2013-2017. It also estimates investment of USD 1 trillion in infrastructure of which 50 percent will come from the private sector, including public-private partnerships. This level of infrastructure investment will have a significant positive impact on overall economic growth, with its linkage to other sectors in terms of demand for their output, its generation of employment and its improvement of national productivity.

Economic progress will inevitably lead to a higher degree of urbanisation. The urban population grew from 220.0 million (26%) in 1991 to 340.0 million (30%) in 2008. In the next twenty years the urban population is estimated\(^1\) to grow to 590.0 million (40% of total population) as 250.0 million more people join the urban population. This will require the emergence of new cities and significant urban rejuvenation in existing cities. A significant proportion of the growth is expected to come from the next level of cities. The numbers forecast for India are extraordinary. The top three cities themselves will grow to a size equivalent of countries today. Eg. Mumbai will grow from GDP of US$ 36.00 billion in 2010 to US$ 265.00 billion in 2030 (Malaysia GDP was US$ 220 in 2010). Similarly Delhi and Kolkata would grow to a GDP of US$ 250.00 billion and US$ 200.00 billion respectively by 2030. The next six cities in 2030 are expected to become 2-4 times the size of Mumbai today!

\(^1\) McKinsey report India’s urban awakening: Building inclusive cities, sustaining economic growth, April 2010. Estimates urban population of 590.0 million people (40% of population) by 2030.
The changing character of and potential in rural India should further catalyse our progress. The traditional belief that India’s rural economy is agriculture driven is gradually changing. In the last decade, there has been a marked shift in the composition of India’s rural economy. According to estimates, India’s rural economy had a share of 48% in net domestic product, much higher than the share of the agriculture sector. The share of agriculture in the rural economy has come down from 39% in FY2005 to 30% in FY2010. Several initiatives taken in recent years in rural road development, supply chain management, communication technology and financial services have redefined the business needs of the rural economy. As rural incomes will grow, it will create a vast consumption market and the demand for consumer goods and consumer finance will increase.

The Indian banking sector has mirrored the country’s gradual emergence as an economic powerhouse over the last two decades. The sector has undergone a transformation over the last two decades, with the adoption of technology, development of new products and creation of alternate banking channels to serve customers and can today drive inclusive growth. Technological innovation played a pivotal role in this expansion, as banking services such as cash management, foreign exchange and trade finance underwent a major change imparting greater efficiency to both banks and corporate houses. Channels of banking also saw a paradigm shift through the decade with increasing use of channels other than the branch. To frame the story in numbers: at ICICI Bank, the share of branch transactions has come down from 94% in 2000 to 19% currently. Correspondingly, the share of transactions through ATMs has gone up from 3% to 53%, internet transactions from 2% to 18%. Mobile banking transactions have just started picking up.

Mobile banking can further evolve as a cost effective channel, as the cost of a transaction through a branch is roughly fifty times that through a mobile. The next wave of evolution would be the impact of technology on driving an inclusive transformation: not only as a multiplier of productivity but also towards democratising access to information, goods and services, and driving the inclusive agenda by facilitating savings, investments, remittances and spending for a large unbanked population of 700 million people.

In recent years, there has been enhanced focus on the inclusive agenda and financial inclusion as a key ingredient of inclusive growth. Financial services remain under-penetrated in India, with substantial scope to increase access to financial services across the country, especially in rural areas and among low income households. In the past, a key challenge was the high cost of delivery of financial services through traditional brick-and-mortar structures. Two key developments have changed this paradigm. First, regulations have been introduced permitting delivery of financial services through business correspondents. Second, the development of technologies using smart cards and biometrics has changed the way banking services can be accessed by the customers.
In this context, the government’s Unique Identification (UID) number project will be a path-breaking effort towards improving financial inclusion. It exemplifies how technology can be a game changer. The UID will not only help to create an identity and a unique identification mechanism that can help track credit history of consumers and improve service delivery, but also help achieve financial inclusion at a low cost. Taking this a step further, it will also help improve governance and efficiencies in social sector investments.

It is important to realise we need significant efforts to perform to our potential. This entails outlining of our priorities such that the process of building the nation continues to translate to an improved quality of life across India. Inclusive growth is not just about subsidies or unemployment benefit schemes – at its core it is about building capacity in the poorest communities in our country to lead productive lives and earn a decent livelihood. Investment in basic healthcare, primary education and vocational training are critical to making this happen. Skill building is especially important. Though over 90% of new entrants into the workforce are literate today, the institutional capacity for providing skill training is insufficient. The challenge today is in terms of upgrading skills and meeting industry requirements. Both the private and the public sector have to jointly provide wide-scale vocational training to quickly enhance capabilities of people.

This brings me to the careers that you will pursue given the emergence of new opportunities. You will be managers in a world where emerging economies will be at the forefront. You are in a country where affluence is fast gathering pace and aspirations are rising more than ever before fuelled by economic growth. To provide a numerical perspective, bank deposits in India grew from USD 195 billion in 2000 to USD 995 billion in 2010. By 2020, bank deposits which are an indicator of savings and purchasing power, are expected to grow to USD 4.7 trillion. It is a whole new India you will be living and working in by the early part of your careers and therefore your aspirations can soar!

The workplace that you will encounter will be very different from the workplace I joined. Obstacles of time and distance have a far lower significance today. The rise of communications technology was led by the spectacular growth in mobile telephony and increased connectivity has been an important disrupter. India is home to the third largest internet user base at about 100 million and has the second largest mobile subscriber base of over 800 million. While the number of internet users is increasing at an annual rate of over 20%, the number of mobile internet users has more than doubled indicating the increasing usage of mobile phone as a means of internet access\(^2\). Broadband connectivity will be the catalyst to multiply the social and economic impact of the evolution in communications technology. Access to technology is available at lower and lower

\(^2\) Report on Internet in India (I-Cube) 2011 and Mobile internet in India, August 2011, published by the Internet and Mobile Association of India (IAMAI) and IMRB
costs, and more computing power is packed into smaller devices including handheld devices. From the internet revolution to broadband to mobility, technological innovation will continue to flourish through discontinuous change. Moore’s Law is alive and well.

This is also the time when the new emerging powers will start to blossom. The numbers I have quoted earlier will skew even more with a greater share of global growth from emerging economies.

Managing change in a new world will need new insights. It will be a challenging task to manage an organisation in a constantly evolving world with growing interconnectedness among seemingly exclusive parameters, a world where an unknown such as the events in Greece can impact global growth.

Sound decision making will require the ability to clear clutter from your mind, preserve clarity in thought, have a sense of analysis and data, and yet have the ability to mix the quantitative with the qualitative with the latter gaining prominence sometimes.

Organisations will be younger. Today the average age of the ICICI Bank workforce is in the late twenties and at Infosys it is in the mid-twenties. As more and more people are added to the workforce, I do not see this increasing over time. In fact, batches that may follow you in just three to four years may think of you as old. Management and leadership will be about managing the aspirations and behaviours of young teams, who are connected to the world through technology and social media, a world where information is democratised, opinions are shaped through the internet and ideas and aspirations are transmitted seamlessly across borders. Organisations will need to adapt to this reality.

The Indian growth story is based on multiple pillars: consumption, investment, domestic demand, global competitiveness, knowledge based businesses and industrial growth. India’s key competitive strengths lie in a large domestic consuming market with a favourable demographic profile, an entrepreneurial talent pool with innovation capabilities, cost advantage and potential for improvement in productivity with easing structural bottlenecks. The scale of opportunity will dramatically change given that the economy would double every five years at least for the next two decades. The speed of adoption of newer technological means and its impact has been breathtaking and as India continues to grow, technology will be a force for disruptive change. There is thus a significant opportunity to leverage technology to drive new business models.

You will enter a workplace that is transformed by connectivity, where organisations are growing younger and have to adapt to democratisation driven by social media. In my time, we thought that the knowledge we acquired would never be obsolete. Now, I think that my knowledge becomes obsolete every year. It is for you
to decide when your knowledge is obsolete and it is thus necessary to constantly upgrade your skills and remain relevant to the environment. Throughout your career you will have to confront various challenges but the one thing you must never abandon in the quest for growth is adherence to ethics and integrity. You also need to think about and develop a work ethic. In the past there was a focus on building careers and progressing through the ranks, which has now given way to means for easy gratification and planning the next career move. You need to decide what suits you best and chart your path accordingly. You are some of the most talented people today under whose leadership the country will emerge as an economic powerhouse. Sticking to these fundamental values shall stand you in good stead to build an exciting future for India and indeed, an exciting future for yourselves.

My congratulations and best wishes.