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MAKING "MAKE IN INDIA" SUSTAINABLE

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First, and foremost, I deem it an honour and privilege to be addressing this very august and discerning academia-industry audience on " Make In India", which from all accounts, is by far the most contemporary national agenda, with the promise and potential of delivering sustainable inclusive economic growth .However, after going through the Conference agenda , I have decided not to speak about how to ' make ' "Make in India " happen , but, instead, to speak about how to ' ensure ' that "Make in India " ever remains a commercially, socio-economically and financially viable and sustainable proposition as it actually happens !

Second, What with the cataclysmic and apocalyptic events like, first, the global financial crisis followed by the US downgrade, and later, Eurozone sovereign debt crisis, followed by the end of Quantitative Easing by the U.S. Federal Reserve, and more recently, the beginning of long overdue Quantitative Easing by the European Central Bank, overwhelming the world and India, the last few years have been characterized by unprecedented excessive volatility in asset prices, currency values and commodities prices, catapulting the critical imperative of Financial Risk Management to the centre-stage , like never before, in making " Make in India" sustainable !

Third, As a direct consequence of these spill-overs from the ongoing veritable global financial and economic nuclear winter, the rupee depreciated against the dollar by about 24% between March 2008 and March 2009 (Rs. 39.80 to Rs. 52.20) with the volatility doubling to about 12% (as measured by annualised standard deviation of daily percentage changes). And during the second episode, between August 5 and and December 15 ,2011 , the rupee depreciated by almost 18% in less than 6 months , with the volatility almost doubling from about 5% to 12%. However, during the 2013 episode, the rupee depreciated against the dollar by 23% in less than 7 months between February 5 and August 28 , 2013 wih the volatility doubling from the previous high of 12% to 26% ! Equally deserving of the attention is the fact that since March 2010 to date, the Reserve Bank hiked key policy rates 14 times, raising the effective policy rate from 3.25%, (the effective rate then being the Reverse Repo Rate) to 8.5% (the effective rate currently being the Repo Rate), resulting in a cumulative tightening of 5.25% in a matter of a little over 1-1/2 years! Only later did RBI start easing monetary policy with the current Repo Rate being 7.5%. However, unlike the previous two episodes, what made the latest episode exceptional was not only the steep and precipitous fall of the rupee to an all time low of Rs 68.80 and its associated unprecedented volatility but also equally the unprecedented volatility in the domestic bond and equity markets with volatilities overshooting to 40% and 36%, respectively. Volatilities on this scale, and of this magnitude, can, under the current maximum permissible limits for forex, equity, credit, on and off balance sheet interest rate, risk exposures, potentially wipe out, over one year horizon, 760% of the net worth of the Indian banking system unless Indian banks recalibrate their risk limits to a sum of no more than 100% of networth! This episode of exceptionally excessive volatility was triggered by abrupt reversal of capital flows in domestic bond and equity markets through a combination of an

unsustainably high current account deficit and a mere prospect of a Fed taper program ! Significantly, it was foreign institutional investment in debt that played spoilsport for out of $ 38 bn worth of FII in debt, $ 9 bn, constituting 24% of the total, was pulled out as against only $ 3 bn pulled out of $ 138 bn worth of FII in equity, constituting a mere 2% !! . Thus, it is no brainer to figure out how much more devastating and disruptive would have been FII outflow from debt market if only foreign investment in debt were of the same order as FII in equity viz; $ 138 bn, or if the then current debt limit of $ 81 bn were fully invested; net FII outflow from debt could have been anywhere from $ 20 bn to $ 33 bn! In other words, FII in debt is far hotter, and more fickle, than FII in equity! Equally significantly, global commodity prices have been just as volatile since the crisis of 2008; crude oil prices, after rising steeply to US $ 147 per barrel in July 2008, fell precipitously to $ 32 per barrel in December 2008, and then again rose from US $ 32 to around US $100 and then dropped again precipitously to US $ 50 now ! The reason why I have broadened the canvas to also include interest rates and commodities is to approach the subject matter of Generic Financial Risk Management holistically, as it is not just currency risk alone, but interest rate and commodity price risks just as much, that represent significant sources of risk not just to businesses themselves but equally to financing banks and thus potentially to systemic financial stability and , therefore , axiomatically and tautologically , to the very sustainability of " Make in India " itself ! !

Fourth, In an increasingly globalised trade and investment environment, business and industry have inevitably to contend with, and manage, not just their normal core business risks, but also financial risks like foreign exchange, interest rate, and commodity price risks. While it will be presumptuous on my part to even contemplate, much less attempt, telling this discerning audience how to manage their normal business risks, I do consider it my dharma to attempt shining light on financial risk management, comprising foreign exchange, interest rate and commodity price risks. Accordingly, I have crafted, and propose to deliver through my keynote address, what I think, given my own intellectual sense of practice, a practical, nuts-and-bolts, and do-it-yourself tool-kit, elucidating the 'what' (i.e. what must be done), the 'why' (i.e. why it must be done), the 'how' (i.e. how it must be done), and the 'when' (i.e. when it must be done) of financial risk hedging, which in my reckoning is as close as, or, the closest, practice could get to theory.

Fifth, Before I proceed further, I would like to put the subject matter of Financial Risk Management in appropriate perspective. Risk Management is not about eliminating , or which is the same thing as completely hedging out, risk but about first determining , like one's pain threshold, risk tolerance threshold and then aligning an entity's existing risk, be it currency, interest rate or commodity price risk, with its risk tolerance threshold. Having said that, it would also be in order to have a sense of how risk itself is defined and measured. Risk is uncertainty of future outcomes such as cash flows. In finance theory and practice, it is typically measured by annualized standard deviation of a time-series of percentage changes in asset prices. While courting financial risks in pursuit of financial return is the staple and dharma of banking and finance industry, it is not so for industrial and manufacturing businesses ! The staple and dharma of business and industry is courting their normal core business risks in pursuit of delivering market-competitive stable returns on equity to shareholders.

Sixth, I turn now to the subject-matter proper of financial risk management. I propose to deal, in some detail, with the specifics of risk management strategies for hedging foreign exchange, interest rate and commodity price risks. I would very strongly encourage business and industry to invariably hedge their actual risk exposures without exception as a base-case strategy. To say the least, this is by far the most conservative and prudent strategy. As this learned, and discerning, audience will readily recognize, the excruciating and wrenching volatility, experienced recently, unquestionably attests to the credentials of such a base-case strategy of being fully hedged. Of course, it does mean that risk is being completely eliminated and, therefore, so is being financial return. But then, this is just as well

because, as I said before, this is not the dharma of business and industry whose cardinal principle it must be to earn their market-competitive return on equity from their normal core business risks only to the complete exclusion of foreign exchange, interest rate and commodities price risks!

Seventh, As regards forex risk exposure of business and industry, I would like to take this discerning audience back in time to the late 1990s when the Indian corporate sector went in for large scale ECBs. These ECBs were almost completely for domestic rupee expenditure and were mostly un-hedged and LIBOR-linked-floating-interest-rate based. Indeed, so also was the case with the corporates in Thailand and Indonesia which became repositories of unhedged currency and interest rate risk exposures creating credit risk for the domestic banks. The saving grace was that, unlike in East Asian countries, ECBs by corporates in India were subject to overall limits under Automatic and Approval routes. As this learned audience will recall , such un-hedged and floating-rate-based foreign currency exposures culminated eventually into the now-all-too-familiar apocalyptic denouement, entailing huge forex losses in India and the East Asian Currency crisis in India's neighbourhood ! I would, therefore, very strongly commend that business and industry be not tempted and enticed by nominally low interest rates and invariably rigorously evaluate such foreign currency borrowing options, benchmarking them against the comparable rupee borrowings. Only if business and industry find that the long-term foreign currency borrowing costs are lower, on a fully-hedged basis, than the comparable rupee borrowing costs, must they choose such borrowing options! I also regret to have to say that the current popular, but uninformed and totally untenable, refrain has been that forward cover for foreign exchange for longer term such as five years, or so, is not available; what is available is out to one month, three months, six months and maximum one year and not beyond. But I would like to enlighten the discerning audience that a long-term forward foreign exchange hedging solution can be easily customized by banks by recourse to what is known as rolling hedging strategy which simply involves simultaneously cancelling, and rebooking, a short-term forward exchange contract until the desired long-term maturity. Incidentally, such simultaneous cancellation and rebooking of forward contracts for rollover is exempted from the RBI restrictions introduced on 15th December, 2011. Of course, precisely the same strategy can be replicated in the exchange-traded foreign currency futures markets as well. Contrary to the popular perception, this strategy is fairly simple and perfectly do-able and locks in the original starting spot exchange rate. What, in other words, this entirely unexceptionable, and highly desirable, strategy does is substitute volatility of the spot exchange rate with that of forward margins at each roll over date. It is empirically, and anecdotally, established that volatility of forward margins is far less onerous than that of the spot exc hange rate. Therefore, I would very strongly encourage business and industry to routinely avail of this hedging solution both to cover forex risk of long-term imports and long-term foreign currency borrowings.

Eighth, I turn next to the other very popular foreign currency funding option, namely, Foreign Currency Convertible Bonds (FCCBs). I must confess that I have been very intrigued by what I have read in business and finance newspapers. The sense that I got was that corporates use FCCBs to raise long-term fixed rate foreign currency funds hoping that overseas investors will exercise the option embedded in FCCBs and convert into equity ! And precisely for this reason, it has been noticed that corporates do not make provision of fully-hedged domestic rupee and foreign currency resources !! In fact, such basic motivation underlying the FCCB-based funding strategy is completely antithetical to both corporate finance theory and international best practice and turns the entire rationale of such funding strategy on its head ! This is because the very raison d'être of FCCB funding option is to lower borrowing costs below that of an otherwise comparable plain- vanilla non-convertible foreign currency bond. The short point is that the FCCB borrower is baiting the overseas investor with an equity option kicker/appetizer, embedded in an otherwise comparable plain- vanilla non-convertible bond. Effectively, in this structure, overseas investor in FCCB purchases an embedded option and

pays an option premium in the form of lower coupon on FCCB. I hardly need belabor the point that equity is always more expensive than debt capital of whatever kind, including even junk/ high-yield bonds ! So I would urge business and industry to fully provide fully-hedged domestic rupee/foreign currency resources to meet potential liability under FCCBs, rather than hope that FCCBs will be converted which, in fact, if anything, can be the case of overseas investors, but certainly not, of issuers of FCCBs ! Ths is precisely what happened to a host of corporates, including Suzlon Energy , which is laden with about $ 600 million worth FCCBs , with the triple whammy of unhedged forex exposure , no rupee resources and the entirety unintended consequential high leverage as conversion did not happen as fondly hoped because of the stock price trading at 70% discount to conversion price ! So also also was the case with the pharmaceutical and biotechnology major Wockhardt which incurred whopping losses of ?550 crores again , not because of its core business, but because of unhedged exposures on its FCCBs ! This is simply because an option exercise will invariably happen when it is in favour of the option buyer and , therefore , axiomatically against the option seller i.e, upon conversion , FCCB issuers simply give away their shares cheap much below the ruling market price thus raising their cost of equity !

Ninth, Although as serious as foreign exchange risk, interest rate risk has not compelled as much attention in the Indian debt market space. If only to have a sense of how significant, and serious, it can be, I invite attention to what I said about the key policy rates rising cumulatively by 4.25% since March 2010 to date ! Just like unhedged foreign currency exposure, long-term floating rate loans represent a source of significant risk not only to businesses themselves, but equally to financing banks as they transfer interest rate risk from lenders to borrowers, effectively substituting interest rate risk of lenders with potential credit risk in terms of creating potential non-performing loans ! At another level, as fixed rate loan has more certainty, and hence less risk, both for borrower and lender, it should be preferred both by borrowers and lenders alike. Thus, for interest rate risk management, the base-case, risk-neutral strategy, is invariably fixed rate long-term funding by corporates. Contextually, the current popular refrain in the policy debate is that absence of a competitive, liquid, deep and efficient corporate bond market has been the undoing of infrastructure financing which typically involves long-term fixed rate funding. And as to why banks cannot make long-term fixed rate infrastructure loans, the stock refrain is that this will create asset liability mismatch in banks' balance sheets as their liabilities are mostly short-term. Even then banks had a combined infrastructure loan portfolio of about Rs.6 trillion (US $ 110 bn), representing about 9% of the total bank assets in India of Rs.71 trillion (US $ 1.35 trillion) as of 31st March, 2011. As against this, corporate bond market was around Rs.9 trillion (US $ 170 bn). In this background, it is noteworthy that back in 2012 , the Planning Commission estimated infrastructure funding requirements, over the next 5 years, at close to Rs. 55 trillion. While prima facie this may seem a daunting and tall order, on a closer scrutiny, it turns out that it is not really so. Why I say this is because of the fact that bank assets have grown at a Compounded Annual Growth Rate (CAGR) of 20.5% during the last six years and real GDP has grown at a CAGR of 8.2% during the last seven years. Thus, it is readily seen that given total bank assets of Rs. 83 trillion as of 31st March, 2012, a CAGR of 20.5%, total bank assets will grow to Rs. 210 trillion over the next five years and assuming that, as against 10% of total bank assets now, banks can finance infrastructure upto 15% of total assets, they would easily be financing about Rs. 32 trillion in infrastructure loans. And further, assuming the current leverage in infrastructure firms of about 4 times, equity capital of about Rs.14 (55 ÷ 4) trillion will be required, leaving a gap of about Rs. 9 trillion which can easily be financed by corporate bond market, which also, assuming the current bond market to total bank assets ratio of 12.5%, will have grown to Rs. 26 trillion ! But this common and popular, but again uninformed and counter-intuitive, refrain that banks cannot fund long-term fixed rate infrastructure assets is untenable in that banks have not thought of using a very 'vibrant' Interest Rate Swap (IRS) market, where outstanding notional principal amounts aggregated Rs 60 trillion (US $ 1.14 trillion) (almost 82% of

total banking assets in India as also of the nation's GDP) ! For banks can easily transform their short term liability into a long-term fixed rate one and thus create a synthetic long-term financing solution for long gestation infrastructure projects by doing the following :

(i) Receive fixed rate for one year and pay floating overnight rate in the IRS market. (Assuming banks' average liability is about one year)

(ii) Receive floating overnight rate and pay 5/10-year in IRS market. This effectively synthetically transforms a one-year floating rate liability of banks into a synthetic 5/10-year fixed rate liability. By loading margin over this rate, banks can make a 5/10-year fixed rate loan to an infrastructure company. And, significantly, considering that IRS now trades about 70 to 80 basis points below sovereign yield curve , it is win-win for both banks and infrastructure companies who, even after bankers' spreads/ margins, will be able to borrow at around 5/10 year Govt. bond yield (currently 7. 80%). That is as simple as it can get in terms of creating two-in-one fixed-rate long-term market-based financing solutions for infrastructure.

Incidentally, another uninformed and untenable, refrain against use of IRS market is that this strategy entails 'basis' risk and 'liquidity' risk. It has been established that there is a statistically significant and positive correlation between one year IRS rate and one year bank deposit rate of 0.75 which will improve further to near perfect level of 0.90 to 1 once this strategy is actively engaged in. As regards 'liquidity' risk, banks have never so far experienced this and will not as their deposits have grown by 18%-plus every year. Indeed, large corporates, can themselves do it in-house by accessing the Rupee Interest Rate Swap Markets. As I said before, corporates must treat fixed rate long-term funding as the base-case, or risk-neutral, strategy. Considering that the five year OIS (Overnight Indexed Swap) are now trading about 70 to 80 basis points below the corresponding maturity government bond yields, corporates can, and should, swap their short-term floating-rate loans into fixed rate long-term loans and yet pick up the above negative yield spread, effectively borrowing long-term funds much more cheaply than perhaps would be the case if they were to borrow either from banks, or for that matter, from the corporate bond market. This is totally risk free arbitrage strategy corporates can, and must, engage in. Of course, when this starts getting done on a large scale as it indeed should, but has not so far happened, such negative yield spreads will automatically be arbitraged away. In fact, CFOs in corporates must routinely compare the two fixed rate long-term funding options to continually assess if they can borrow fixed rate long-term funds cheaply by borrowing in the short term market where they might have a comparative advantage. But the reverse viz., corporates borrowing fixed rate long-term and swapping loan proceeds into overnight floating rate funds must be scrupulously avoided. Nothing supports this better than the recent period of tightening cycle which caused overnight floating rates to go up from 3.25% in March 2010 to 8.5% in October 2011 i.e., effective cumulative rise in overnight interest rates of 5.25% ! Having said that, it is both counter-intuitive, and disturbing, to note that some corporates have consistently been 'receiving fixed' and 'paying floating' ! What this means is that corporates have been speculating by courting interest rate risk by paying 'overnight floating rate' and receiving 'fixed rate'. Why I say this is for the reason that if corporates first borrowed fixed rate long-term funds and then swapped them into overnight floating rate, then they were exposed to interest rate risk because of 5.25% increase in interest rates. On the other hand, if they speculated in IRS market without any underlying exposure in the fixed rate long-term loans, then they would obviously be paying overnight and receiving OIS fixed rates and, therefore, they lose both on the floating rate side as also on the fixed rate side because during the same period, five year OIS rates also increased, though only, by 0.6%. We thus see if they speculated in interest rate markets, rather than hedge, they lost both ways any which way one looks at it ! What I have said about management of rupee interest rate risk applies just as much to floating rate Libor-linked long-term foreign currency loans as well and I would, therefore, strongly commend to business and industry to go in for interest rate swap-enabled fixed rate

long-term financing solutions both in domestic and foreign currencies. While still on the subject of Interest Rate Swaps denominated in Indian rupees, I would wish to address the question as to whether counterparties exist on the other side. My answer would be, yes they do, and, in fact, one too many ! This I say because the outstanding notional principal amount of IRS, as I said before, was a whopping Rs. 60 trillion (about 82% of total banking assets) (USD 1.14 trillion) and of which, disturbingly, only less than 2% was accounted for by the real sector i.e. business customers and the rest was accounted for by speculative trading of bank dealers, mostly foreign and private sector banks ! In other words, the remaining 98% interbank exposure of about Rs. 59 trillion represented super-abundant/ overwhelming potential supply of counterparties as the hugely negative spreads to G-Secs yields only mean fixed-rate receivers far exceed, and out-number, fixed-rate payers. This compares very poorly with outstanding OTC forward exchange contracts, where customer (real sector) foreign exchange contracts account for about 40% of the outstanding contracts ! This clearly highlights what is referred to as the 'financial sector – real sector imbalance', which was the cause of the last global financial crisis and the resulting worst recession . In fact, the situation here in IRS segment, unlike forex OTC forward segment, is almost getting to the point where the IRS market, instead of being a means to an end of sub-serving the real sector is, to all intents and purposes, existing almost entirely for its own sake to almost complete exclusion of the needs of the real sector, creating a massive 'financial sector-real sector imbalance' ! But This imbalance itself is the reason enough for corporates to exploit this opportunity for obtaining low cost fixed rate financing , more so , as the IRS market is fairly liquid, deep and efficient up to 5 year maturity, and with the right policy mix, it can easily get so upto 10 years and beyond. For internationally, IRS dealers typically, and routinely, make markets quoting IRS yields as a mark-up over corresponding maturity government bond yields. For example, if a counter-party wants to pay 10 year fixed, and receive overnight floating, in IRS market, a dealer will immediately hedge by shorting a 10 year government bond, and investing sale proceeds in overnight repo market. However, this cannot be done in India for want of short selling and HTM (Held to Maturity) and no MTM (Marked to Market) accounting.

Tenth, As regards commodity prices, business and industry can use international commodity exchanges to hedge dollar price risk, and domestic commodity exchanges to hedge rupee price risk. In fact, whenever some commodities, like crude oil, are in backwardation (the futures price being lower than the current spot price), in addition to buying price protection, business and industry also earn what is known as 'rolling', or 'convenience', yield.

Eleventh, By now, I am sure this discerning audience must have got a fairly good sense of the repertoire of derivatives to choose from in management of financial risks business and industry need to contend with day in and day out. However, as regards derivatives, I would like to quote Financial Times Columnist Wolfgang Munchau and the legendary investor Warren Buffett who famously described derivatives 'as probably the most dangerous financial products ever invented' and 'financial weapons of mass destruction', respectively ! Perhaps, they had the global energy giant Enron Corp in mind which filed for the largest bankruptcy in the US history by assets of $ 50 bn all because of straying into derivatives as a profit centre , courting financial risks in pursuit of financial returns , rather than using them for hedging ! But I would beg to differ because, to my mind, they are as strong statements as saying that cars and driving are most dangerous because they might lead to accidents ! The problem is not so much with derivatives, or with cars, for that matter, but with how we use them !! In this context, as this learned audience will recall , not long ago ,the instances of egregious forex losses of hundreds of crores to thousands of crores of rupees, more than offsetting, in some cases, the net profit from normal core businesses, were legion and the print media replete with them ! These losses arose primarily because derivatives were used by business and industry not for hedging, but for speculative, purposes. As reported in the media, huge losses were sustained by business and industry on account of complex

structured and synthetic, but so much less transparent, derivatives. In other words, business and industry must go in for plain vanilla derivatives which upfront, transparently, and explicitly, disclose cost of hedging strategy rather than arcane, complex, synthetic and structured derivatives which camouflage risk. As regards prudent use of derivatives, the touch-stone that business and industry can use with profit is that any derivatives strategy which promises reduction, or elimination, of hedging cost, or promises enhancing income, is intrinsically speculative and the one that involves incurring hedging cost and promises no income enhancing is intrinsically a hedging strategy. And as regards convincing businesses that over the long haul, the cost-benefit calculus of hedging is net positive, at its most basic and fundamental, it is as net positive as that of insurance for crop, earthquake, health, property, factory, fire, theft, machinery, accident, etc.

Twelfth, As non-financial businesses, unlike financial businesses like banks, have a typical leverage/Equity Multiplier of 2 to 3 times, their assets are funded to the extent of 50% to 33% by common equity shareholders and the remaining 50% to 67% by banks and bond holders; funded to the extent of 42% with bank debt and 8% with bond finance and 55% with bank debt and 12% with bond finance, respectively. It is significant to note that because of such typical corporate finance structure of non-financial businesses (very low leverage), globally there is no regulation and supervision of such non-financial businesses in the same sense as regulation and supervision of financial businesses like banks primarily because, unlike in the case of the former, any imprudent and risky behavior, on the part of the latter, represents significant risks to depositors and systemic financial stability. The point that I am making is that in the case of non-financial businesses, because of the typically low leverage, common equity holders take the bulk of risks and losses from their acts both of commission and omission. Unlike in the case of banks, where acts of commission of shareholders, directors, business managers are either proactively and preemptively front-stopped, or reactively back-stopped, by regulators/supervisors save the latter's own acts of omission themselves, there is no such supervisory/regulatory supervention in the case of non-financial businesses to make them practise the tool-kit delivered in this keynote address, potentially culminating in the inevitable consequences of higher costs of both equity and debt capital, and in extreme cases, even insolvency/bankruptcy ! However, in India, since bank debt accounts for roughly up to 55% of the financing of assets of non-financial businesses, the paragraphs 102 and 103 of the RBI's Second Quarter Review of Monetary Policy 2011-12, which require that while extending fund based and non-fund based credit facilities to corporates, banks should rigorously evaluate the risks arising out of unhedged foreign currency exposure of corporates and price them in the credit risk premium, will have the effect of delivering the required chastising and chastening, with banks pricing unhedged financial risk exposure of businesses into credit risk premium, provided they are effectively enforced in practice.

Thirteenth, Significantly, businesses not practising the nuts-bolts-what-why-how-when regimen, commended in this keynote address does not make it theory anymore than does a patient not practising a medical practitioner's regimen make it theory. So if the patient does not practise the medical practitioner's regimen, he will pay the price with his deteriorating health and, in the extreme case, even with his life. So also will businesses, which do not practise the nuts-bolts-what-why-how-when regimen in this keynote address , will pay the price with much higher costs of debt, and equity, capital and, in the extreme case, with insolvency/bankruptcy due to financial risks , of course, at the expense of the very sustainability of " Make in India " ! Just as in the case of a patient, close relations and friends may try, and secure, medical regimen compliance and practice, so also in the case of non-financial businesses, shareholders, through their elected directors, independent directors and 'activist shareholders' on their boards, must do what they can to practise the nuts-bolts-what-why-how-when regimen in this keynote address ! As someone has said, "once we make a choice, we choose its consequences as well". So, if businesses choose, whether because of enormous pressure from

shareholders, or for that matter, because of heads-business managers-win-and-tails-shareholders-lose incentive structure, to "behave not rationally" and "not play for the long-term" and take completely avoidable financial risks, they choose the inevitable consequences as well of being backlashed, and chastised, by capital markets comprising equity and debt (both bond and bank debt markets). Such imprudent behaviour will, in equilibrium, result in capital markets exacting higher equity risk premium (lower share price) as well as higher credit risk premium (lower debt price). Therefore, if they choose not to practise, one need not feel compunctious as they simply will also choose the inevitable consequences of their own choice which will entail much higher equity capital costs and borrowing costs in banking credit and bond markets, and, in the extreme case, insolvency/bankruptcy, thus, not maximizing, but minimizing, and even destroying, shareholder value and wealth , again , as I said before , at the expense of the very sustainability of " Make in India " !!

Fourteenth, To sum up, such is the insidiousness of risk that its under-pricing, as reflected in excessively low volatility, is perceived as low, or no risk, and, therefore, economic agents including banks, business and industry are caught unawares and unpleasantly surprised when risk suddenly eventuates. Since unhedged financial exposures represent significant risks not just to businesses themselves but equally to financing banks and thus potentially to systemic financial stability, and no less, of course , to sustainable " Make in India " itself , it is imperative that banks actively and constructively engage with their unhedged corporate clients on risk management with a view to saving banks from their corporate clients and corporate clients from themselves ! Therefore, to my mind, nothing conveys and expresses the Risk Management mantra more trenchantly than the following: "Just as you make friends when you don't need them, not when you need them and certainly not after you need them, so also you hedge when you don't need it, not when you need it and certainly not after you need it". Complete internalization and ingraining of this holistic risk management culture, attitude and temper by business and industry will, in equilibrium, reduce cost of both debt and equity capital by reducing volatility of ROE as markets will perceive them as much less risky and more safe ! If I have succeeded in alerting and sensitizing this learned and discerning academia-industry audience to the Financial Risk Management imperative enough, I will feel vindicated that I have delivered on my dharma ! And, I have no doubt, if acaemia and industry completely internalize and ingrain this mantra and dharma, they will exemplify the following fairy tale ending viz. "And they lived happily ever after" ! Finally, with the fond hope that I have not unwittingly come across as pontificating on the mantra and dharma of Financial Risk Management, I conclude my keynote address and , going forward , wish academia and industry a truly blissful Risk Management nirvana and , through their ongoing synergistic and symbiotic Interdependence , Integration and Cocreation , sustainable ' Make In India ' !