

## Flagship Seminar

**Book Launch - The Struggle and The Promise- Restoring India's Potential.**

**Centre for Social and Economic Progress (CSEP)**

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CSEP Research Foundation

6, Dr Jose P Rizal Marg, Chanakyapuri, New Delhi 110021, India

Ph: 011 2415 7600

### **CSEP Research Foundation**

Regd. Off: Second floor, 6, Dr Jose P Rizal Marg  
Chanakyapuri, New Delhi 110 021 India  
T: +91 11 2415 7600 E: [info@csep.org](mailto:info@csep.org) W: [www.csep.org](http://www.csep.org)

**Author:**

**Naushad Forbes** – Co-chairman of Forbes Marshall, India's leading steam engineering and control instrumentation firm. Dr Forbes is also chairman of Ananta Aspen Centre and Centre for Technology, Innovation and Economic Research (CTIER).

**Discussants:**

**Kiran Mazumdar-Shaw** – Founder and Executive Chairperson of Biocon Limited and Biocon Biologics Limited. She is a board member of CSEP.

**Arvind Panagariya** – Professor of Economics and the Jagdish Bhagwati Professor of Indian Political Economy at Columbia University.

**Montek Singh Ahluwalia** – Distinguished Fellow at CSEP

**Moderator:**

**Rakesh Mohan** – President & Distinguished Fellow at CSEP and Member, PMEAC.

Please contact [IKapoor@csep.org](mailto:IKapoor@csep.org) for general inquiries and [TWahengbam@csep.org](mailto:TWahengbam@csep.org) for media inquiries.

Watch the event video here: <https://www.youtube.com/watch?v=3FpYpT7C62c>

*The following is an edited and revised transcript from the event. It has been generated by human transcribers and may contain errors. Please check the corresponding video for the original version.*

## PROCEEDINGS

**Rakesh Mohan:** I am Rakesh Mohan, President and Distinguished Fellow of the Centre for Social and Economic Progress in New Delhi. We are delighted to have the opportunity to hold the first launch of the book, *The Struggle and The Promise – Restoring India's Potential* by Naushad Forbes. This is in fact, CSEP's 14th Flagship Seminar, which we hold for rare events like this. This is an incredible book written by Naushad, basically wanting to address the potential of India to lead the world, and taking into account its many, many strengths, particularly this diverse culture, with something for everyone; a young population that is thirsty for education and achievement and a strong and diverse private sector. I won't say more on the book, because that's Naushad's job. I just want to say that this is a really delightful book to read, easy to read, and it is incredible that someone like Naushad who is an active hands-on businessman, who runs a company, who has been president of CII and participates in a whole number of appearances, writes, and so on. How he can write such a book, is beyond my understanding, obviously, he doesn't sleep. Let me introduce him more formally.

Naushad is the co-chairman of Forbes Marshall, India's leading steam engineering and control instrumentation firm. He is also the chairman of the Ananta Aspen Center, and also chairman of the Centre for Technology Innovation and Economic Research. He was the president, as I said, of the Confederation of Indian Industry, CII in 2016/2017. He's on the board of several educational institutions and public companies. He's also a visiting lecturer and consulting professor at Stanford University for courses and technology in newly industrializing countries. Naushad has received his bachelor's, master's and PhD degrees from Stanford University. He didn't really want to leave there, but had to be pushed out to come back to India, and also, pulled by his family, of course. I have had the privilege of knowing Naushad since around the late 1990s, when I first actually met him in the first India-Stanford conference, and it's always been a delight to meet him, to discuss and of course, we've been friends ever since. What I will do is, after I request Naushad to talk about his book, I will then ask, in this order, the panelists for their comments. First, Kiran Mazumdar Shaw. Second, Arvind Panagariya. And third, Montek Singh Ahluwalia. And I will introduce each of the panelists just before I ask them to speak, and they will each speak for 10 to 15 minutes. Naushad.

**Naushad Forbes:** Thank you, Rakesh, thank you very much. Thank you for hosting this program. And I'd also like to join you in thanking Kiran, Montek and Arvind for joining us today. I think both Kiran and Montek and Arvind had to change schedules, and so on. I appreciate that very much. And Arvind, I know it's 7:30 in the morning, I particularly appreciate you joining us at this time.

I'm not going to try to summarize the book. What I'm going to try to do, is to talk about a few themes that run through the book. Obviously, the big theme is India as a country of great promise. And my starting point really is that the world wants India to succeed, and this comes across in a whole range of incidents that I talk about and report in the book. But many experiences, you know, I was talking to a friend the other day and he was telling me about, Goh Chok Tong, when he was prime minister of Singapore saying this in 1991 in so many words, "The world wants India to succeed". The US trade representative when a group of us from CII had gone to see him in 2016, right after he gave us a very irritated comment, because India had just blocked an agreement to the WTO. He then also told us how much he wanted India to succeed. And we got this message again and again on CII delegations that we took to countries all over the place; to Iran, to Vietnam, to Sri Lanka, to Bhutan, to Indonesia. And the message was always that, "Look, India is welcome, Indian industry is welcome and not only welcome, but it's actively desired". We are seen as a benign presence, we are seen as a benign force, something that adds to the country and as a force for good.

Having said that, I think one of the points that I always make when I talk about India with investors overseas, for example, is that India is a long-term play. Do not come to India for short-run results and for short-run profit. And in the same spirit, the spirit of us being a long-term play, this is not a book about quick fixes; this is a book about how we get to leadership. It's a 20 - or 30 - year project, and it requires many changes, it requires a lot of people coming together, it requires a lot of change, and I'll talk about three big areas. But more than anything else, we have that opportunity. We have that promising potential and we should take advantage of it. So, if you like, there are three key things that I'd like to talk about: First, I think we have to expect a lot more from Indian industry if we wish to have any claim for world leadership. Second, we have to get the balance right between government policy and our institutions and culture. And third, the quality of our democracy matters. The norms of being a liberal democracy are important for us to deliver on this promise of leadership. Norms like authenticity and humility and nuance, and qualifications are important to deliver on this ambition of leadership.

So, let me start with industry because I feel like it talks more directly of my demands for industry. And if you like, my demands for industry are four "I". The first I, is Inclusiveness. Inclusiveness in growth by investing our CSR funds very specifically in [indistinct- 07:48] UK outcomes, so that we include more and more of our population in our growth progress development. Second, this will please Arvind particularly. Investment in labor-intensive industry as a way of including people and creating good quality jobs to a much greater extent than we do. And third, by a new social contract that provides a minimum protection for all labour, whether that labour is formally employed in our companies or informally employed through contractors. So, that's more being more inclusive. Second, is to be more international; to be open to the world in India, and to be open to the world by investing overseas. I won't say any more about this, because this is a subject not only which Arvind will speak on, but which I've learned from Arvind. So, I think he should talk about it because I look to him for his input on this. Third, to be more innovative. Innovation in developing countries has been my academic field, so, I feel I could speak with some more authority in this area and investment in in-house R&D is something I argue quite strongly for in chapter five in the book. In brief, India invests 0.3% of GDP in in-house R&D, the world average is 1.5%, so, that's also the number for China. So, we need Indian industry to scale our investments in in-house R&D by a factor of five to match the world average or to match China. That's the requirement that we have. We have a huge opportunity in the availability of talent, relatively low-cost talent in our engineers. The world industry sees that; Indian industry needs to see it too. And I hope Kiran will speak to this because Kiran's company has been doing this in a way that should inspire us all in the Indian industry. Fourth, is that Indian industry needs to be more independent.

Until 1991, Indian industry was very dependent on the government for licenses, for a whole bunch of other things. Since then, things have opened up so dramatically, but the mindset is still to a large extent, one of dependence, it's still one of going to the government and asking for things. And I think Indian industry has to stop asking the government for things. My metric of Indian industry being independent is, if I can use a quote from the book, "An industrialist criticizing the government, should not make the headlines". Today, if an industrialist, even slightly criticizes the government, it makes the headlines. It shouldn't. That must be a basic feature of an independent private sector. It should be so normal for the way in which we operate, that it no longer is news. The second area is the role of the state, and especially, its interplay with our unique and diverse culture and the quality of our institutions.

My argument here is that we start with India having low state capacity. This is not unique or a new argument by any means, many have argued exactly that, and there are lots of examples in the book that also talk about this low state capacity. But this low state capacity combines with another feature;

which is that our diversity and our pluralism means that any close state government relationship is automatically somewhat suspect. We've recently seen the privatization of Air India. If Air India had been a profit-making undertaking, there would've been all manner of allegations floating around about the deal and why it had been done. The fact that it was losing 20 Crores a day was highly beneficial to the criticism being really muted. And second, the fact also, that it went to the Tatas, who are seen as being such a principled industrial house also led to the whole deal being seen as much more muted. Just think, if Air India in its form of a 20 Crores loss making company each day, had gone, to take the obvious examples, had gone to either the Ambanis or the Adanis. What would we have heard in our public discourse?

When these two combine together, low state capacity, plus a suspicion of any close industry state relationship, it seems to me that for the state, the state has to play an essential role, but it has to play an extremely limited role. And unless we approach all policy making with this frame, with this mindset, I think we will struggle. We have to constantly find ways in which the state can limit its role. The state can play a smaller role and enable industry, enable NGOs, etc., to perform and function, instead of trying to decide things and play its role itself. And I talk about some examples, particularly with regard to the higher education sector and public research to illustrate this. So, for example, for public research, the argument that I make is that the government has to fund public R&D, but it shouldn't do it. Today, the government funds and does. It funds public R&D about the same proportion as countries worldwide. So, that's not a gap in funding. But it does it itself in autonomous, independent government R&D laboratories. Instead of that, the government should fund the R&D, but it should do scientific research in the higher education sector and it should do technological research in industry. That's why the recent budget announcement was so welcome, where 25% of the defense R&D budget is now open for funding, both industry and higher education. It's a small step, but it's a very important change in direction. And I think quite could be fundamentally transformative to our innovation system if it is implemented effectively.

Finally, let me talk about the quality of our democracy. The norms of being a liberal democracy, if you like. They're words like authenticity, humility, nuance, these are the words that I think need to characterize how we do things in the country. I've never expected perfection in how we govern and what we do, but I do expect honesty. I think that's an essential need in being an effective, good quality, high norm, liberal democracy. And the essential need for honesty seems to me, is dissent, is argument, it's disagreeing. In a chapter in the book towards the end of the book on culture, I talk about one of my five favorite books, which is a book by, the social scientist, Albert Hirschman, called *Exit Voice, and Loyalty*. Hirschman argues that you respond to a decline in a state or an institution or a company, in one of two ways. You either complain; you use the voice option, or you exit; you stop buying the service, or you immigrate, or you no longer draw on the institution.

Whether you choose voice or exit, because it's much healthier and much better if you choose voice, instead of exit. Whether you choose voice or exit depends on loyalty and loyalty depends on trust. Do you trust the state or the company or the institution to actually do what's best for you? And if you do trust it, then, you will choose voice, you will choose dissent, you will choose an argument instead of choosing the exit option. So ultimately, this book is an argument, I think, for active engagement. It's an argument for understanding, it's an argument for discussion about these kinds of, I think, key issues that would concern India's potential. And I really look forward to today's discussion being in that same spirit of discussion and dissent and argument, because that's so much a part of what we are, and so much a part of what being a high norm liberal democracy is all about. Let me stop there. Thanks.

**Rakesh Mohan:** Thank you. Thank you very much, Naushad. I think that you have really encapsulated the key points in your book so well in such a short period, and you are, of course, exercising your voice and dissent, with the spirit of loyalty to the country. It really is a miracle, in a sense, that Naushad always speaks his voice, provides dissent, both in terms of not hesitating to criticize the government on key policy issues and also deferring with his industry colleagues on many of the things that they would like to say. And it's the quality of his very, very, what I might call, civilized way of discussing and dissenting and exercising his voice. Despite his views, he was indeed elected as president of CII and is called for discussions almost in every forum. Thank you very much, Naushad.

So, let me now introduce our first panelist, Kiran Mazumdar Shaw. She is the founder and executive chairman of Biocon Limited and Biocon Biologics Limited. Among her key achievements of course, is that she's a board member of CSEP, we are very lucky to have her as our board member, and she brings a lot of wisdom too aboard. Miss Shaw has been named among Time Magazine's hundred most influential people in the world. She has been pivotal in redefining the biotechnology landscape and ensuring affordable access to life saving biopharmaceuticals globally. She received the Padma Bhushan in 2005 – efforts in industrial biotechnology, and the Padma Shri much earlier in 1989. She holds a bachelor's degree in zoology, of all things, from Bangalore University in India, and is qualified as a master brewer in Ballarat University, Australia. So, her first intention was to actually become a brewer. So, she has indeed come a long way from the brewing industry to biotechnology.

She has received many honorary doctorates and recognition for preeminent contributions to the field of biotechnology. We have known each other for almost 20 years. She was also generous enough to write a chapter on her work, in the book on India Transformed, some years back, edited by me. So, Kiran, you've been among the leading innovators in Indian industry. One of the striking features of the book as Naushad just mentioned, is the attention that it gives to the role of technology, innovation, design, and R&D or lack of it. Mostly, on lack of it in Indian industry. Naushad has documented, and which he just mentioned on how low our R&D investment is in India, in both the public and private sectors, and particularly, in contrast with China and Korea. I haven't puzzled myself in that we used to think before 1991, that because we were a closed economy, there wasn't any competition, therefore, there was no incentive to do R&D. But even after opening of the economy and competition in general, both domestic and foreign, there hasn't been almost any change in the amount of money, the resources as a proportion to GDP, going to R&D and Indian industry, and one sees very few products being developed, except in your sector and of course, in pharmaceuticals. So, I would appreciate your views on why this has happened, why this is happening, and can we be more optimistic in this area in the future?

**Kiran Mazumdar-Shaw:** So, Rakesh, thanks a lot. And let me first start by commending Naushad on a wonderfully written book. I mean, you know, Naushad is a very meticulous researcher and a very thoughtful interpreter of various aspects of the economy, of democracy and all these things that sort of, basically fit in together to make this whole socio-economic value. And let me also tell you that whilst I've sort of, gone through most of the book, I've particularly spent a lot of time on these chapters on innovation and research, and it was very deftly handled, very wonderfully researched. And let me start by saying, Rakesh, that for me as an entrepreneur who was driven by science, who was determined to start a research-led company, I know how important R&D is to create value. I think that is the fundamental premise on which you need to drive innovation and research because if you want non linear growth, you have to basically start innovating.

India actually, as Naushad said, is sort of one of the lowest investors when it comes to R&D investments. He talked about private enterprise investing only 0.3% the GDP. But even if you look at it at a national level, it's 0.7%, and when you compare this to most of the other economies that are very

innovative economies, even if you look at the US or China, these are all countries that are actually investing upwards of 2% of their GDP in R&D. If you look at some of the other countries in the Asian region who are really, really focusing on innovation big time, is Korea and Taiwan who are investing 4.8% of GDP and 3.3% of GDP. So, we do need to double our spend in R&D. But even when you think about that, you also have to look at another bit of statistics that Naushad has built upon, which I thought was very revealing. If you look at how R&D investments are actually deployed across sectors, if you look at US, US roughly spends about 600 billion on R&D per annum. And that is kind of split roughly about 70% within industry, 20% at universities and the rest is spent actually, in what they call publicly funded institutes.

Now, if you compare that to India, which spends \$18 billion per annum, which is the 0.7% of GDP that I talked about, that is actually spread between the private sector at 35%. So, we are half of what other countries do. Universities, we only spend 10%, which is again, half of what most other countries do. And as Naushad very rightly said, this whole notion of publicly funded research, which is in their own publicly funded institutes, is 55%. So, 55% of that \$18 billion is rarely being plowed into the public institutes, which are like, DRDO and all the kind of government research institutes, and universities get very little. Now, to create an innovation ecosystem, you actually need universities coming up with ideas and patented ideas, which then get basically absorbed by industry to build on and create that value, and you have this whole virtuous ecosystem being created with funding and valuations. And that is not happening. If I look at my own pharmaceutical industry, which you mentioned that invests a lot more in R&D than other sectors, that's a fact. But at the same time, I think we must understand that the kind of R&D most Indian pharmaceutical companies indulge in is very imitative R&D, something which we call reverse engineering.

So, whilst we basically account for 30% of the global market share of generic molecules by volume, we only account for 4% by value. And that's where I think we have to change the game, because we do need to innovate, we do need to research and come up with new molecules. I mean, that is not happening. And I think that's where India is now kind of, venturing into, where I think Indian companies want to now invest in what we call as New Chemical Entities or New Biological Entities. And that's a very, very high risk, high reward game. It's also a very long gestational model, because the payback takes a very long time and the risk of failure is very high. And therefore, you don't see that kind of money coming into this space, and I really believe that we need to incentivize this much broken industry-academia link. It was there many moons ago, but in the last several decades, it's simply not there. We need to make that link happen. And the only way I see that happening, is by incentivizing the industry-academia linkage, where you basically your industry into investing in academic research, which I think can happen. I think we do have the talent, we have the scientific talent, we have the engineering talent for technology, but I think we need to really do a much better job of innovation. I think everyone knows that it's really about the idea and the value of that idea.

How do you create an idea and know the worth of that idea? And how do you keep building value to take it to the market? That is the innovation journey that we all have to really understand, which I think the rest of the developed world does very well, and we need to get there. So, that is one aspect of research and innovation that I think we really need to focus on. It starts with patenting. I always tell academic institutes, when you are doing research, please try and look at what you are doing in terms of patentability. And most people lose track of that because, you know, I remember a long time ago when Ramesh Mashelkar used to be the head of CSIR. He used to always talk about patent literacy and patent operation, those kind of thinking he had come out with. And he was very right, because you have to patent to create that value around that idea. And once you do that, I think we also need tech transfer offices within our academic centers to shape that idea, and to basically, make it into a

marketable idea, which will be licensed by the companies to take to the market. That is what is missing at the moment in India, and we must do that, and that is something which needs to be focused on and incentivized. The other thing I found very fascinating in Naushad's book was this whole concept of design.

I think in manufacturing, design is a very critical and key element of the value of the idea. We are very used to just being very functional as a country. We've always been a very under-resourced country, and we always think of any innovation as something that's great, as long as it functions, but that's not good enough. You've got to design it. You've got to design that product. So, productizing through design is such an important part of innovation. And I think that's something which we really need to learn. And as Naushad very rightly calls this whole process of research and innovation, it's really about building a learning culture and a learning organization to be able to do all of these things. So, I, for one, believe that if you want to really break away from this status quo and steady state growth, you will have to innovate and start building nonlinear growth through new products, new ideas, and it's happening. Rakesh, I just want to tell you that right now in Bangalore, I'm really excited that we have this boom of startups. And the startups are very exciting because they are coming up with new ideas. I, for one, have always believed that in the next 10 years, India can become the largest digital and digitally enabled marketplace in the world. Just think of our demographics, our population size and the demand for digital kind of products, I mean, I think that's what is really sort of, making it very exciting. And if you create the world's largest marketplace, everything will happen in a way that India then becomes the focus.

Today, we are forced to look at marketplaces that are attractive and large, which don't exist in India; we've got to start creating those marketplaces. And I think a digital marketplace is what appeals, at least to me, as someone in this whole area of technology as the way to move forward in leadership. And for that to happen, you've got to innovate, you've got to come up with new ideas, new products, new digital technologies, and it is happening as we speak. We have in Bangalore, got what they call large number of unicorns, which are these billion-dollar value companies that have been created out of just few digital ideas. And I think they're very exciting companies. They've found a niche, they've created a market opportunity, and they're growing. If you think about the fact that there's so much venture money chasing those ideas, that's also an exciting thought because it tells you that these are being looked at as innovative ideas. Some of them may be 'me-too' ideas, in fact, most of them might be 'me-too' ideas, but what they're trying to do is to create new platforms. They're trying to see whether they can improve or adapt these platforms to what they believe is a very different marketplace. So, I think I, for one, feel very optimistic that innovation is happening, will happen. We need to really seriously focus on incentivizing innovation.

In fact, I did suggest to the government that, just as they've come up with production-linked incentives, they need to come up with research-linked incentives. And the objectives of that research-linked incentives must be about certain moonshot areas must be about the industry-academia linkages, and must be about creating value and built from innovation. So, I think I'm going to sort of, stop my comments there, Rakesh, because I'm sure the other panelists would also like to say their piece on other topics. But I'm sure we can discuss this in the sort of, breakout question and answer session. So, thanks a lot.

**Rakesh Mohan:** Thank you very much, Kiran, for those very, very thoughtful comments and very much focused on the book. If I can just press you for a minute, we don't have too much time, that you talked about getting incentives from the government, etc., but you didn't talk about why are your business colleagues are not like you, in terms of investing much more in R&D and innovation. If you take more successful sectors like the automotive, as well as also actually, IT, apart from all the new digital



startups, that are largest IT firms, if you compare them with their counterparts elsewhere, they spend very little on R&D and nor does a whole automotive sector. Almost every component that you use in automotive sector has basically been imported from abroad in terms of design and everything else. Why is it not an incentive, like you said, to bring new ideas and make money out of them?

**Kiran Mazumdar-Shaw:** Well, you know, Rakesh, let's be honest. I mean, our software services companies are doing extremely well and exceedingly well, because it's a huge business opportunity. And this opportunity is only growing. In fact, COVID has made this huge digital transformation as a kind of a must-have for every industry. So, the need for supporting digital with digital services is so huge that I don't think they need to innovate products. It'll take new, a different type of company to innovate products, and that's what I'm hoping will happen, because you are beginning to see such companies, you are beginning to see a few. Some of these companies are trying to productize and develop products. I know that FinTech products are being developed by the tech industry. In Infosys, on whose board I served, Finacle is one such product, which actually, has been very successful for Infosys. But it took a long time for Finacle to really pay back. So, I think they believe that they're not as good as innovating in products as they are in offering services. And if the service opportunity is so huge, then, why would you want to invest, risk money into innovation, which is a long payback? So, those are some of the questions we need to ask ourselves.

So, there must be a compelling need to innovate. And I feel that compelling need to innovate is in the pharmaceutical industry. Even if you look at say, the automobile industry, I think if you look at the market opportunity for automobiles in India, it's so enormous. For a country of our size, we are only marketing something like 40, 50 million automobiles, which is ridiculous. I mean, the market is there to, you know, if you go by the kind of ratios that you see in the developed world, you should be able to market a billion vehicles, but we are nowhere near that. So, until you satiate the market with what it needs as just basic product, why would you innovate? You know, that's the question. In most of the saturated markets, to differentiate and to break the mold, you have to innovate, to kind of, show growth. Here, we have to just keep producing more to show growth. So, I think that is where I find the psyche has to change. And the psyche will only change when there's a compelling need. We have the talent, we have the skills.

In fact, I think in Naushad's article, he actually talked about the fact that when it comes to high skills, India has it. The way we've built many of these sectors, is because of those high skills. We have highly skilled workforces, but the point is, we are pursuing imitative research or imitative innovation or just imitation all the way through, because the demand is so huge. So, we don't at this point in time, need to differentiate, but there will come a time when we will want to differentiate, and it's already showing. Because the value differentiation is what will actually get people to innovate.

**Rakesh Mohan:** Thank you, Kiran. Let me now shift gears and introduce professor Arvind Panagariya, who's a Professor of Economics and the Jagdish Bhagwati Professor of Indian Political Economy at Columbia University in the US. He served as a first vice chairman of the NITI Aayog from 2015, 2017 in the rank of a cabinet minister. During this tenure, he also served as India's G-20 Sherpa. So, we actually have two G-20 Sherpa in this session. I think Montek, you must have been his immediate predecessor as a G-20 Sherpa. So, we're really privileged to have two G-20 Sherpas in this discussion. And of course, he led the Indian teams that negotiate with G20 communiqués. He was also awarded the Padma Bhushan in 2012, he was Chief Economist of the Asian development bank, and was on the faculty of department of Economics at the University of Maryland. Professor Panagariya has authored more than 15 books.

His book, *India – The Emerging Giant* was listed as a top pick of 2008 by the economist magazine. He received his PhD in economics from Princeton University, I think, just two years after I did. So, we were together, we've known each other since the mid-1970s, because we were there together in the Economics department at Princeton and have been friends and colleagues ever since. So, Arvind, partly going on from Kiran's wonderful exposition on the issue of innovation and R&D, I do think that it has a connection to international trade. Naushad has a full chapter on international trade. He's been a proponent of a more open economy, and is also critical about withdrawal from RCEP. He's gone on to propose, "Let us set ourselves a project: In 10 years, every Indian company must either be able to compete with the best in the world or does not deserve to exist". Your overall views, I would like on prospects for returning to more open trade stance, given the ongoing trends and the global economy. Perhaps, I'll follow up with another connected question once you address this one.

**Arvind Panagariya:** Okay. Thank you, Rakesh. Well, let me also join Kiran and you in expressing my great appreciation of the fantastic book that Naushad has written. Like you, I also wondered, when did he find the time. My full-time job is to write books and articles and I exactly know how long it takes. So, like prime minister Modi, he must not sleep. And I often thought that India's development problem could be solved if we had another half dozen Naushads sitting in CII. So, congratulations, Naushad. So, there is definitely direct connection, in fact, Rakesh to what you were just discussing with Kiran, on why the industry doesn't innovate and Kiran said, "Well, you know, if there are these other profit opportunities, why would I innovate?" And hidden behind that actually, is a long-standing history, which is, how, the way we ran the economy for almost half century, where you provided protection against imports on demand. Anything that was domestically not available, and you said, well, I want to produce this, I would supply this, the government will immediately stop the import of that product. It was protection provided on demand.

And then, there was licensing, which also, restricted the domestic entry. And so, then, impact of that was that there was no competition. Anybody who managed to enter the market, actually became profitable. And that, I think, across the board, has impacted the psyche, not just of the bureaucrats, politicians and so forth, but also the entrepreneurs. When there is a problem, the first place where the entrepreneurs look, is the government, "What can the government do for me?". So, specifically to the question, the 10-year project that Naushad proposes, Naushad is a very well-intentioned businessman, and so, even though he endorses generally an open trade environment, he wishes to do this experiment. But first, let me point the danger that that sort of experiment brings with it. When you provide protection, first of all, when you say that it is 10-year protection, it's not a very credible, because from history, the entrepreneurs know that once we get our foot in, we will actually be able to prolong this protection for much longer. But let us say, even if actually, we could credibly commit for 10 years, that protection, even for 10 years, would not bring innovation.

There'll be firms, entrepreneurs who would actually see an opportunity that look, you know, "For 10 years, I got a good deal. And I will continue to produce with my substandard processes, substandard products. I have protected market here, and for 10 years, I'll make profits, enjoy it, while the going is good. And 10 years later when protection is lifted, I'll exit". And so, there is no guarantee actually, at all, that even a credible commitment to protection for 10 years is going to produce efficient suppliers who would then survive after 10 years. So, there is a danger. But even then, I'm willing to go along, play along with Naushad, but I have one condition, that if you would take that risk, then, let us also see if the industry is serious, and let's apply this condition, at least, to the firms which have enjoyed for the last 25 years, protection of 25% or more. Let us first, see if the industry agrees to lifting protection in sectors where for 25 years, there has been protective tariff for 25% or more. If they say, "Yes, we are okay with it", I go with Naushad's recommendation of doing another experiment for the next 10 years.

**Rakesh Mohan:** Okay, let me follow up with that. There is a contrary view to open trade, which is, Associate Dani Rodrick, which Naushad refers to, where the claim is that countries that managed to leverage globalization as China and Vietnam, employed a mixed strategy of export promotion and variety of policies that violate current trade rules. Subsidies, domestic content requirements, investment regulations, etc., and other input barriers were critical to the creation of a new, higher value industries. And then, of course he says, countries that allow free trade alone, Mexico comes to mind, have languished. Now, would one put the new PLI scheme in a similar category? Also, everything you were talking about a minute ago, that the PLI scheme is going to provide for, I think, for five years, certain subsidies to industries under certain conditions, and whether this is similar to the kind of thing that Dani Rodrik is talking about.

**Arvind Panagariya:** Answer to the last point is straightforward, that yes, that is the motivation, and it does fall in that sort of category. The question really is whether Dani Rodrik is right. So, first, let me say to everybody here more broadly about the chapter on international trade, like in the rest of the book, Naushad has read very widely and he really rereads the scholars on both sides, and he certainly then sorts out the views, and it is very nicely done in the book. To the specific question now, what Dani is arguing there, it's an old argument, really, Dani is much later. We have Robert Wade who made exactly the same argument before him, and this was in 1990, so, almost 30 years ago. And to that actually, at that time, Ian Little had replied quite urgently, and I'll come to that. Now, this interventionist model really, where you do industrial targeting, provide protection, and so forth, comes from example taken out of South Korea. The first point to note about South Korea is that, South Korea did not begin its industrial policy, I think, about 1973. Its CI drive the heavy and chemical industries, and doesn't start till about 1973.

Prior to that, there is a whole decade, 1963 to 1973, and there is no industrial targeting. They did protect something like fertilizer and petrochemicals, which are [indistinct- 48:33], but not the rest of the industries. The incentives were all neutral, whether they were export oriented or with protection, these were largely neutral. And during this period, over a decade, Korea grew about 9.1%. And one example, favorite example I give, that there was no targeting being done during this 10-year period, is one of the leading exports that emerged in South Korea at that time, it was the human hair; wigs. If you go back, look at the composition of exports in 1963, human hair is simply not present in the basket. And by the end of this period, 10% of south Korea's exports are human hair. So, no targeting was done, and they grew actually at 9.1%. During the decade that followed, 1974 to 1982, this is the targeting decade. Growth rate actually declined to 6.9%. So, that's my first point.

Now, a broader point of course, here, is that every country that succeeds or fails, intervenes. There is not a country, I mean, Hong Kong is probably the purest example, and I'll mention that again, but nature of the government is to intervene. And so, whether the countries failed or succeeded, countries have intervened. Question really is that, can we connect the interventions to the higher growth, or it happened in spite of the intervention? That really, is the key question. And that's where I think, all the earlier writers, including Robert Wade also, as well as Dani Rodrik, have failed to kind of, make that connection. Now, when Robert Wade wrote about this, and he said that, Korea actually grew at a pretty high growth rate and it intervened. And to say that intervention did not contribute positively would mean that except the interventions, Korea would've grown even faster, and that's simply not credible. To that, Ian Little replied, said that, "Why does Mr. Wade think that that is not credible? In fact, all the other three Asian tigers; Singapore, Hong Kong, and Taiwan intervened less, and all three of them grew faster than South Korea. So, the counter effect shows that Korea would've also grown faster is completely credible". That was his response.

And so, that's the second point. Third point is that, everybody who says that, "Oh, intervention works here, intervention works there", makes a claim. Dani Rodrik writes sort of, a book saying, "Oh, many recipes to development". But what he does there is to describe what happened. So, exposed, we know that these interventions happen and the countries grew rapidly. But can somebody actually give actual model, that, okay, these are the 10 things of intervention that you should do, and these are the 20 things you should not do. But nobody has done that. And your own teacher, by the way, or maybe he was your teacher at Yale, the Yale Economist, Gus Ranis, he commented once on Robert Wade. He said, "Robert Wade and the book in Taiwan exposed what the government did". And then he goes on talking about how Taiwan acted strategically. So, Gus Ranis says that "Wade's *Governing Markets* describes government interventions in Taiwan exposed, but I could find no primer on just how to act strategically". What is the ICP? I mean, you've got to be able to tell us. Just describing that this happened, this happened, and therefore, just doesn't really cut it.

So finally, Mexico. For the record, I should note that it was actually Dani Rodrik, who was one of the former supporters of opening of NAFTA, that this will actually bring great gains to Mexico. And it was people like Jagdish Bhagwati and, yours truly, who was on the opposite side, saying that this is discriminatory liberalization, this is not the kind of non-discriminatory liberalization which produce successes in East Asia. So, now of course, that Mexico has not succeeded, that has become his example of free trade failing. Now, you know. Every single thing that Dani says, there are domestic content requirements, subsidies, this, that, and the other, was tried by Mexico before it opened up. I mean, if you go back to the history of 1980s and 1970s, all these interventions were done by Mexico, and it's because those things failed that Mexico then said, "Well, I'm going to try NAFTA". But if anybody has a recipe to make a success out of Mexico, I would like to know it myself, but certainly, whatever Dani has suggested here for the sectors of Mexico, Mexico had tried already, and he knows that history also.

But like a contrarian, Dani and including being contrarian to himself, because he was the one who first actually was supporting NAFTA at the time of negotiation. But the fact is that nobody has produced, you know, Latin America is not a place where I look for lessons, I must say, because absolutely nothing has succeeded in Latin America. Thank you.

**Rakesh Mohan:** Thank you, Arvind. I had another question for you the most time on that, on higher education, but if there's time later, I'll come back to you. I do hope that you will keep lending your strong voice, along with Naushad, from the other side, the other side being industry, on getting our country to open more, and some of the changes that have taken place in the last many years, and also, made me talk about the exchange rate which didn't have time to ask you about actually. Let me turn to Montek, last panelist. Of course, also, he was G-20 Sherpa for India. He's a distinguished fellow at CSEP, and has been of course, a notable figure in Indian economic reforms from the early 1980s onwards. He has also previously served as a Deputy Chairman of the Planning Commission of India, Finance Secretary in the Ministry of Finance, and also, as the First Director of the Independent Evaluation Office of the IMF. He's written extensively on various aspects of development economics, and is a recipient of the Padma Vibhushan, India's second highest civilian award of public service. He's the author of recent book; *Backstage: The Story Behind India's High Growth Years* is published a couple of years ago.

So, actually, Montek, I think this is a very good segue to you, the last discussion with Arvind. That is, this issue of the government knowing what to do towards growth, comes back to some extent, to the issue of state capacity. Naushad writes a lot about state capacity, and it's critical of lack of state capacity in India. And this leads him to propose private sector solutions to most issues, perhaps even more than what is practiced in capitalist countries. Do you think that we can aspire to build a better state capacity to do things that the state must do, and of course, as to what it shouldn't? I have another question for you once you, of course, you are free to speak on whatever you want to speak on, on Naushad's book.

**Montek Singh Ahluwalia:** Thanks a lot. Thank you, Rakesh. Let me join both Kiran and Arvind in congratulating Naushad on this. I mean, it sounds as if I'm just saying something trite, but it really is a fascinating book. It's different from the kind of books that economists write, because those are always kind of, if you like, configured around a particular way of defining the problem. And I thought this was really fascinating because, it sort of, takes certain themes, and then within those themes, that just kind of, brings out a lot of richness of experience, which I personally found really very good. Somewhere in the book, he mentions that, Naushad, when you were chairman of CII, you maintained a daily diary, and quite honestly, I wish you would just publish that, at least, for your friends. I mean, I'd be fascinated to – because that would have a sense of the sequence of events, knowing what the context was, which is a different way of cutting it. And honestly, if you really did maintain in a daily diary, you can always redact; I think that's the phrase they use, redact things that you think are too insulting, but leave the rest of it in. The book is actually quite sort of, willing, your book is quite willing to criticize in many areas.

So, I mean, you obviously have the instinct of being able to say interesting things, even if they end up being a little controversial, but I seriously suggest that you pull out that diary, do some minimal redacting and just print the whole thing and share it with your friends. In fact, Rakesh, you should offer from CSEP, to do a little kind of Zoom on that particular version. It would be a lot of fun. Now, coming back to this, Rakesh, you had I mean, fascinating discussion with Arvind, and I want to join what you said that, I mean, it's very important for Arvind to remain vocal, putting forward his case on the openness of trade. I mean, I occasionally invoke his name, to indicate that, look, it's not just people outside the government, but even guys whom the government themselves have brought in, who recommend that this be done. I don't do it too often because I don't want him to lose credibility with the government, but I think it is interesting that, you know, I think the big difference between 1991 and now, is that in 1991, there was a global consensus on what to do. We were the only odd guys out not doing it.

So actually, it was relatively easy to say, listen, I mean, just wake up and smell the coffee, and this is the right thing to do. Slowly, you, kind of, were able to get it across. Of course, the fact that we had as finance minister, someone who had done his own thesis in trade theory made a big difference: Manmohan Singh. But the interesting thing is today, that consensus has more or less disappeared, and not just in economics, it's also disappeared in what is the nature of a liberal democracy? What is the role of elites? And that's true in Europe, that's true in America, it's probably true here also. So, I think these ideas are now being picked up and discussed by people in a world in which social media has empowered everybody. So, it's very difficult to know what is an expert view and what is just a view that is circulating around on WhatsApp. And I mean, Naushad in a very balanced way, kind of, puts Abhijit and Dani Rodrik on one side and then puts Arvind on the other side. And he himself, I thought he gives a slight sense of being more on Arvind's side, but while genuflecting to the Dani Rodrik and Abhijit side, saying, "Well, they also have a point". I would've thought these are issues that we really need to discuss much more thoroughly in India.

Now, when you talk about state capacity, we don't have discussions. I mean, I don't know what's going on in government now, of course, but I don't get the sense that these issues are being thrashed out either in government or in industry. I mean, I realize that in public, industry has always applauded whatever the government does. And quite honestly, I can understand that. Whatever sensible things the industry wants to say to government, it does privately, not by making public statements. I have no idea, but from what Naushad says, I get the sense that he is actually, in industry itself, a bit of a lone voice. It may be, and I mean, I'd really like to hear Naushad tell me that it's really true, that a lot of his colleagues actually agree with him. They just don't say it, and I would understand that, but that's

somehow, not the impression I get. I think most of them buy the argument now associated with Dani Rodrick, that this is the way successful countries have operated.

Of course, at the back of your mind, is always this issue that you've got to succeed in exports. I mean, the big thing about Korea was that they never had any doubt that the criteria of success would be exports. Our problem is the criterion of success is import substitution. I mean, if somebody were to say, we are pushing Atma Nirbhar because we want to become, if you like, the *vishwagurus* on vaccines for the world. And the test of that is that today, only two out of five internationally recognized vaccines are being produced in India. In five years, four out of five will be produced in India and we will be exporting them to the world. If that was the trust, I think we might make progress. But the trust is that, a short while ago, we were highly dependent. We had to import masks, now, we are making masks ourselves. And given that masks are pretty low technology product, and we have a large population, if we have a competitive advantage in producing masks, it's good that we are producing it, but that's really not a real sign of success.

I do think that, I mean, Naushad had told me earlier, and I've mentioned it in my book also, the lovely story that, you know, after the liberalization in 1991, he and his brother sat down and said, "Look, what are the products which we would be competitive in if inputs were available duty-free at world prices?" And they came to the conclusion that only 50% of the products they produce, they would be competitive. But then they decided they were not going to produce the other products, and we're going to produce these and then, have put themselves targets that, you know, you go from 10% exports to 20% exports, etc. And I was so impressed by this when he first told me, that the person I play golf with is a small-scale guy, not one of these big-ins, but I kept telling him that, "Listen, how much do you export?" And it was at that time, less than 10%. So, I said, "You should set a target and try and get to it". And I'm happy to tell you that the fellow actually did set targets, and he is now exporting 35 to 40%.

So, this proposition that the mindset change within industry, can make a big difference, is terrific. Of course, since I don't know enough about it, I mean, we need more books like Naushad's, and we need people to actually realize that when people take up a challenge, I mean, as Naushad has done, and Kiran has done and others too, that they're actually able to succeed in a competitive way. We need a lot more examples of this than we actually have, and we are not publicizing them. And, you know, I would've thought Indian industry as a group would start celebrating those who actually managed to do this. Naushad has a slightly misleading graph, if I may, just to prove that I actually read the book, Naushad, because it's very easy to praise everything, but if you say something that you think is critical, then, it really proves you've read it. I think you mentioned the fact that trade as a ratio to GDP, is higher in India than China. But that's dominantly because of software, the service export, which actually includes remittances.

If you just went by trade as a percent of GDP, it's true that we've improved, and certainly, America has no example because they're not actually oriented to product trade and product export that much. But I think in our case, that figure which shows us we're ahead of China as a ratio of GDP, is slightly misleading. But if you cut that out and you just say that, "Look, which are the Indian industries that have really succeeded?" it would be quite an interesting story to tell. I mentioned this also because, we are currently going through what I think is going to be a highly disruptive system change in the country, pushed by two factors. One, is what Kiran herself mentioned, which is the whole digitalization where, thanks to people like Nandan Nilekani and so on, we managed to get the framework laid. The framework is actually laid in the previous government, but this government has built on it very rapidly. So, it's actually a multi-government achievement, and it is significant what has happened and what could happen. So, the whole digitalization area is one. The other is, if we actually rise to the challenge

of meeting climate change, quite frankly, we are going to have to have a radical transformation of our energy sector, most of the energy using stuff, and certainly, the transport sector.

I mean, the structural change in Indian industry is going to be – just look at automobiles. Automobiles think of themselves as the kingpins of Indian industry. That's because they believe that the automobile industry, I mean, let the industrialization change in the United States and therefore, they're going to do it. I mean, anyway, Kiran sort of, implied that when she said we need so many million automobiles, although, mind you, with digitalization and sort of the right sharing, we may not need that many cars, but whatever it is. The mere fact that you go from the internal combustion engine to an electric vehicle, is going to transform industry in the sense that the number of components that an electrical vehicle needs is much, much smaller than something that has an internal combustion engine. So, all these guys who are currently in this very vibrant, booming component manufacturing industry, somebody ought to read them a little bit of a future and say that, look, if we are really going to achieve 100% of automotive sale, it's going to be EV by let us say 2050, which is only 30 years from now.

Then, quite frankly, all the guys manufacturing engine component have a 30-year life. And these are all manufacturers and many of whom have children who are 10 years old. I mean, do they realize that their 10-year-old kid is not going to be running an automotive component manufacturing unit? So, if they want to actually grow, gift him a sensible industry, they better to something else – producing batteries, or refurbishing batteries or something of that. So, I think we don't have enough of a focus on what are these changes and how are we going to become competitive in the light of these disruptive changes. Not a question of just doing efficiently, what you're doing now, but get into the new areas that are coming up and be efficient there. Big challenge. And I think a lot of what Naushad says about how industry thinks, I mean, I just hope that these guys read his book and say, “Hey, I better do some thinking along those lines”. Now, much the same thing is true of government, because government is singularly incapable of doing what people call ‘Whole-of-the-System Thinking’. I mean, let's just look at the climate change business.

Historically, climate change has been discussed in the UN Framework Convention for Climate Change, the UNFCCC, 195 countries, etc. It's dominated by the ministry of environment, which historically, used to look at things like forests and that sort of stuff. And it's supported by the ministry of external affairs, which is a whole bunch of bureaucrats. Now elsewhere, the lead is being taken by a climate change negotiator, who's actually empowered by whatever the president or the prime minister or something, to bring on board, the different ministries that are relevant. And in India, I mean, climate change really means the energy sector. One elementary thing, if we are going to achieve what Mr. Modi has, I think, very sensibly announced, that is, we are going to go net-zero by 2070. I mean, most of his team was strongly opposed to that. I was delighted that he actually said that we were going to be net-zero by 2070. Now, the implication of net-zero by 2070 is, that certainly, coal fired power stations should just get out of the Indian reality by 2050. I mean, they should just be retired, if since all these things have a 40-year life, it also means that other than the coal power station currently under construction, we should announce that we're not going to build anymore.

And the other side of this is that Coal India should become a miner of lithium and these kinds of things, rather than coal, because coal's a dead industry. Nobody's willing to say that. I mean, I don't know whether industry is doing some of this thinking. And the interesting thing is that, unlike in the past, from the corporate sector, you've got some pretty good responses. I mean, there's Mokesh saying that, “Look, I'm getting into green hydrogen and things like that”. Adanis are also getting into green energy. So, the corporate guys are acting quite a bit. I don't know whether our energy corporates are doing the same thing. I mean, for example, Coal India, do they have an internal plan that, in 30 years' time, there aren't going to be that many coal mines that we'll be operating. So, what are we going to do? I

mean, if we are going to go down the solar and wind energy route, take solar, otherwise it takes us back to trade because I think, Arvind should take a look at this because in this budget, one of the things we've raised customs duty on, is solar cells.

So, and now, it's very interesting that at the moment, since we are forcing people to buy solar energy as kind of, directed thing, to get the thing going, the price doesn't matter so much, because you know, the electricity will get sold. But if you're getting into a competitive market, then we cannot be sort of, slapping on tariffs on solar cells, making these things more expensive. And the associate point is that this is an area where technology is going to change very dramatically, because the whole bloody world is working on it. So, are we going to end up with the sort of, ambassador car feared car syndrome? That is, some guy starts producing a solar cell and then, erects "something" on Atma Nirbhar grounds even though other people are producing solar cells that are three times more efficient. So, I think frankly, it's going to be a lot of fun, and I mean, Rakesh, you are running a research institution, so you better plan research around this. Arvind, you're a guru in this area, so, keep a watchful eye open on India, and maybe those of your Indian students who are coming back to sort of, keep guiding this direction. And Naushad, maybe trigger some of your colleagues, and indeed, Kiran also, although you're not in energy, but you are very much – and by the way, Kiran, on digitalization, maybe I'm burbling a bit too much, but you just stimulated me so much.

On digitalization, on the one hand, there's this tremendous enthusiasm that this will be hugely disruptive, disruptive in a Schumpeterian sense of a good thing; new changes, etc. On the other hand, there is this view that digitalization is creating so much power on the part of the big guys who mine your data, that the whole idea that markets lead to rational allocations in the light of consumer decision making, is totally undermined. That of course, is what Lina Khan, the new FTC commissioner, is doing in India saying, all these guys, they may think that they're serving consumers, but actually, they're brainwashing consumers to think they're being served. So, it's a very subtle set of points. And we could have exactly the same problems coming up in India, and it'll become a classic 'big guys' versus 'little guys' thing that the big retailers, I don't mean foreign retailers. Actually, it's interesting because it's the Indian retailers, the Mukesh, all these guys, who want to use this in order to bypass the distribution stream and reach the Kiran store directly. And already, the guys who are being bypassed, or the middle-men, same problem that you have with farm laws.

They're saying, "Look here, bloody consumer, may be getting a little bit more, but my livelihood is at stake. Is this a good thing?" It kind of, reminds me of, I mean, Rahul Bajaj used to say, that consumer interest is not the same thing as national interest. Now, that is actually in current legal theory, a well-established proposition is what they call the Louis Brandeis View on Antitrust Activity. So, we are getting into intellectual areas where there's a lot of farming. Anyway, I apologize for going off. The main thing is, I really enjoy the book Naushad, and congratulations. And do publish your day-by-day diary, which you mentioned.

**Rakesh Mohan:** Thank you, Montek. Thank you. We have just a few questions from the audience. One is a very important one, which is, Naushad, Arvind, Kiran, whoever. The issue of language, does that not put a lot of constraint on scientific and technical education in the country, given that there are so many different languages and not everyone is well versed in English as they grow up? Naushad, do you want to take that?

**Naushad Forbes:** Sure. I mean, I talk a little bit about this in the book too, actually. And I think our great strength is actually our prowess in English, especially when it comes to science and technology. Because if you look around the world, English is the language of science and technology in every country, including in Europe and through much of Asia. It's actually a big advantage that we have in actually, engaging with the world in English. It may not be politically correct to think in those terms, but it's sort of, factual. [crosstalk].



**Rakesh Mohan:** That, yes, of course, that we have a large number because we are a large country who speak English and therefore, it's an advantage. But the majority of population grows up in their own language, and there's not enough textbooks etc. in their own languages.

**Naushad Forbes:** So, you know, actually, in school education, could we do a better job with regional language training? Almost surely so. Could we do a better job with bilingual education? Actually, that's what we end up doing, because we have, very often, even English medium schools, the explanations in the textbooks will be in English in the class where the class teacher will explain subjects and answer questions, and so on, in the local language. So, you have this sort of, combination that ends up delivering bilingual education. I think it actually is quite an effective combination for our engagement with the world, certainly when it comes to innovation. I mean, if we're talking beyond that, it's different, but I think if we're talking about innovation and sort of, global innovation, I think English is actually a very good platform to build that innovation mindset around.

**Rakesh Mohan:** Arvind, do you want to comment on that?

**Arvind Panagariya:** It's a very, you know, wide issue but what I have often felt is that look, you know, they are countries like South Korea, Japan, for which English was not the first language, they've done very well, not China. The language barrier can be overcome. I don't think it is insurmountable. And this also cuts the other way that, in which goes a little bit opposite of Naushad was saying that, we think that somehow, English gave us a huge advantage. But look at countries that did very well; Taiwan, Korea, Hong Kong, China, they caught up. So, at the end of the day, I mean, personally, I feel that along with English, came socialism, which really kind of, hurt India so badly, I mean, that's a separate subject, but. So, I don't think this is really a big barrier. When you want to do science, you learn English and you [indistinct- 1:22:07] those books. In that sense, I could sort of, agree with Naushad.

**Kiran Mazumdar-Shaw:** I would like to add. I would just like to say that, look, I think English is the language of science and engineering, mathematics, to a very large extent. And if you think about the fact that our software industry in India is where it is, and dominates the world, it's largely because of the English education or the digital language that happens to be English, which is what makes us very, very strong. So, from that point of view, I think English has helped us in a very big way. And I can tell you that, in all our labs, or even in the software centers, people will talk in a different language, but they all speak the digital language and the language of science, which is English. They write in English, they do all their research in English. So, I think it cuts both ways. I think English is a big help for a country like India.

**Rakesh Mohan:** Okay. I'll end with one large question, posed to all of you. In the chapter on Democratic Politics, Chapter 11. Naushad discusses the question, whether there's too much democracy is in the way of India's growth. The context is that medical economies of South Korea, Taiwan, and most recently, China, have all been authoritarian during their high rapid growth phases. So, in three decades of top policy making, Montek, and Naushad and Kiran, do you think that's an issue? Arvind of course, sorry. Arvind, do you want to start?

**Arvind Panagariya:** Okay. I'll go first. Well, first of all, I don't think democracy is ever in the way. And our own experience does show that, to a considerably degree, that when policy good policies got adopted, the same economy, which was performing at 3% to 4% has now shifted to between 7% and 8%. So, that's a pretty solid example there. But I do feel one aspect of the Indian democracy which has handicapped us. And that was beginning of the democracy, which has combined simultaneously with socialism. I really think that this has had very long-term effects, because in the psyche of the bureaucratic, psyche of the politicians, psyche the journalists, psyche of the intellectuals, this ideology got embedded, and there is inheritance in this. The new IAS officers that come and learn from the old

IAS officers, new politicians that come in, learn from the old politicians, economists who actually learn their economics in the 50s and 60s and 70s, they then reproduce themselves in the colleges and all. So, this kind of socialist ideology, though much reduced, has still not left us.

And this is where I see it continues to be, continues to express itself, both in terms of slowing down of the reform process; privatization, for example, doesn't happen so rapidly, policies don't get adopted so rapidly. Even if you look back, 20 years after the reforms had already been kicked off, we get largely a socialist legislation, which is Land Acquisition Act, largely another socialist legislation, which is the Right to Education Act. And we revert to protectionism yet again, and the same terminology that we used to use in the PMP, Phase Manufacturing Program – the domestic availability kind thing that no exemption on the tariff rates, so, another 300 products go back to seven and half because of tariffs. I think somehow, this ideology so deeply got embedded along all, ultimately, most part did also come out of the congress party, and so had that ideology embedded you know. So, I think, that aspect of democracy has hurt India. Whereas, you know, if it was authoritarian, I mean, China started the same way – heavy industry and everything, and communism had that, but comes along Deng Xioping authoritarian, bang! he changes it, and then, he can't be questioned. But in a democracy, questioning is very much there for the good, but at the same time, its mixture with socialism, has been a bit deadly.

**Rakesh Mohan:** Montek?

**Montek Singh Ahluwalia:** Well, yeah, I would probably put a little less emphasis on the pervasive role of socialism as an ideology. But I do think that what has happened is that we are today, our democracy is actually highly vulnerable to extreme populism. I mean, you look at the Punjab elections that are going on. What is being said is virtually guaranteed to make the Punjab state economy go steadily downhill until the state government is busted. And it's true of all parties now. And I mean, that's going to be the real issue. I mean, the test of it all is that, will this get corrected because we hit a crisis that make people realize that you can't do this? Otherwise, the way to win an election is thought to be, give any number of freebies that you want, and one view would be that, yes, you give a lot of freebies, but you still observed some fiscal discipline. But actually, what happens is, when you are giving all these freebies, then the state doesn't do what you wanted to do, which is, health and education. And that's a serious problem. Now, maybe this could get altered if there's more power in the hands of the state. But that cuts against this notion that, to hold the country together, you need a strong Centre. That's a very strong kind of belief, which spans both the right and the left. It's not particularly socialist idea. So, it's a tough question. I don't have an answer. We have to wait and see how it works.

**Rakesh Mohan:** Kiran?

**Kiran Mazumdar-Shaw:** Well, I, for one, believe that authoritarianism never yields innovation for sure. So, I just feel that you've got to have a very democratic set of tenets that allow you to question, you have to have this dissent. And that's what really builds a very, very strong and durable culture and a durable economy at that. So, I, for one, believe that you cannot be thinking that economic growth is tied to authoritarianism more than a free democratic system. And I agree Montek. I think you're clearly seeing that very liberal states with very high levels of democracy are doing very well. I mean, you look at a state like Karnataka, where of course, we have a very liberal and democratic culture, which actually is very conducive for growth and innovation. So, I, for one, believe that you can't tie economic growth to an authoritarian kind of system.

**Rakesh Mohan:** Thank you, Kiran. So, Naushad, you'll have the last word, before you do that, one commentator on the chat box says, "Dear Naushad, superb. Your book should be made mandatory reading for all our civil service studies and exams".

**Naushad Forbes:** Well, thank you for the comment. So, Rakesh, you've done a wonderful job of reading my book and promoting it as well. And as you know, in the last chapter in that same section on too much democracy, I come out with a clear view. So, let me start by saying that I'm entirely in Kiran's camp. That I think democracy is hugely powerful as a framework for innovation. There was a wonderful piece written in research policy, oh, I don't know, 25, 28 years ago by Richard Nelson, Arvind's colleague at Columbia –

**Rakesh Mohan:** And my teacher at Yale.

**Naushad Forbes:** And your teacher at Yale. Where he talks about capitalism being an engine of progress. And he was talking actually about the US system versus the Soviet system. And he talks about why the US system was much more powerful because he says that even though capitalism is a more inefficient system, it actually ends up being a more powerful system, because you end up with much more of variation and experimentation that gets thrown up. And because of that experimentation then selected by the market, you end up with a more powerful solution and more innovation that's productive at the end of the day. But I hesitate to, for someone who's gone through my book and has read a hundred thousand words, I hesitate to say, you should read 2,000 more.

But [indistinct- 1:32:14], I wrote a two-part article in Business Standard specifically on this topic, on the role of inclusive politics as a framework and as a foundation for inclusive economics, using another book that you can read about in the article. And the argument really is that, in post 1991, our politics tended to fragment, and we didn't have a dominant political party. Our most reformist government, 1991 to '96, we should remind ourselves, was a minority government for the entire five years that it was in office. It put through the most transformative reforms as a minority government. Second, that as politics fragmented, institutions gained greater authority and power. The Election Commission of India and the session became a much more stronger and much more stronger, independent voice. The Supreme court became much more divergent from the prevailing views of the government. The precedent stopped being a complete rubber stamp, and started pushing things back to the government from time to time. All of these institutions really came to the fore for a period of time, as a result of this fragmented politics.

So, the inclusive politics in many ways, we also had very regional parties that became powerful, but the net result, it seemed to me, was that you had this fragmented politics leading to much more inclusive politics, and the inclusive politics led to more rapid growth. And I think in the last, since 2017, as we've returned to more and more of a dominant political party, as we had with the Congress before up to around 1990, I think that returned to a much more dominant politics, but politics dominated by one party is leading also, then to less institutional independence, and less institutional independence is leading then to poorer economic outcomes. I don't think these things are unconnected. So, that's really where I come out on in those two articles. So, I would argue strongly in favor of democracy, and greater democracy as a way of underpinning greater economic success.

Last comment, if I may please. I think these are wonderful issues and wonderful topics for us to talk about. And I completely agree with Montek. We need to talk about them in government, but we need to talk about them more widely too. We do talk about them some in industry, but we need to talk about them much more widely in general, in terms of public debate. You know, these are great issues for us to debate. And if we can foster more of this discussion, it seems to me that we'll get much further along this path to leadership. Let me stop there.

**Rakesh Mohan:** Thank you. Thank you very much, Naushad first, for giving us the opportunity of launching your book. Thank you, Kiran, for giving your time, even though you are actually away from home. Thank you, Arvind for waking up so early in the morning and being so clear-headed despite the

early hour. And thank you, Montek, for as always, for being with us and contributing. Finally, I must thank my team, Zehra Kazmi, who's the head of our communications. Ishita Kapoor, Trishna, Shishir and Ganesh Sivamani, for organizing and making this event possible. So, I think I've only gone six minutes over time, which is, I think, the best we've done in one of these webinars. So, thank you everyone. And thank you to, of course, all the participants who have logged on to this webinar. Thank you very much.