## ARE JOBS IN INDIA PULLING PEOPLE OUT OF POVERTY?

Ft. Manish Sabharwal



# DECODING Impact

**[00:00:10] Rathish Balakrishnan:** The imagination of what the job market as a whole looks like, is often missing for most people.

**[00:00:15] Manish Sabharwal:** India doesn't have a jobs problem. Our unemployment has stayed between 4% and 8% since 1947, right? But employed poverty has been 30%-35%. You know, I don't believe we have poor people. We have people in poor places.

**[00:00:31] Rathish Balakrishnan:** There is no one strategy that's going to work for every country because it's in the context of the country, it's the context of the time.

**[00:00:37] Manish Sabharwal:** I'm not sure you can take jobs to people. I think you have to take people to jobs.

**[00:00:41] Rathish Balakrishnan:** How do you see where we are and what we've learned about the skills challenge that India's facing?

**[00:00:46] Manish Sabharwal:** India is a much easier place to do business than it was, and we have eliminated some of the difficult stuff. So I think India in the next 25 years, it's an absolutely unique time.

**[00:00:56] Rathish Balakrishnan:** These three issues, which is education being the paradigm we are going, has its own vertical challenges. Skilling, scaffolding that's missing around assessments and the demand side not signaling enough for us to be in a proper equilibrium.

**[00:01:07] Manish Sabharwal:** I think it is that all the ideas on the table have the potential for some spontaneous combustion.

**[00:01:15] Rathish Balakrishnan:** Something that I struggle with constantly is just the scale of the problem that we are solving.

**[00:01:18] Manish Sabharwal:** There are many kinds of labour market outsiders. Women are one kind. Caste can be another kind. Rural can be another kind.

**[00:01:25] Manish Sabharwal:** I think we should really now stop kidding ourselves that government schools are unfixable.

**[00:01:31] Rathish Balakrishnan:** Listen, let's create a flexible model of learning that acknowledges that learning happens by doing.

**[00:01:36] Manish Sabharwal:** We have to shift apprenticeships from pitching to CSR or pitching to HR Head to the CFO.

**[00:01:41] Rathish Balakrishnan:** If there is a way education can pay for itself, that is the model of education India needs.

**[00:01:46] Rathish Balakrishnan:** Welcome to Decoding Impact from Sattva Knowledge Institute from your host, Rathish Balakrishnan, where we speak to experts, practitioners, and thinkers to help us demystify complex social problems and understand how we solve these problems at scale systemically.

**[00:02:02] Rathish Balakrishnan:** It's very hard to talk about the reality for the whole of India in anything that you take, from jobs to education to health. But I think the one area where it is extremely stark is probably the area of jobs and education. Everyone in the city imagines that this is how the rest of India lives, but the organised sector accounts for only 8% of the whole of India.

**[00:02:23] Rathish Balakrishnan:** A large part of India is farmers and construction workers today and are running MSMEs. And the imagination of what the job market as a whole looks like is often missing for most people. And that is crucial for us to have, as we think about our roles in policy making, economic choices, and in philanthropy.

**[00:02:41] Rathish Balakrishnan:** One person who's been through this job market, both top down and bottom up, is Manish Sabharwal. He's had a chance to orchestrate employment for a large number of people within the Indian job market. He's also served on the largest policy boards across the country, including the RBI, in defining what the financial future of this country looks like.

**[00:03:01] Rathish Balakrishnan:** Manish has also had a chance to travel across the country, speaking to young people, to really know the pulse of the country over the last few decades in the job market. So it's great to have you here Manish, to talk to us about where India is in terms of both jobs and education.

[00:03:15] Manish Sabharwal: Thank you. Look forward.

**[00:03:18] Rathish Balakrishnan:** Manish one question that I've always had from people and I've had for people is, how is India's job market doing overall? And as I was telling you, I was recently at an event in Delhi two weeks ago where they were discussing India's job market and how it is doing.

**[00:03:34] Rathish Balakrishnan:** And they actually disagreed on facts, which is, is India's wage increasing over the last decade or is it decreasing? Are we actually seeing more jobs or less jobs? And today, beyond all the numbers and COVID and all of that, it is shrouded in mystery whether economically, as an engine of job creation, is this country doing really well? As somebody who has a very close eye on this, I'd love to hear your thoughts and on how are we doing as a country.

**[00:04:02] Manish Sabharwal:** I mean, we have obviously, you know, like the *Tale of Two Cities*, it was the best of times and the worst of times. We have a stock problem since 1947, and we have a flow problem since 1991. The stock problem since 1947 is we've still got 42% of our labour force working in agriculture. We've got only 11% of our labour force working in manufacturing.

**[00:04:27] Manish Sabharwal:** And we probably have 50% of people self-employed, but they're not self-employed, they're self-exploiting. So what has happened since 1991 on flow, we haven't produced enough manufacturing jobs. We haven't formalised the economy enough. And I think I would be careful with framing this as a jobs problem.

**[00:04:47] Manish Sabharwal:** Because India doesn't have a jobs problem. Our unemployment has stayed between 4% and 8% since 1947, right? But employed poverty has been 30% to 35%. And I think this distinction is important up front, because if you think India has a jobs problem, then you'll throw money from helicopters, you'll mandate a three-day work week and do some labour laws.

**[00:05:10]** Manish Sabharwal: Or you will take away people's shovels and give them spoons to dig with, right? Because if people are *bhooka* (hungry) and *pyaasa* (thirsty), then you've got to really do the... If the patient is in the ICU, you don't tell them to lose weight or quit smoking. But if the patient is in the ICU for 50 years, then you've got to think a little bit about, you know, what is the challenge here. And so I would really hope people, and I think now people have shifted the conversation from jobs to wages, right? Because wages are a sign of productivity. It's a sign of productivity of five things. You know, I don't believe we have poor people. We have people in poor places and in five poor places.

**[00:05:53] Manish Sabharwal:** One is states. You know, I live in Karnataka. My parents live in UP. Both states have the same GDP, but Karnataka does it with one-fifth the number of people. Cities, you know, if everybody in India lived in Bangalore, then India's GDP would be more than China, right? India's GDP is 2,500 dollars. Bangalore's GDP is 12,500 dollars.

**[00:04:37] Manish Sabharwal:** So those are the two geographic places, right? I mean, if an electrician moves from Balasore in Orissa to Lucknow in UP, they get two times more salary. You move to Bangalore, you probably get four times more salary. You move to Dubai, you get eight times more salary, but you move to Switzerland, you get 25 times more salary.

**[00:06:29] Manish Sabharwal:** It's the same damn electrician with the same damn skills. So beyond a point, the pathology is not at the level of the individual. It is in the external environment. If you think states and cities are two places, then the next three are more conceptual, which are, which firm you work for, which sector you work in, and which skills you have, right? We all love IT, but IT is 0.8% of India's labour force. It's a rounding error, but we love IT because it's 8% of GDP, while agriculture is 42% of the labour force and only 14% of GDP, right? Firms, if you... we finished an exercise with the World Bank a few years ago, if you rank manufacturing companies by size, there's a 24 times difference between the biggest and smallest manufacturing firms.

**[00:07:15] Manish Sabharwal:** Now, if there's a 24 times difference in productivity, then you'll never pay the wage premium. If you don't pay the wage premium, you'll never be productive. So you get stuck in this low-level equilibrium.

[00:07:26] Rathish Balakrishnan: Correct.

**[00:07:27] Manish Sabharwal:** Which informs, shows up in our enterprise stack, right? We have 63 million enterprises, 12 million would have an office, 12 million work from home, only 1 million pay social security. Only 26,500 companies in India have a paid-up capital of more than 10 crores.

[00:07:43] Rathish Balakrishnan: Hmm.

**[00:07:44] Manish Sabharwal:** 63 million enterprises means nothing if it only translates to that small number at the bottom. And then with skills, I mean, I pay three times a different salary to a kid the same age with technically the same qualification on paper, right? For feet on street sales jobs. So I think that the notion that wages is a more complex problem.

**[00:08:03] Manish Sabharwal:** The notion that India lacks productivity because jobs are easy to provide, but do those jobs pull you out of poverty is a question that I think too many Indian policymakers have not asked, which is why I think we oversold fiscal and monetary policy. You know, if fiscal deficits could make countries rich, why would any country bother being poor?

**[00:08:23] Manish Sabharwal:** So I think overselling fiscal and monetary policy has been one of our challenges in economics where you don't structurally take the worm's-eye view of the daily life of employers. You're always taking the bird's-eye view or the satellite-eye view of an employer, you know, so then everything is aggregated to the level, but on a daily basis, the regulatory cholesterol is one of the reasons why India's flow of jobs since 1991 has transformed the stock of jobs, right?

**[00:08:54] Manish Sabharwal:** In the same period, China moved 550 million people from farm to non-farm employment. We still have 200 million people on farms who need to be moved out. We don't need 250 million, 220-230 million people on farms. We don't need 50% of our labour force to be self-employed. That is not some overweighted entrepreneurial gene among Indians.

**[00:09:16] Manish Sabharwal:** The poor cannot afford to be unemployed. So they're self-employed, right? And so much informality is bad for productivity because informal firms undertrack the talent or the technology or the capital to be productive, right? What is formality in the end? It hurts us at the formal sector and it hurts them in the informal sector. So I think the jobs question should be viewed as the wages question. I think the wages question should be viewed as five ways to drive higher productivity, which is states, cities, sectors, firms, and individuals. And just take, in all these five, the firm one is the most important, in some sense, because firm productivity decides wages.

**[00:09:56] Manish Sabharwal:** You know, I think the only thing left is regulatory cholesterol. Why have we not converted mass democracy to mass prosperity since 1947? I mean, India has created the world's largest democracy on the infertile soil of the world's most hierarchical society. And technically, building a democracy should be harder than building an economy because, you know, building a democracy is not an algorithm. So I think the regulatory cholesterol in my mind is why we have not raised our wages. Why we have not built productive firms. Why we don't have enough factories.

**[00:10:33] Rathish Balakrishnan:** I have a question here, Manish. I think one, by the way, a phenomenally comprehensive answer, but one question and one hypothesis I've always carried is that regulation is of course the cholesterol, but the way comparable countries in Eastern Asia solved for it is by being a lot more export-oriented as a country. A lot of what Korea did, South Korea did actually, and a lot of others did, which are not small countries per se, was to have just a significant export focus and say, "Hey, use that as a force to clean up the cholesterol. Prepare the design, build the large factories," etc. And we never did that.

**[00:11:09] Manish Sabharwal:** Don't you think that was important? The lack of regulatory cholesterol was why they exported. I think that our correlation and causation are important to see which one is going where. I think that their regulatory cholesterol... I mean, we just did a report last year called *Jailed for Doing Business*.

**[00:11:28]** Manish Sabharwal: There are 26,000 ways for an employer to go to jail in India. Now, yes, I know there's no CEO in jail. But there should not be 26,000 ways. There shouldn't be 67,000 compliances. There shouldn't be 6,700 filings. So I'm not sure that India has not tried to do manufacturing. It's not done it because it's really hard to set up a factory with current labour laws, with current tax laws, with current compliance requirements. Otherwise we go back to the cultural explanation of why we didn't do it.

#### [00:12:01] Rathish Balakrishnan: Yeah. Hmm.

**[00:12:02] Manish Sabharwal:** And I think infrastructure and skills have shifted from being a dagger in the heart to a thorn in the flesh. Infrastructure was a dagger in the heart in the late '90s and 2000s, but we've really invested. It can get better, faster, quicker, but I don't think it's a binding constraint. And skills, I mean, electronic assembly is proving that, you know, Foxconn and others do eight weeks of training in the classroom and then eight weeks on the job. We used to dance with ghosts of *do saal lagenge* (It will take 2 years) to do an iPhone manufacturer.

### [00:12:26] Rathish Balakrishnan: Right. Yeah.

**[00:12:31] Manish Sabharwal:** People are making iPhones in 16 weeks no? Because most of the technology is embedded in the machines and the processes, and you're just doing assembly. So I think that I acknowledge that skills and infrastructure are important, but there are no binding constraints. So by elimination, I think regulatory cholesterol explains because cultural explanations are at best, the soft bigotry of low expectations and at worst, they are racism. So I

think we have to be honest that yes, I think Indian entrepreneurs have done, I mean, India exported more software than Saudi Arabia did oil in 2021. So yes, services exports are much smaller than goods exports.

**[00:13:09]** Manish Sabharwal: And services exports are much more skill-intensive than goods exports. And global services exports are 6 trillion, while goods exports are 26 trillion. So, obviously, we should focus on getting 26 trillion. But there's an important difference also in timing, right? I mean, when Deng Xiaoping, he was very skilled, but he was also very lucky in China. Started opening up in '78. He got a 30-year supercycle or maybe a 40-year supercycle of global growth, global openness to trade, and global deconstruction of manufacturing supply chains. That is not the hand India has been dealt in 2024.

**[00:13:47] Rathish Balakrishnan:** I have actually had a chance to talk to a senior bureaucrat who quoted you and your earlier work around regulation, that portal that you had to say, "Here are all the things that you have to solve." Shaking conversations in the government to say, "Hey, we really have to fix this, right?"

**[00:14:00] Rathish Balakrishnan:** It's that one moment where they put that report on the desk and say, "Look at what Manish is saying. We need to fix this." One question is, do you see that shift happening in the government today? Is it more of a slow shift or is it something the government is struggling to solve for, given the centre-state conundrum that we have?

**[00:14:16] Manish Sabharwal:** Yeah, see, ease of doing business is now equal to civil service reform, unfortunately, right? And it's not the 6,700 IAS officers, it's the 25 million civil servants, right? I mean, even tomorrow, if we got rid of all the filings, compliances, and imprisonments, these 25 million would replicate it within five years, for three reasons.

**[00:14:38] Manish Sabharwal:** There are three philosophies in some sense. You know, bureaucrats have this thought world of "prohibited till permitted," right? Drunk driving is an argument against cars. So you have to ban cars on the road if there are possibly drunk drivers, rather than put the drunk drivers in jail. And the other is bureaucrats tend to be too small for big things and too big for small things.

[00:15:00] Rathish Balakrishnan: Yeah. Hmm.

**[00:15:02] Manish Sabharwal:** And I know that we live in a Parliamentary system where technically the Parliament makes laws, but criminal provisions are mostly put in by the drafters, and the drafters are all bureaucrats. So I think it's very important that we recognize that this steel frame has become a steel cage now. This is not a bureaucracy rant.

**[00:15:19] Manish Sabharwal:** It is the incentives of bureaucrats, right? They can't choose their own teams. They can't punish or reward their subordinates. They can't pick other than L1 tender, which means they'll have some dhobi nai supplying software. But most importantly, in the last 10 years, this corruption thing has meant that anything that goes wrong, we don't distinguish

between fraud, incompetence, bad luck, and bad judgement, right? Anything that goes wrong is viewed as fraud. So I think it's important to recognize the incentives of the civil servants. And that's why this regulation has become entwined with civil service reform. I don't think we'll be able to make India a fertile habitat for highway job creation unless we get civil servants to recognize that, of course, there will be private sector chores. But there's also corrupt bureaucrats. There's also goofy politicians, right?

**[00:16:12] Manish Sabharwal:** See, everybody has three problems. The government has an execution deficit. The private sector has a trust deficit, and nonprofits have a scale deficit. In fact, one of the reasons India is poor is the lack of teamwork, right? Between the three, we all climb on a high horse and look down upon the other.

**[00:16:28] Manish Sabharwal:** So I think that this regulation, obviously, there's a centre-state conundrum, but... you know, Indira Gandhi in 20 of her speeches had said strong states lead to a weak nation. N. T. Ramarao, the next morning, responded saying the central government is a conceptual myth. Everything that is required to be done by matters for citizens is done by state governments.

**[00:16:48] Manish Sabharwal:** You know, life is somewhere in between both of them. You can't do defense in state governments. You can't; you need a lot of that, but obviously, medical health, law, and order are in the hands of states. So I think 29 chief ministers matter more than one prime minister. And 200 mayors matter more than 29 chief ministers.

**[00:17:04] Manish Sabharwal:** So we have only in the last five years devolved funds, functions, and functionaries from Delhi, right? For the first 70 years, the central government used to spend more than state governments. It's only in the last five years that state governments went... but now state governments don't want to give money to cities.

**[00:17:23] Manish Sabharwal:** In India, only 3% or 4% of total government spending is done at the third tier of government. In China, 50% of spending and 50% of employment, even in the U.S., is done by the third tier. In India, the central government spends 48 lakh crores, state governments spend 58 lakh crores, two and a half lakh municipalities and panchayats only spend four lakh crores.

[00:17:43] Rathish Balakrishnan: Correct. Hmm.

**[00:17:46] Manish Sabharwal:** It's very important for us to recognize that this ease of doing business is a bit of a traffic jam between the three tiers of government. But fundamentally, it's about a tone from the top and a philosophy of saying that, yes, there are goofy characters in the private sector, but you can't write the law for those drunk drivers, because then you ban cars on the road, and then the whole economy suffers.

**[00:18:09] Manish Sabharwal:** So I think there's a philosophy shift. There's a power-sharing shift to recognize that the people closest to the problem should have the funds, functions, and

functionaries, which are power. And the third shift is just to recognize that fiscal and monetary policy won't work, and the worm's eye view of employers is more important than the bird's eye view of employers. So once you make these three shifts—philosophy, sharing of power, and the worm's-eye view—I think regulation, and we're making progress. I wish we could do it faster, but maybe that's the fixed cost of democracy. I don't know.

**[00:18:44] Rathish Balakrishnan:** No, I agree. I agree. And I think that, and this is a point that Neelkanth Mishra made in the conversation that we had as well, to say, hey, you, there is no one strategy that's going to work for every country because it's in the context of the country. It's the context of the time. And what is the context of our country? And what is the context of the time, I think is very, very important. You spoke about regulation, Manish, I just had one further question before I come back to regulation. You talked about the law of the land, and you're right. It's not as bad today, but the place-based prosperity is so stark today.

**[00:19:12] Rathish Balakrishnan:** And, you know, I was in a different place and I don't want to name it a few weeks ago. And it struck me that economic action is not going to follow unless people feel safe in this place, both in terms of the ownership of their property and in terms of security. So, do you think that is still a problem that India has to solve at scale? Or do you think that that's on its way to being solved across multiple countries and multiple states?

**[00:19:33]** Manish Sabharwal: I think pure law and order security, there will be some conflict zones but India overall, the conflict of that kind, which we saw in the '50s, 60s and 70s is way down. We're on our way to do that. But I'm not sure you can take jobs to people. I think you have to take people to jobs. So we don't have a Chinese New Year where 150 million people buy a train ticket for their four-day weekend in February on chart to Diwali, Eid or Christmas.

**[00:20:01] Manish Sabharwal:** We should... I mean, it's in the political imagination. The whole of India cannot be a fertile soil for job creation. I think in the short run, we will have to have more internal migration. I think we should have more external migration also. I mean, 17 million diaspora sends us \$120 billion.

**[00:20:21] Manish Sabharwal:** We should raise that to 30 million and 300 billion of remittances. You know, so we should send 13 million more. I mean, right now, illegal migration is killing legal migration. But I think a well-structured guest worker program is one strategy for India to think about where we send 13 million people–nurses, truck drivers, you know, teachers, many things–for the wage premium, and they come back in five years.

**[00:20:48] Manish Sabharwal:** So there's nothing wrong with that. It's like internal migration, but internal migration between the North and the East and the South and the West has increased, but only in some, you know, very clear pockets like Kerala, right? Kerala is now 9.5% Bihari because they sent 10% to the Middle East, so they brought 10.5% from there. But you can't be a civil contractor in Chennai unless you speak Hindi.

**[00:21:15] Manish Sabharwal:** But it's clear that this migration in the short run is happening. It's not necessarily a good thing. You know, when people in Punjab—the Chief Minister of Punjab recently told me, wherever you go in the world, I went to Vladivostok. And there was a Punjabi there, and we are so enterprising. I'm like, you people, nobody wants to live in Vladivostok. They left Punjab because there were no economic opportunities there.

**[00:21:37] Manish Sabharwal:** This is not all voluntary migration. I mean, much of it is forced because they had to leave. So I think that the question of place-based prosperity, geography in... I mean, the world is second best at best. You know, in a first-best world, I would take jobs to people. But in a second-best world, you have to take people to jobs. And the whole of India doesn't have to get fixed for us to deliver prosperity for the whole of it.

**[00:22:05] Rathish Balakrishnan:** Yeah. And you know, a longer conversation, there are some times where we move really, really fast. And there are some things that we go glacially slow. And especially when you're in Delhi, it's even more warping because you realise everybody is busy, but nothing is moving. And we wonder why. But coming back, Manish, to the same question around the wages argument and economic status, what gives you hope? There has been talk about China plus one. There has been good talk about Apple and others increasing their investments in manufacturing in India. Tamil Nadu, for example, is really benefiting from some of these investments as well.

**[00:22:40] Rathish Balakrishnan:** There have been conversations on STEM. There have been conversations on logistics. As you see the market, what gives you hope around the creation of value? Because we've talked about the leaking bucket problem, which is the system has issues. But beyond that, are there trends that are creating greater value for us in terms of jobs and wages?

**[00:23:00] Manish Sabharwal:** I mean, fundamentally, all the other seven problems we have eliminated, right? So, regulatory cholesterol is flick-of-the-pen reforms. See, there are three kinds of reforms: capacity-building reforms, institutional reforms, and flick-of-the-pen reforms. Now, capacity building, infrastructure building, NEPs, you know, a 15-year glide path on human capital.

**[00:23:22] Manish Sabharwal:** I mean, there are many improvements in India. India is a much easier place to do business than it was. And we have eliminated some of the difficult stuff. So I think India, in the next 25 years, is in an absolutely unique time. I mean it will lead; there will be factory refugees. There are 40 of them going around. Only three of them from China have made the leap. Three of them have made the leap right now—Samsung, Apple—but there are 40 more who are ready to make the leap. And they're not choosing India. They're choosing which state to operate in. They've already chosen, and in some sense, so they'll have, they'll consider Tamil Nadu, Maharashtra, and stuff like that.

**[00:23:58] Manish Sabharwal:** So my sense is we are already on our way to a very different enterprise future. I'm just hoping that if this last round of regulatory cholesterol changes, then

we will be able to accelerate it. I mean, it's important to recognize, despite all the drama and all the noise, investors have made 13 times their money on it.

[00:24:20] Rathish Balakrishnan: Yeah, yeah.

**[00:24:20] Manish Sabharwal:** So if we convert the GDP growth to shareholder returns, I think we can easily convert the GDP growth into wage growth also.

**[00:24:31] Rathish Balakrishnan:** And one last question on the demand side, before we come to the supply side. We talked about formality a lot, Manish, and I think one of the things that, you know, that we've been able to do is to move money digitally, even at a coconut seller level today, which already gives us a digital flow to capital, which we never had.

**[00:24:48] Rathish Balakrishnan:** And that's the first step to formality. And then we, on that, enable credit, provide that as a carrot, etc., but are there other ways beyond the regulatory hurdle, which is that just don't make it so expensive for somebody to be formal? Are there other things that we need to do to make the Indian market more formal?

**[00:25:03] Rathish Balakrishnan:** Because sometimes I wonder whether the ideal state for India is going to be a place where informality continues to exist, but we just manage it better than where we are right now. And I know, you know, your point about informality just being a joke on the law, but would love to hear your thoughts on that.

**[00:25:20] Manish Sabharwal:** See, development is moving from deals to rules, right, as land purchase. You know, so the transmission losses between how the law is written, interpreted, practised, and enforced are essentially informality or they are corruption, right? And I think it's very inefficient. For everybody in India, if you follow a rule, you feel like you missed a deal.

**[00:25:41] Manish Sabharwal:** You should have called somebody, you should have spoken to somebody. It's very inefficient to look at the rules and then say that, you know, you can't follow them. So again, back to my regulatory cholesterol point, that in the past, people concluded that the costs of formality were higher than the benefits of formality.

**[00:26:00]** Manish Sabharwal: And I think GST will change that a little—lower, lower regulatory cholesterol. And people will recognize that formality gives you access to talent. It gives you access to technology. It gives you access to capital. It just makes you more productive, either as an individual or as an enterprise. So I think the benefits of formality were outweighed in the past by the costs of formality. As we reduce regulatory cholesterol, as we digitise, as we do all the stuff, I think urbanize, formalize, industrialize, financialize, and human capital are the vectors that raise wages. So, if we do all these four or five, then the benefits of formality will be realised.

**[00:26:45] Manish Sabharwal:** So I think formalisation is... I mean, we can't make peace with informality because then you'll always encourage transmission losses between how the law is written, interpreted, practised, and enforced. And that's just very inefficient for a large country

like India. So, the more we make the law as it is written to be as it is practised and enforced, the more efficient it will be for this country. And then that's when you will see the median household income rise. See, you know, per capita GDP is going to rise.

**[00:27:18] Manish Sabharwal:** But finally, median household income is what should be our metric, and that needs us to do all five productivities: productivity of states, productivity of cities, productivity of firms, productivity of sectors, and productivity of individuals. So I think formalisation is very closely linked to productivity.

**[00:27:36] Manish Sabharwal:** And you know, the two shock absorbers in our labour market—agricultural employment and informal employment—are suddenly no longer acceptable to kids. Actually, nothing has changed in India, but the kids are saying that what was self-exploitation, which was good enough for their parents or their grandparents, is no longer acceptable to them.

**[00:27:56] Manish Sabharwal:** So I think this train has left the station anyway. They are not going to accept the *Raju Chotu* jobs anymore. And the *Raju Chotu* job is just the proxy for informal enterprises and informal employment. So I think we should not make peace with informality. But we must recognize that a large part of informality comes from regulatory cholesterol, which tips over the calculation on formal and informal.

**[00:28:20] Manish Sabharwal:** I think we have to take the worm's-eye view of employers' daily lives and then reduce the costs and raise the benefits. The superstructure of digital public infrastructure actually improves the returns to formality, you know, the exhaust that you have from credit, the digital compliance that you have. I mean, you can't hire kids without appointment letters who want loans to buy jobs. So there's all kinds of drivers of formalisation. So I'm quite clear that the 63 million enterprises should come down, the number of 1 million social security payers should go up, and the 26,500 companies in India with a paid-up capital of more than 10 crores should double or triple in the next year.

**[00:29:05] Rathish Balakrishnan:** Yeah, absolutely. Let me move this to the fifth lever you talked about, Manish, which is the supply-side view we have, which is really the skills question. And you've always said in the past as well, India does not have an employment problem. It has an employability problem, which is, are we really ensuring that people have the right skills to get the right jobs? And as we continue to increase the aspirations of people, just the point that you mentioned, other jobs are not going to exist, which means that the aspiration gap is shrinking. On the other hand, you know, recently I was listening to a CII roundtable of CEOs before the budget. They all said, "Listen, our biggest concern as a company today is actually talent."

**[00:29:45] Rathish Balakrishnan:** You know, we need way better talent than what we have right now, not just for us, but across the value chain. But our skills seem to lack us, and we've done many, many things over the last decades, right? I've seen the NSDC curve, Skills University, Apprenticeship. How do you see where we are and what we've learned about the skills challenge that India is facing?

**[00:30:06] Manish Sabharwal:** See, the last 20 years have taught us that there's a market failure in skill development. Employers are not willing to pay for training your candidates; they're willing to pay a premium for trained candidates. Candidates are not willing to pay for training; they're willing to pay for a job. Banks and microfinance aren't willing to lend to a candidate unless a job is guaranteed, and training companies are unable to fill up their classrooms.

**[00:30:29] Manish Sabharwal:** So while there's been a lot of innovation and action on curriculum, pedagogy, and teacher training, finally the question is, "Who's going to pay for it?" The government wants employers to pay, parents want kids to pay...There are all kinds of... everybody's saying, "Who will pay?" And this is largely because you can't manufacture your own employees, right? You pay for training, but there are three holes in the bucket for an employer. You pay for training, the kid doesn't get it. You pay for training, the kid gets a job, but it's not productive. You pay for training, the kid gets a job, is productive, but he leaves.

**[00:31:05] Manish Sabharwal:** So learning risk, attrition risk, and productivity risk just mean that you're finally screwed with this. But the five design principles that I think we have learned about are: it has to be learning while earning, because, you know, in a country like India, stock is as important as flow. Not all parents can pay, and not all people can afford to pay while learning.

**[00:31:27] Manish Sabharwal:** So it has to be learning while earning. It has to be learning by doing. You know, soft skills are not taught, they are caught. Learning by doing is very important. It has to be learning with qualification modularity. You know, the social signalling value of a degree matters. But only if you keep multiple on-ramps and off-ramps can you encourage diversity, right?

**[00:31:48]** Manish Sabharwal: So a three-month certificate should be an opening balance for a one-year diploma, which should be an opening balance for a three-year degree that you can do over a long period of time. You can do a degree in seven years: you go work, get a diploma, go work, get a certificate, go work, come back. So I think qualification modularity was not there in the past. You want multimodal delivery, or flexible delivery, because you want an online classroom to be recognized as the same as an on-site classroom, to be recognized as an on-job classroom, and to be recognized as an on-campus classroom. Because otherwise, we traditionally had only one classroom, which was on-campus and it looked like Oxford, Harvard, or IIT, which just doesn't work for skills.

**[00:32:30] Manish Sabharwal:** And the fifth one is learning with signaling value—an employability signaling way, not social signaling. You know, I went to Wharton. Wharton's a good place to be at, but it's a better place to be from, right? The fundamental value of going to IIT is being from IIT, not at IIT. So I think, but that's social signaling value, which Michael Spence got his Nobel Prize for, but I'm talking about employer signaling value? People may not know how to read and write. So you need signaling value of the certification.

**[00:32:53] Manish Sabharwal:** So, in my mind, if we implement all these design principles—learning while earning, learning by doing, learning with qualification modularity,

learning with flexible delivery, and learning with signaling value—which we are now starting to think about as NEP, also has destroyed the apartheid between education and skills.

**[00:33:15] Manish Sabharwal:** In the past, this big partition between education and skills. And we must recognize those colleges and what they used to be... The world has produced more graduates in the last 40 years than the 400 years before that. This means 60% of taxi drivers in Korea have a college degree, 31% of Walmart checkout clerks have a college degree, and 15% of security guards in India have a college degree, but the social signaling value seems to matter of the college. So what we're trying to do in skills, by converging it with the higher education system, is create that diversity. Now, will these be separate universities?

**[00:33:51] Manish Sabharwal:** Research universities have a very different thought world than a say, ability university? Is a skill university a contradiction in terms? It doesn't matter as long as this whole system works together, because I think globally there is a crisis of financing in higher education. You know, student debt in the U.S. is a trillion dollars. Some of it may have to be written off. I mean, the returns to higher education are concentrated in the top 200, 300 universities in the U.S.

[00:34:20] Manish Sabharwal: And we talk about endowments, 800 billion dollars in the U.S., but 50% is with 20 out of the €5,000. So I think there's a crisis of financing. There's a crisis of signaling value. For India, we have started off now, you know, we've just opened up. NEP has allowed three foreign universities to set up. We've now allowed degree apprenticeships. We've allowed a number of online learning to slowly start. So I think overall there is a good convergence of the three of education, employment, and employability because what kids are finally looking for is one-third college, one-third ITI, and one-third employment exchange. They say, "Give me the social signaling value of college. Give me the skills of an ITI and give me the matching with an employer of employment exchange."

### [00:35:05] Rathish Balakrishnan: Hmm.

**[00:35:06] Manish Sabharwal:** There's now the policy room for innovation for universities, for employers to do this kind of mix and match rather than say that, you know, the employability world is separate from the education world, which is separate... See the government is organised vertically, while this problem is horizontal. You need to think about how innovation always happens at the intersection. So I think NEP, combined with NSQF, combined with many other micro-credentialing regulations, I mean, overall UGC is also recognizing that they can no longer, I mean, 20 years ago, the oxygen was rare on the high horse that UGC was, right? I mean, we just used to look down upon the whole world in terms of, you know, this thing. Degrees are for, you know, vocational training is for other people's children. It's not for our children.

[00:35:54] Rathish Balakrishnan: Hmm. Correct.

**[00:35:55] Manish Sabharwal:** Now that we are converging the worlds, I think the problem with the last round was there was also not enough hands-on training, practical training,

apprenticeships. I mean, Germany has 2.7% of its labour force. Germany, Austria, Switzerland are the three places which have got apprenticeships right? All of them have between 2.2% to 2.7% of their labour force in apprenticeships. If we had that number, we would have 15 million apprentices. We have half a million.

[00:36:22] Rathish Balakrishnan: Hmm.

**[00:36:23] Manish Sabharwal:** So I think that the recognition that, you know, getting to 15 million apprentices requires connectivity with degrees, requires multimodal delivery, has also happened. So obviously we've spent a lot of time, we've done a lot of iterations, but fundamentally why degree apprenticeships also matter because they solve the financing problem that I started with.

**[00:36:46] Manish Sabharwal:** They attract new money from employers. Employers cannot manufacture their own employees, but apprenticeships pay for themselves. I can prove to CFOs now, in the past we used to go to CSR or go to HR for apprentices. Now we go to the CFO because we can prove that apprentices pay for themselves in three ways. Higher productivity, faster time to hire, and lower attrition. Because you've taken the kid for a test drive, the kid has earned specific skills by spending time in that, and your productivity and attrition is lower because they already know what they're getting into. So I think that in the next frontier, obviously not everybody will want apprenticeships, not everybody will want this, but my sense is apprenticeships have, or learning by doing is fun. Even if we don't call it an apprenticeship, most of our learning in life happens by doing it.

**[00:37:37] Manish Sabharwal:** So I think that the skills reboot, which is happening, is partly happening because NEP has created open architecture. It's partly happening because the financing crisis is hitting skills, and you want to attract new money. It's partly happening because the demand side is driving programs rather than the supply side driving programs.

**[00:37:57] Manish Sabharwal:** So I think there's a bunch of forces coming together, which I think, I don't view for the next 25 million factory workers in India, I don't think skills is the binding constraint for the next hundred million workers in India. We need to do that. And that's why NEP has a 15 year plan.

**[00:38:14] Rathish Balakrishnan:** Right. But two questions here, maybe three questions here, Manish. One question is when you look at the educational hierarchy, you know, let's say there are a hundred kids between grade one to eight right now. 26 of these kids in India today go to college, but maybe two of the kids today have any signaling value that is of relevance in the ecosystem, right?

**[00:38:33] Rathish Balakrishnan:** Like the NIRF ranking, it's really the top hundred colleges that actually can create economic value that can actually shift median and family income. The rest of it ... social signaling, maybe when you're getting a bride, maybe better, but in the job market, it's not as relevant. And that is an education system that's been running for 70 years and so on.

Is that a similar challenge in skilling, right? That's one question. Maybe I'll just frame all the three questions so you can answer them together. Maybe they're all connected, which is that the ladder of education is still very, very narrow at the top. It's two out of a hundred that's getting any signaling value that is there, financially remunerated.

**[00:39:08] Rathish Balakrishnan:** Two is, I think the scaffolding for skilling in general, in my impression, is broken, right? Like, even to assess skill is a challenge. Like, when you talk about recognition of skilling, like if I work, do I know I work well or not? RPL has not really been successful because we've not found ways of assessing whether somebody is skilled or not, as much as somebody can write an exam and prove that they can pass it, you know.

**[00:39:32] Rathish Balakrishnan:** And that scaffolding then creates a lot of other issues around how do I recognize skill today, all of that stuff. I think the third problem is, and this may be related to the earlier point, so you can ignore it if that's the case. I went to Raipur once and talked to a retail manager and asked him, "Sir, the skill and all of that." He said, *"Bhaisaab, mujhe gadhe chahiye, ghode nahi*" (Brother, I want donkeys, not horses).

**[00:39:51] Rathish Balakrishnan:** I just need hardworking, low-skill, low-pay, low-retention models of people. And oftentimes that, you know, the flywheel effect you want, where industry is demanding talent at the levels that we want, often creates the premium for skilling, etc. And sometimes that is stuck in that poor equilibrium because the demand side feels the supply is never going to be sufficient.

**[00:40:10] Rathish Balakrishnan:** I'm going to build a demand that is suboptimal and the supply side feels, "Say there is no demand signaling, so why am I even spending time doing this? I might as well just go for a job." These three issues, which is education being the paradigm we are going, has its own vertical challenges. Skilling, scaffolding that's missing around assessments and the demand side not signaling enough for us to be in an improper equilibrium. Do you think they are challenges that we have to solve for?

**[00:40:31]** Manish Sabharwal: My favourite book about education is by John Gardner. He was an education secretary in the 1960s. He used to say, "Can we be equal and excellent?" Right? He asked the question that for being equal, in a democracy, you have to have large volumes, and to be excellent, you have to do small numbers, right? I mean, it's like the IITs and IIMs have tight entry gates and wide open exit gates. Nobody fails, and the chartered accountant exam has wide open entry gates and tight exit gates. 95 – 98% fail that exam. But vocational training has been wide open entry gates and wide open exit. So the signaling value, but that has come from the need to create higher volumes, right?

**[00:41:11] Manish Sabharwal:** It's like engineering college versus medical college, right? I mean, has the ICT done a good job by taking engineering capacity from 400,000 to 1.9 million and then back to 1.1 million, then back to 1.5 million? India's engineering supply chain is so real-time, it's

actually quite remarkable. And I think they've done a better job because quantity leads to quality in some sense, right?

**[00:41:33]** Manish Sabharwal: The journey to quality is through quantity. So my sense is this equal and excellent tension will always be there in a democracy, and let's do it in two different systems. Let's have research universities and let's have, you know, employability universities in some sense. I think finally, the only assessment can be done by wage premiums offered by employers. I mean, many countries have tried this recognition of prior learning. You get 40 certificates, but the certificates don't mean much if the employer is not willing to pay the wage premium.

### [00:42:05] Rathish Balakrishnan: Right.

**[00:42:06] Manish Sabharwal:** You know, wage premium. We can map out wage premiums pretty quickly now because our recruiting team, we've hired somebody every five minutes for the last 20 years, but we've only had 5% of the kids who came to us for a job. So you're able to think about the wage premium in terms of, for this job, for this employer, will this kid work or not? Now, is that as scientific as people would like to make it? I'm not sure that my board exam result was very scientific 25 years ago. So I'm not sure. You know, assessment is always depending on the day which exams show up, which questions come with how you're feeling.

[00:42:42] Manish Sabharwal: I mean, so let's be careful and a little more humble about a single point-in-time assessment also, right? And employers are much better at doing that. The final one of thinking about skills versus... is much harder, right? Skills versus education. I mean, does supply create demand or demand create supply? I don't think anybody can answer this question. I mean, it's a chicken and egg problem. The only way to solve a chicken and egg problem is to become vegetarian, do something different, right? So let's do something different here, which is let's do regulatory cholesterol for the demand side.

**[00:43:17] Manish Sabharwal:** Let's build infrastructure. Let's move away from too much puja of fiscal and monetary policy and focus on productivity. And on the supply side, we have a 15-year roadmap for NEP. Let's bring it down to five years. Yeah, if people want to... I mean, it is quite clear the problems on the supply side. It's quite clear what are the problems on the demand side.

**[00:43:37] Manish Sabharwal:** Countries like India don't have to choose between demand and supply, just like we don't have to choose between manufacturing and services. I find the debate insane when people say that India should make up its mind on whether... I mean, we're not a popcorn stand like Norway or Singapore or Hong Kong or even Korea. I mean, we're a continent. We will do both manufacturing. We will do both services. We will do both domestic consumption. We will do trade. We will do both of them. You know, because that is our strength. So we're not stuck in a low-level equilibrium because of some supply-side constraint.

**[00:44:13]** Manish Sabharwal: Electronics assembly, many of the employers we have supplied 50,000 people in one year. How do we do that? I mean, they are fine and they are producing and they are productive, you know. So if the notion was, I mean, at some stage, I feel that if employers are willing to pay the wage premium, see why... why is Apple manufacturers paying 30,000 rupees? Because Steve Jobs, genius, managed to *topi pehenao* people to buy a cell phone for two lakhs, no? While the Indian car cell phone sells for 15,000 rupees. So those guys fight with me saying, we'll only pay 18,000. So finally, what is the difference between a cell phone guy who says, "I'll pay 18,000 rupees," and who pays 30,000 is the firm productivity, the firm brand, the firm design.

**[00:44:54] Manish Sabharwal:** So firm productivity really decides where... So Steve Jobs genius, you know, having design and having branding and makes him, you know, *topi pehenao* people for a two lakh cell phone means that Indian workers get paid 30,000 instead of 17,000, right? So firm productivity is a very important component.

**[00:45:12] Manish Sabharwal:** And I don't think people in... in fact, informal employers hate being informal because they're continuously recruiting, they're not able to attract capital, they're not able to take loans, they're not able to do... they're continuously harassed by the government. So it's a myth that informal employers like informality. They pragmatically choose informality because they don't have a path out of it. But I think if India decides that, look, we don't want informal and we don't want to push people into informality by the regulatory cholesterol, then I think Indians will happily embrace formality and our firms will move up to being productive and self-employment, which is a large chunk of informality, will come down.

**[00:45:57] Rathish Balakrishnan:** I want to just add the question of gender here, Manish. And I think this has caught up a lot of policy imagination and conversation. 17% female labour force participation, 21%, 34% is back down, COVID brought it up and then down. And as a country, it is one of the things that we are telling ourselves is that we need as many smart people as possible to join the workforce.

**[00:46:18] Rathish Balakrishnan:** And if 50% of India's workforce is not formally joining the workforce, it's a talent gap that we have to solve for. But a lot of this conversation, like you said, it's stuck in cultural non-conversations often, right? Is it that, hey, do we want the women to work or not? How do you see it?

**[00:46:34] Manish Sabharwal:** I mean, I think cultural explanations are again, not fair. I mean, there is no difference. There are many kinds of labour market outsiders. Women are one kind, caste can be another kind, rural can be another kind. Is there a difference between a Ministry of Dalit Employment and a Ministry of Women's Employment?

[00:46:52] Rathish Balakrishnan: Hmm.

**[00:46:53] Manish Sabharwal:** I think both of them...or even rural employment, who want to migrate to cities, all of them suffer from lack of public transport. All of them suffer from the wage premium in formal enterprises. All of them suffer from the lack of security sometimes. So if you do good urbanisation, if you do good formalisation, if you do good industrialisation, if you do good financialisation, and you do good human capital, my five pillars for raising wages are exactly the same pillars which will raise women's labour force participation.

**[00:47:26] Manish Sabharwal:** I know that a lot of people have some very women-specific labour force participation and interventions in their mind, but they work better as randomised control trials, you know, the pimple on the dimple on the left cheek of the ant, rather than being scalable, replicable, generalizable. I am a little tired of, you know, things which can't be replicated, which can't be scaled and you know, facts are not data.

**[00:47:54] Manish Sabharwal:** All anecdotes are facts. Of course, I'm not saying they're lying, but facts are not data. So, you know, the fact that this worked in this village, in this particular thing for 20 people is of no interest at an India level for me. India, you know, why we have solved or not is why we have done well with digital public infrastructure, is because people like Nandan and others solve for population scale calibration, right?

**[00:48:17]** Manish Sabharwal: And population scale calibration is something that we all in policy or who's interested in policy or work in policy or work in skills or work in employment need to calibrate for. Because it would be very different to solve a problem for Finland or Singapore than it is for India, you know? So I think that I am not convinced yet that the women's Ministry for Employment is a good idea because the Ministry of Employment is 27 ministries. I'm definitely not convinced a Ministry for Women's Employment is different from a Ministry of Employment, which is anyway, all the ministries, the role of the government. I think that women's labour force participation is held back for a variety of plumbing reasons. I think that in the next 20 years, as you see the higher proportion of women who have gone to education come out, you'll see some bump up in that. I mean, China went from, you know, foot binding to 60% labour force participation in one generation. Now, that was somewhere where they used to bind women's feet, and now it's 60%.

**[00:49:22] Manish Sabharwal:** It was just a giant sucking sound from the demand side, right, which paid a wage premium, which had public transport, and which had formal enterprises with productivity. So I would be careful in cultural explanations for sure. And I think that if we formalise, urbanise, industrialise, and financialize human capital in India, then we will have the labour force participation.

**[00:49:44] Rathish Balakrishnan:** Got it. I wanted to come back briefly on the apprenticeship piece. And I know you spoke about it earlier. Personal experience, fully agree. Whatever I learned, I learned when I'm doing it. Whatever I learned got me a job where I learned what I have

to learn. I mean, it's just how it works. And the recent announcement of the government and, you know, it's done in a very similar format where they say, hey, you have to... companies have to enable this and make this happen.

**[00:50:08] Rathish Balakrishnan:** You said it's 0.5 at the moment, and we are looking at a number that's closer to 15% of India's people. Are we structuring this right in terms of getting companies to do this? Are there ways to make this work more effectively for young people and for companies?

**[00:50:21] Manish Sabharwal:** I mean, the recent schemes don't make it mandatory. They're still voluntary. From 1961 to now, there was a jail provision for not having apprentices. Now, either you should have 15 million apprentices or 5,000 CEOs in jail. We have neither. Threatening people to put people in jail if you don't do it, really doesn't work.

**[00:50:39] Manish Sabharwal:** So you have to make it attractive for people and I think now people recognize that a well-designed apprenticeship program is really self-financing. See, we have to shift apprenticeships from pitching to CSR or pitching to HR Head to the CFO to say you have a 12% hurdle rate for your CAPEX projects. We can show you a 12% if not higher return on a well-designed apprenticeship program. So I think apprenticeships is an idea whose time has been coming for a long time. Most people don't remember it was the 20th point in Indira Gandhi's 20 point program in 1975. So we identified it almost 25 years, 50 years ago. But you know, this is the problem in government, right? One of my biggest questions, maybe you have it too: when you work in policies, how do you get something done in government after everybody who matters in government agrees with you?

[00:51:30] Rathish Balakrishnan: Right. Yeah.

**[00:51:32] Manish Sabharwal:** And so, this obviously the government agreed that apprenticeship was a good idea in 1950, but they didn't remove the jail provision. They didn't integrate it with higher education and they didn't make it easy for employers, and employers started treating the Apprenticeship Act like a labour law, which is a disease like COVID. So you stay away from it. You try and wear a mask, you try and run far away. So all employers have been running away from the Apprenticeship Act.

**[00:51:55] Manish Sabharwal:** It's not like COVID. It is an integral part of your people supply chain and it will be attractive to kids if you create employer signaling value along with the pathway to learning qualifications. So I think we have finally not reached critical mass, but we have slowly, slowly taken away the hurdles in its path.

**[00:52:17] Manish Sabharwal:** So this half million will go to two, three million soon and then on our way to 15 million. Can more be done? Absolutely. But I think, you know, it is the future of education. Globally, I think this employed poverty question means that, you know, full-time

learners will no longer overwhelm employed learners because, you know, our parents had 25-year careers.

**[00:52:46] Manish Sabharwal:** We'll maybe have 30-year careers, we'll have 40-year careers, our kids will have 50-year careers. So this upfront learning model of 10 plus 2 plus 3 plus 2 is not going to work anymore. So I think degree apprenticeships with multiple on ramps and off ramps, actually, India has the chance to innovate at a global level. Where we have four classrooms: online, on site, on job, on campus. We have three qualifications: certificate, diploma, degree. We have learning while earning. We prescribe stipends and we, companies will keep stipends. We have the signaling value. And we have the learning by doing, mingling with the learning while of theory, with the practical learning, with theory learning.

**[00:53:28] Manish Sabharwal:** So I actually think that because it is also a solution to financing, Degree apprenticeships attract new money, right? Teamlease Skills University, the one we run in Gujarat, I went to Delhi University. Delhi University only gets 2% of its budget from fees. The balance comes from the central government, so 800 crore budget. Teamlease Skills University also only gets 2% of its budget from fees. But it gets 98% from employers, right? So we are also 800 crores in revenue. We get 98% from them in the Skills University. So I think it's very important to recognize that financing is the challenge for higher education for skilling now in the future.

**[00:54:09] Manish Sabharwal:** Obviously, the best way was for the government to pay for it. But I recognize higher moral claims of school education on government money than on higher education and skills, there might be some claims. So I think we have to figure out new ways of financing education also. And that's why degree apprenticeships in my mind are not only a solution to making skilling more demand-driven rather than supply-driven. They are also a way to attract new financing to the board.

**[00:54:37] Rathish Balakrishnan:** I want to take three points that you talked about together before I move to the last part of our conversation. One is solving for population scale. We talked about it for DPI. Second is the wider entry gates and the wider exit gates for skilling that is necessary. And the third is the idea of universities and apprenticeships.

**[00:54:53]** Rathish Balakrishnan: Something that I struggle with constantly is just the scale of the problem that we are solving. You know, 15 million apprentices. Even if we have the university model scaling, do you really see how, I mean, in the best-case scenario, what percentage of young people in India do you see going through the Skilling University route to get a meaningful economic outcome? Because I think from where our baseline is, anything is going to be progress, right? Like we can do way better than what we're doing right now. But at the best

performing stage, 20-25% of young people going through Skilling Universities, or do you think that could be more?

**[00:55:27] Manish Sabharwal:** Say, 52% or 60% GER (Gross Enrolment Ratio) in the U.S. and 50% of them did a two-year degree in community college and didn't go on to finish their four degrees. So, when the U.S. reports GER, it's actually not comparable to our GER, right? So I think that, that whole notion of every university is like Oxford or Cambridge or IIT or Harvard... that train has left the station.

**[00:55:50] Manish Sabharwal:** So I think that yes, absolutely, the pathways for kids will be much more diverse, just like careers for kids are much more diverse than they used to be, right? The doctor-engineer failure train has left the station. So I think that the amount of the economic complexity of India has increased substantially. So just like there are many more professions, there will have to be many more pathways to get into those professions, to signal you're worthy of your professions or to make yourself worthy of those professions. So I think the skilled university, open architecture, multiple classrooms, and multiple qualifications is really the future of education globally. So I think that, yes, 20-25% of our youth going through this system is going to become the norm in the long run because, first of all, it's more inclusive than a traditional university system because, you know, kids who don't have money to pay for it.

**[00:56:42] Manish Sabharwal:** I mean, I chose my parents wisely, so I went to, you know, Mayo and Sriram and worked. I mean, I recognize that most people...I was born on the 10th floor. And, you know, it's just not fair to have university systems, which cost so much and you know, William Baumol, his research was on the cost disease, right? Where productivity and education can't go up as fast as the costs go up. And that's why U.S. higher education is becoming almost unaffordable for most people, right? So, and, and they talk about scholarships, but it's a really hard thing to do, you know. See, a great university is low fees and high costs. Most people don't realise that. How do you square that circle? You know, you have to have low cost to be inclusive, and so I think that changing the way there will be research universities with the 5000, 10,000, 15,000, 20,000 students, but you'll have these skill universities with hundreds of thousands of students, not all full-time, not all on campus and not all doing a degree, but working towards it.

**[00:57:50] Rathish Balakrishnan:** But do you think that design will still meet the need of the scale that we have in India today, Manish? Or do you think, because I mean, as you're speaking, I feel like that still will help make sure that the topsoil is not just 2%, it's, you know, more than 40%, but will that still hit as far as we need to for population scale?

[00:58:09] Manish Sabharwal: You can only innovate as far as you can see. I think once we turn

this corner, we'll see around the corner, no? See, again, I just like thinking about development as learning by doing. I mean, we have learned a lot about apprenticeships and skills and online, what works, what doesn't work.

**[00:58:26] Manish Sabharwal:** So I think once we have this model embedded, that will become the ground floor for building the second floor and third floor on top of it. I mean, so I think, yes, I think, did China innovate massively in skill development? I don't think so. They innovated massively in creating factory jobs, which sucked people out, and they taught them by learning and put them on the factory floor. So hopefully, we will pass a little different path than China. But I think it is, all the ideas on the table have the potential for some spontaneous combustion. There will be other business models. There will be some nonprofit models. There will be government innovation. So I actually believe that yes, I'm back to my skills. It is not the binding constraint for growth right now.

**[00:59:11] Rathish Balakrishnan:** The last section that I wanted to speak to you about is really education, because a lot of times I feel like we, rather than building on the coattails of good education, we are fitting band-aids into a faulty education model, and then figuring out ways to make people productive and realise their human potential.

**[00:59:28] Rathish Balakrishnan:** And while the North Star for primary education is clear, which is that a child has to be able to, you know, learn, write, and read, and do some maths, we are not so clear about what children have to do after they hit seventh or eighth grade right now. And there is really no vision for what we have to do as a country. And I think the NEP sets a path in terms of bringing skills and education together. That's a good starting point, but how do you see it, Manish? Because as you once said, you're at the exit gates of education today. And are we setting ourselves up at that exit gate for the kids to have a meaningful future and what should be done differently?

**[01:00:01]** Manish Sabharwal: Yeah. See, the most embarrassing number about India is only 45% of kids left in government schools, right? Only 5% of kids are in private school in Japan, only 10% in the UK, only 15% in the US. So I think if anything should be free and of quality, it should be K-12 education. But because we lost all these years in government schools because we equated school reform with higher teacher salaries, higher teacher qualifications, and smaller class sizes. Turns out, yes, they help in a randomised control trial kind of low ambition way, but they don't really change the needle on an aggregate basis because the two things of governance and performance management, right? What is performance management? The fear of falling and the hope of rising. We have completely shied away from doing that. We even hesitate to do a transfer policy, you know? And governance is allocation of decision rights on what the principal actually has. So I think unless we get government schools right, you know, in the repair, prepare, and upgrade continuum, prepare is very important.

**[01:01:04]** Manish Sabharwal: I mean, I think sometimes the school premium may be more important in wages than the skill premium. The reading, the three Rs of reading, writing, and arithmetic with the fourth R of relationship. If you want to add it, soft skills. You had them for 12 years, man. *Humko kaiko bol raha hai? Theen mahine meh we can't teach people English* (Why are you telling us this? In three months, we can't teach people English). In K-12, you had them for 12 years and you teach them how to read, write, and do arithmetic. I'll teach them how to be an electrician or a salesperson in three months, but I can't teach her how to read, write, and do maths. And now that's what most employers are looking for at the bottom of the pyramid because technology has taken tacit knowledge and codified it and embedded it into machines. It's embedded into processes. So actually for bottom-of-the-skill electronic assembly jobs, most of the knowledge has now been embedded in the machine or in the process. So you can actually get away with a 12th-class degree and make an iPhone, in some sense because you're being supported by all these machines and processes, right?

**[01:02:00]** Manish Sabharwal: And that's really what happened in China. So I think that the education system of schools, private—I mean, this is not an argument against private schools. I shudder to think what we would have done without the private sector response to schooling, that 55%. But I think we should really now stop, you know, kidding ourselves that government schools are unfixable. The economy of government schools has been tough, but it is just shameful that chief ministers would not crack a whip on government schools and get government outcomes up there.

**[01:02:33]** Manish Sabharwal: So if you don't fix school education, then in government schools where education should be free and of quality, and then have the private schools do it separately, which is anyway happening. And there's multiple tiers and multiple fee points. But again, you know, like great universities, low fees, high costs—how schools don't know how to do endowments, don't know how to do scholarships as much as universities can do it. Universities have this proven model of attracting resources for CAPEX, so you don't close the feed with CAPEX, you know, you do endowment. But in schools, that's much harder. And because alumni also are, you know, differently in moods of giving at different stages of life. So there's all kinds of ways that I think the alumni, the endowment scholarship cross-subsidy model that universities can adopt to be more inclusive, doesn't apply to school. And if we don't get well, we don't fix our human capital problem because they're an upgrade. Cannot do what repair is supposed to do.

**[01:03:38] Rathish Balakrishnan:** Absolutely. And if I had to ask you, Manish, when a 15-year-old gets out of school or at 17, gets out of school, when he reaches you, what are some things that we should absolutely make sure we do for every Indian child?

**[01:03:51] Manish Sabharwal:** I mean, reading, writing, arithmetic, and relationships, right? The soft skills of telling them to shave and take a bath and tuck their shirt in, is as important as them knowing how to do compound interest or, or not even compound interest, forget it, that's too much. Just do reading, writing, and arithmetic in the traditional way.

**[01:04:09]** Manish Sabharwal: You know, that's why I am a little against vocationalization of school education because class 10 has become the new class 8, class 12 has become the new class 10. Schools should just teach kids literacy, numeracy, and soft skills. Make reading a habit for them. You know, if you're not reading by grade four, I mean, before grade four, you're learning how to read. But if you haven't learned how to read by grade four, after grade four, you're reading to learn. So you just get left behind, right? Because learning to read was hygiene, but reading to learn is no longer hygiene. You just get left behind. So I think schools should be schools. They should teach them these things of the three Rs and the fourth R, which is a 21st-century relationship, soft skills, life skills, whatever you want to call it. And I think schools are a good place for that, you know, teamwork, sports, music.

**[01:04:59]** Manish Sabharwal: I mean, all the other stuff is important to teach kids, teaches kids soft skills in ways that very often you can't do in soft skills classes at the exit gate of the school system. You know, teamwork is better taught by sports than by, you know, exercises in a classroom or answering questions. So I think that if schools are able to deliver the four hours, we will, we will figure out what to do with them after that, and then some of them will go to college. Should everybody go to college? I think India will not do what Singapore does, which is you get a letter in class eight saying you're good with your hands and they stream you into the vocational system.

**[01:05:40]** Manish Sabharwal: I mean, I was a late starter. I would have gotten streamed out of college and I wouldn't have been where I am. So I am not a big believer in streaming or binning kids too early because many people are late starters. So should everybody go to college? That should be answered by, let different kinds of colleges be available, you know, at the exit gate, but everybody should do class 12.

**[01:06:02] Manish Sabharwal:** And everybody should get... even a security guard, even an electrician now requires you to be literate, requires you to be numerate, requires you to have soft skills. So, we should just make universal class 12, with learning outcomes. And, you know, I used to never go for the ASER report because it was too depressing for 20 years.

**[01:06:23] Manish Sabharwal:** This year I agreed to launch it for Rukmini because more kids are in school with more years of schooling, with better learning outcomes, and massive digital connectivity. You know, for the first time, her report is fun to read. It's not sad to read. It's hopeful to read, and I think that's a wonderful thing.

**[01:06:44] Rathish Balakrishnan:** Yes absolutely. Manish at the end of every episode, I try and summarise. I don't know if I'm going to even be able to do that with the amount of ground we've

covered. And for the first time, I have a guest who speaks faster than me. So it's actually good to have someone on the podcast who has so many numbers. And I've enjoyed all our conversations. Let me take an effort in summarising what I took away from the conversation. I think, to always see poverty as a problem of the person is the biggest mistake we can make. And there are five levers that you talked about, which is really state and the city, and then sector, firm, and individual. And how do we look at these five levers, with the firm being probably the lever that has the highest returns today, for us to be able to solve for? And in the firm level, by just the process of elimination, like Sherlock Holmes would love to do, if the only thing that is left is probably the right answer and regulatory cholesterol is the problem to solve.

**[01:07:34] Rathish Balakrishnan:** And what appealed to me in that conversation is sometimes you make it about 15 things to say, hey, this is the biggest constraint, solving for this is going to become most important. And I think, as you rightly said, solving for this is not a problem of just changing the norms. It's probably civil services reform, is that are we putting people who have the right incentives to solve problems at the right places, and are we putting them at the right size for them to get out of the way when they know they have to, I think is important. You also highlighted the fact that, hey, listen, while regulatory reform is a problem to solve, it's not something that has to pull us down because we have actually given 13 times shareholder returns for us. As a country, we have invited people, people are choosing states, not countries inside India anymore.

**[01:08:16] Rathish Balakrishnan:** We are showing in Maharashtra and Tamil Nadu that investments are resulting in commensurate returns. And I think the point that you made and coming from you, for me, was an important lesson that skilling is not the binding constraint. Let's not shoot ourselves by saying, no, no, we don't have skilled people because in 16 weeks, people are actually making iPhones and it's actually working. And I think the demand side, sucking sound will take care of people navigating and making that happen. On the supply side, I think the point that you mentioned in saying that, listen, let's create a flexible model of learning that acknowledges that learning happens by doing this. Probably not one way, one model, one structure to be able to do this.

**[01:08:52] Rathish Balakrishnan:** And for a country of India's size, solving for population scale through the right flexibility is going to be super, super important. Will it help every Indian? We get as far as we can go and we learn from it. And I think that's the only way to do this. We cross the river by feeling the stones and we have to start crossing the river at this moment.

**[01:09:07] Rathish Balakrishnan:** And I think the other point that you made that I'm sure is going to start a lot of conversations inside my own organisation is the question of gender, which is that exclusion comes in many forms. It comes in the form of the place you belong to, which is rural, your cultural identity, which is caste, and your sex. And each of them does have constraints, but is there a way we can solve for this problem by the Ministry of Women Employment? Maybe not. What we have to solve for, is the same five things that you talked

about and reduce the frictions in the system from transportation to mobility to internal migration to that.

**[01:09:38] Rathish Balakrishnan:** So that if the demand is strong enough, if the friction is less enough, people make rational choices to improve their economic outcomes, then women will get to work. Just like how villages in China went from binding the women's feet to getting them to jobs at 60%, right? And I think the last thing that we talked about is the apprenticeship and I think we didn't touch upon this enough just because I was watching the clock, but we can't solve for skilling in education unless we bring new money into this model.

**[01:10:03] Rathish Balakrishnan:** And one part of that money is philanthropy. One part of it is endowment. One part of it is government's funding. But if there is a way education can pay for itself, that is the model of education India needs because we have limited capital and how we solve for it is important. And hence, apprenticeship gives us a way of financially sustainable models of enabling people. Have enough credentials that can get them jobs and for companies to find ways of integrating it because it is not a bottom-line issue for them. And doing that at scale is an idea whose time has been coming. It's probably right now that it's going to come. And the last part that we mentioned is that we can't solve for 12 years of education in three months of a book, right?

**[01:10:42] Rathish Balakrishnan:** What skilling universities have to focus on is to make somebody an electrician, not make somebody literate, numerate, or a good human being. All of those things that we have to do, which is literacy, numeracy, you know, and relationships, is going to come from school environments that don't have to focus on vocationalization, but just have to focus on getting a child to read. Getting a child to engage with other people, getting a child to recognize that there's a human potential that they can unlock through fundamental aspects, and making 12th grade education mandatory with good learning outcomes is probably the goal that we have to fight for. And we should stop giving ourselves excuses that we can't fix this problem and wait for it to become politically salient, because this is a fundamental engine of growth that every state will need for them to thrive.

**[01:11:26] Rathish Balakrishnan:** And so on. And so I hope I did a decent job of all the insights that you've covered. Manish, thank you so much for your time. Very, very useful conversation as always. Enlightening speaking to you, and at some point, I hope we can come back again, ask ourselves if we need to shift it significantly more between our two conversations.

[01:11:45] Manish Sabharwal: The summary was better than the original. Thank you.

**[01:11:51] Rathish Balakrishnan:** Thank you for listening to this episode of Decoding Impact. I am your host, Rathish Balakrishnan. If you liked what you heard, head over to Sattva Knowledge Institute because we have a lot more content there on education and many other topics. Also, check out Decoding Impact Season 1, 2, and 3 on YouTube, Apple Podcasts, Spotify, or wherever you hear your podcasts.