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Flagship Seminar Series on India's public finances I Part 3: Regional Inequities and Implications for Federalism

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Keynote Speaker:

Dr. Pronab Sen – Former Chairman, National Statistical Commission of India and current Programme Director of the International Growth Centre's India Programme.

Discussants:

Sajjid Chinoy – J.P. Morgan's Chief India Economist and A Member of The Economic Advisory Council to the Prime Minister.

Chinmay Tumbe – Assistant Professor at the Indian Institute of Management, Ahmedabad.

Moderator:

Anoop Singh – Distinguished Fellow at CSEP; Member of the Fifteenth Finance Commission and Director of the Asia Pacific and Western Hemisphere Departments, IMF.

Watch the event video here: https://www.youtube.com/watch?v=KjGUjnkTDAU

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'm Rakesh Mohan, President and CEO of the Center for Social and Economic Progress, which was formerly Brookings India. This is the third part of a series on India Fiscal Framework, essentially based on the report of the recent report of the Finance Commission or the 15th France Commission which Mr. N.K. Singh was the chairman. And the first of the series did involve his participation in that as his keynote address. This has been organized by Professor Anoop Singh who is a distinguished fellow in CSEP.

So, today's topic is Regional Inequalities and Implications for Federalism. What I will be doing is to introduce all the participants today to begin with, and then hand over to Professor Anoop Singh to moderate the discussion.

So, let me start with our speaker for the day, Dr. Pronab Sen. He is currently the Program Director of the International Group Center, India Program. He has in the past served as chairman of National Statistical Commission, the Principal Economic Advisor, Power and Energy of the Planning Commission. He was indeed the first Chief Statistician of India, and also Secretary of the Ministry of Statistics and Program Implementation. In the Planning Commission, he was the Principal Author and Coordinator of the ninth and 10th five-year plans. And I guess Pronab, those produced the highest growth rates we've ever had, right?

Pronab Sen: Yes, it did.

Rakesh Mohan: So, you can appropriately take credit for that. But that was aided by the excellent monetary policy that I did at the Reserve Bank of India.

Pronab Sen: Oh. Absolutely. Great team then.

Rakesh Mohan: And also the various bit of appraisals of the eighth, ninth, 10th, five-year plans. We are really delighted and privileged to have Pronab as our main speaker this evening.

The two discussions are Professor Chinmay Tumbe, he will go first after Pronab. He's an Assistant Professor at the India Institute of Management, Hyderabad. He has been a visiting scholar at Harvard Business School and Assistant Professor at the Tata Institute for Social Sciences in Hyderabad and the Postdoctoral Fellow at the European University Institute in Florence. He also served as a member of the working group on migration constituted by the Ministry of Housing and Urban Poverty Alleviation of India. He is the author of two books. Most recent, "India Moving, a History of Migration," 2018. And more recent "The Age of Pandemics, 1817 to 1920" which came on in 2020 just when the next pandemic hit. So, he must've had some advanced knowledge to do this book, bring it on in 2020, focusing on previous pandemics to 1920. Assuming that the book took some time repairs, he obviously knew much more than most people in the world that the pandemic was coming.

His research on Migration Studies, Urban Economics and Business and Economic History, has featured in journals, newspapers, policy, portals, et cetera. And thank you very much, Professor Tumbe for being with us today.

Sajjid Chinoy he's JP Morgan's Chief India Economist, and also a member of the Economic Advisory Council to the Prime Minister. He's very familiar with the work of the Finance Commission since he served as a member of the advisory council to the 15th Finance Commission. And has also previously served on several RBS committees and task forces, including the RBS expert committee to revise and strengthen the Murphy Policy Framework that proposed inflation targeting in 2014. And I wonder if he's advising the government now as a member of the Economic Advisory Council on the review of the monetary policy framework that is due this year.

He has been ranked by the Asset Magazine as one of the best individuals in fixed income research in India for every year, since 2014. Sajjid is author many publications on the Indian economy, including co-editing a book on India economic reforms. He has previously worked at the International Monetary Fund and also at McKinsey. He has a doctorate from Stanford University. And I first came across him when he'd just finished his doctorate and whatever. I think our first India Economic Reforms Conference at Stanford.

So, thank you very much Sajjid for finding the time to be with us today. And maybe after the session, you can tell us all about what's happening in the US bond market, which will then affect us in the coming days and months,

Let me finally introduce our distinguished fellow, highly distinguished fellow, Professor Anoop Singh. He was of course, a member of 15th Finance Commission. He was prior to that at the International Monetary Fund. And his appointments included being Director of the Asia Pacific at the time that he retired. And prior to that, Director of the Western Hemisphere Department. So, he was in charge of all of Asian Pacific, which included India. In fact, he was the Director of that Department. I was Executive Director in the IMF. And prior to that, he was, as I said, Director of the Western Hemisphere Department and had to cope with many of the Latin American crisis that occurred during the time that he was the director.

He has taught Georgetown University in Washington, DC as an adjunct professor, and has worked and written extensively on macroeconomic surveillance and crisis management issues.

So, we are really delighted to have such a distinguished panel with us this evening. Let me just mention that as I said, first, Pronab Sen, then Professor Tumbe and then Professor Sajjid Chinoy.

After that, we will have open questions. And so, you can pose your questions to the Q&A tab on the zoom screen that you see, and they will be curated, and Anoop we'll then pass on some of those questions to the panelists. As I said, this is the third of the sessions, and watch the space should we decide to have more sessions on the same general issue. Anoop, all yours.

Anoop Singh: Okay, thank you very much. We have a great group, so I would start by speaking very much. Let me just make one or two points. As you can imagine, the financial commission reports for five years. We've done projections for five years of many variables. We cannot not avoid the most important factor was trying to project growth for India over the next five years. I won't go into how we did that and what that means, but that was an important contributor and input to a lot of our work and it's implication.

The good news is, and we are talking about growth, whether that's with recovery or whether it's grown as something else. What we do know, I think is there are three main things. One is that, whatever growth will take place after COVID, whether it's recovery or growth, will likely be uneven. That's number one.

Number two. As we look back 10 years, no, other than Thomas Picketty spoke about combined the activity by developing the way that the advanced countries was busy growing wealth equally. And then the last 10, 20 years, the growth leaders of the world, probably being India and China. In that period, there is no doubt that India as grown incredibly fast. And there's no doubt that per capital income at state levels have gone a lot in the past two decades. The problem, before we look ahead is trying to find out, is it that the growth India has had in the last 20 years, actually, has India been very uneven? Is it that even after the economic reforms of 91, what is seen is growing dispersion, dispersion in per capital income.

Nothing is for complex objection in advanced countries. The issue is, why is it the countries like India and China have had this incredible growth for 20 years, but from any convergence factor you look at where there's growth rates or incomes that have been more divergent from expected. And as India issue is - what are the factors? And I'm hoping for now you will give us some of the facts. But, is it true that we've looked at growing disparities? And if so, what are the factors? Is it that the finance commission, or financial commissions have not done enough? But to my mind, the Finance Commission look at equating the provision of public services and equalization from some perspectives, but they don't dare to affect the per capita income of states, maybe they are. Is that the...?

So, my only point is this for now. Is it a fact that disparities have grown as the growth rates have decreased? And if so, how do you look at the factors? And that's before we tried to trim it wrong and see what the migration will be a positive or a negative factor. So, Pronab, over to you please, and thank you so much for speaking.

Pronab Sen: Thank you. Thank you very much Anoop. But may I begin with thanking CSEP for doing me the honor of asking me to lead this discussion off and particularly Dr. Mohan.

Now, as far as the scenario that you've laid ou, I think we need to get a few things clear. First of all, there's been a lot of work on regional inequality in India. There's a huge body of literature on it. And the findings of a lot of that literature are very interesting. The first of course, as you very rightly said that there is no evidence of any form of convergence or whether we look at the per capita income levels or for that matter, growth rates. So absolute convergence doesn't exist if anything, there has been absolute divergence. However, when you look at what's called conditional convergence, that is weakly positive. There has been conditional convergence, which means that once you correct for the initial conditions, then that is a very mild weak convergence that has been happening.

Then I think there are number of issues that we need to look at. The first, I think is that the way the sort of state level per capita GSDP has been behaving, we seem to be moving to a bi-modal distribution, in terms of the distribution of per capita tate GSDPs. Which means, in effect that the middle of the original distribution is either tending in one way, which is upward or trending downwards. So, what you are getting are localized convergences happening. But when you look at the big picture, the big picture looks like low convergence or divergence, in fact. So, the nature of the change is important, which is why you really need to look at what's happening to distributions rather than the numbers that get tossed around saying that the highest per capita GSDP is 12 times the lowest per capita GSDP. These are the figures that are project all over the place. I think it has to be a great deal, more nuanced than that. But having recognized this bi-modal, does trend watch this bi-modal distribution? I haven't really seen any work which looks into the nature of this bi-modal thing that's happening. And I think to understand what one does about it, one needs to have a feel for the kind of movements that we've been seeing.

Now, this is essentially about per-capita GSDP. The problem of course, is that when use per capita GSDP, we have one inherent problem, which is that we are comparing GSDP at current prices. We are not asking the question, but how do you compare the GSDP in real purchasing power terms? Which means, like you really need to bring prices in very, very clearly. Unfortunately, this has not happened. Globally, we have the global comparison project where the purchasing power parity and the source are developed, but for a country like India, we haven't done one of those of our own. The only one we do have is the work that was done for the Lakdawala Committee for estimating poverty. But that was done around the poverty line. And way back, as far back as the late eighties, what it showed was that the price index for the most expensive state was some 42% higher than for the lowest cost state. Not, if that was the magnitude then, I'm almost certain that magnitude has become larger now. So that, a lot of what we are seeing in terms of the widening dispersion could simply be that the price behavior in different geographies in India are behaving very, very differently. And we will never be able to get a handle on this until, and unless we develop a national PPP measure, measures of some variety.

Now, there's been a lot of discussion on this. And it's all got stuck around one point. Which is, "What is the basket that you should use?" Now, we globally agreed on a basket for every country in the world, from the richest to the poorest. We haven't been able to agree on a basket, which is suitable for Indian conditions. But once that is done, actually developing the purchasing power parity, and this is for Indian states, is not that great a task. But there has to be a will and there has to be a certain degree of agreement, both of which are not quite so easy to come by. But until we do that, almost every statement that we make about regional inequality in India, or the change in that level of that inequality, or what's happening to dispersions, will all be questioned. Because we do not know whether it is happening from changes in the real purchasing power of the people of each state, or it is happening from changes in prices. That's that's problem Number One.

Problem Number Two is that is GSDP, which is the Growth State Domestic Product, is that an appropriate metric for measuring cross state inequalities? Now, if we start off with the presumption and I think it is not a bad presumption, that income is only an instrumentality and the objective should be standards of living, which is better reflected in consumption, then the ballgame changes quite dramatically. At some point, I'm sure Chinmay is going to come in and pretty much tear apart what I'm saying. But my sense is that, and having read by the way, read Chinmay's book. I haven't read the second one, the first one I have. The migration in India is large. It's very, very large. Now, if you think about what migration does, it's a very complex phenomenon because what's happening is when labor goes from one state to another, it's actually reducing the productive capacity of the originating state and increasing the productive capacity of the receiving state. And this would then get reflected in the GSDP numbers. But, consumption patterns may not actually follow that same trend, for the very simple reason, the consumption would depend critically upon where families and households of these migrants stay. If the families are the migrant stay back in the originating state, then transfers by the migrants to their families will tend to equalize the consumption. If on the other hand the families also migrate, it will tend to lead to a widening of the consumption disparity as well. So, the nature of migration, not just in terms of who has moved from where or for the matter, what level of productivity is being carried, also matters whether the family is relocating or not relocating, makes an enormous amount of difference.

And the third point. I mean, again, there's work on this. In fact, in the plan, I think it wasn't the 10th plan we did this, is the movement of capital. Because of the way the banking system has been bigger, there is an enormous amount of out movement of capital from relatively low-income states to higher income states. Now, his is in complete contradiction to what happens globally. Globally. capital tends to move from high-income countries to low-income countries. In India, it's the other around. And the question that you need to ask - and you know this by the way, it's fairly easy to make out this by simply looking at what the credit deposit ratios are in the banks located in each state. And the data is available, it can be compared, and it does not paint a pretty picture at all. So, you've got all these things happening simultaneously.

And the question then arises that if you want to get a handle on how to fix this problem, you'd have to look at the casual sort of dimensions of each of these. And then ask the question that what are the common touch points which we could address now? I think the point that was very rightly made that as far as the finance commission is concerned, the finance commission's mandate is inherently not equalization of incomes or GSDP, or even consumption. It is about the ability of the state to provide public services. So, what you will get, again, if you look at the data. Anoop, you have must have looked at the data at nauseum while you are working in the finance commission, what you'll find is very interesting, that the dispersion of per capita taxes between states, per capita taxes, states owned taxes, is less than the dispersion in the per capita GSDP. And the per capita availability of whatever public service you wish to talk about is even smaller.

So, the question then is that if you're addressing only one part of the problem, which is the public services, then the amount of distribution, the redistribution that you have to do is actually pretty small. So, nobody should expect the finance commission and given the mandate of the finance commission to correct for this, unless your diagnosis of the original problem of high dispersion, high inequality is a lack of public services.

Anoop Singh: That's true.

Pronab Sen: And I have not heard of anybody making - yes, there is a lot of talk about the role of infrastructure, but as I said, the dispersion in infrastructure availability is not that bad. Odisha has a better infrastructure index than Maharashtra. So, it becomes quite problematic. So, we need to go far beyond. And I don't think we should use all of this to throw brick bags at the finance commission. It's not their remit. But in order for us to understand and to figure out why this is happening, I think we have to look at multiple causal factors and then try and get a sense of what are the kind of interventions which may work. As I said, there's been a lot of work on, on regionally inequality, but to actually come up with these causal factors, the quality of work isn't good, a lot of it is preconceived notions and hand-waving. But unless all of these problems are sorted or are talks through. we will not come to any sort of categoric answer. So, we should hold our breath. This is the job for people like Chinmay to take up. But to my mind, the only thing that at the moment is keeping us afloat, in my personal opinion is the migration that has been happening, which has partially offset the capital flight that has been happening for much longer. I'll stop your Anoop. We can come back during the Q&A period. Thank you so much.

Anoop Singh: Thank you. Just one point before I pass it on to Chinmay. I think you are kind of saying that we should look carefully when we talk about disparities. If we look at disparities from consumption or better measure PPP basis, we will not find that extent of disparities within India in the last 20/years. And I think that is partially what you're saying. Am I right?

Pronab Sen: This is correct. On the PPP, I do not know, because we haven't got it, but the fact of the matter is still we do that kind of an exercise, we are really shooting in the dark.

Anoop Singh: Okay. The second point, and this is moving off the traditional. The second point, you talked about localized convergence. Now, when you talk about localized convergence is a way of pointing to inequities within space and limits, is in fact ineffectual that India localized convergence in certain space, is it the symbol or the symbolic of higher inequities within the state of India?

Pronab Sen: It could be. Again, Chinmay, correct me if I'm wrong. But my sense again is that within state migration, it's far higher than outside state migration. So, the same set of factors which play into the interstate differences will be playing out intra-state as well.

Anoop Singh: Right.

Pronab Sen: I'm not sure that's true, but again, I have no way of getting a handle on that.

Anoop Singh: Okay. The reason me and Chinmay talked about an intra-region, I'm under the impression that the last 10, 15 years in India, maybe I'm wrong. I hope I'm wrong. The problem has moved on to inequality between states to inequities within states. And if intrastate migration become more important, are we then equate that with the ever reality of rising inequity within states? Now, I raised two key questions before we even start to speak. You have to take as wanted and not to worry about the points I've just raised. We'd come back to those later on. Please. Thank you.

Chimnay Tumbe: Nice. Can I, can I speak?

Anoop Singh: Please?

Chinmay Tumbe: Yes. So, firstly, thanks for this very kind invitation. I've actually been thinking about migration, fiscal federalism for nearly a decade now. Though I don't really have much to show in terms of written output, but I did write a piece on the Ideas for India website, I think in 2013. And that was when I had just worked on migrant remittances, trying to quantify at the state level, both domestic as well as international remittances. And I do think that migration does affect fiscal federalism in India in various ways.

So firstly, just to build on to what Dr. Pronab said, there is a post substantial migration in India, painfully of course we realized it last year after the lockdown, a lot of people had to work back home and so on. The migration numbers, though I should point out, by almost any yardstick, internal mobility in India is much lower compared to most other large countries in the world. And that's kind of a given. It's much lower as a proportion of older population then, especially for work compared to say China and definitely compared to America, which is probably the most hyper mobile country in the world.

If you look at the census numbers, we're talking about 400 million migrants, but most of that is migration for marriage, which is just across village borders. The numbers we're settling onto now in terms of work-related migration and something like a 100 million, which is much more than the census numbers of 55 million. So, we are saying there are some limitations in the census data. And by the spend amount, this is interstate, as again, Dr. Pronab pointed out, the bulk of work-related mobility in India is within state. And of course, some states are much more dominated on this migration.

Now, how does this really matter for Fiscal Federalism Center State Transpose and so on? I'll just point out a very quick map on where migration happens so, I thin, we can save a lot of time. You can see this map now on your screen, and it's a district level map. It's not a state level map of India. But it basically shows you the percentage of how zones in a district. This is national sample, so 2017 data, so it's a bit old. But it basically shows the red shaded districts are those, which sends out a lot of people. And they're sending out people mainly to cities. So, classically, you know, Delhi, Mumbai, Bangalore, Hyderabad, and so on. But the biggest hub is of course, Bihar and Eastern Pradesh. That is a massive labor cluster. Then you also have Himalayan States of Uttarakhand and Hilmachal, and then you have a lot of districts in Rajasthan.

But you also have districts, what should we in every state? You think of Gujarat, where I am based right now, play a huge out migration. And then much of the west coast of India running into Kerala and then at the Southern tip of Haryana. And much of central India is lockdown. And partly, this can be explained by historic migration networks and so on. Coastal Odisha is another on the map.

And now, what is the significance of this geography is that one is, it definitely affects one state in almost it's entirety. And that is the state of Kerala. So, let's start with Kerala and then go to maybe a few other States where it has this massive impact on fiscal resources.

The Kerala migration story of course, is unique in the sense that a huge part of that out migration is not within India, but it's outside India. And the numbers of a stack deduction of over 2 million people, as a percentage of population, this is anywhere between 5% or 10% of the population, which is outside. And the money that they're sending back by even the most conservative estimates come out to be something like 30% of state level GDP. So, these are staggering figures. I mean, if you want to compute a different measure of welfare, and one of the things I've argued is that, especially for fiscal federalism, we are having this 45% wastage on income distance and income measured by cross GSDP.

Dr. Pronab Sen pointed out one issue, which is on price structure of GSDP, but another one is of course on PPP. And especially if you think of Kayla, where a huge part of the workforce is outside, not paying income tax, because they're working outside in the Gulf, as a result, they're not paying to the central government, but sending back a huge part of their money back home. And with the idea that they're going to settle down back in Kerala. This is what Dr. Pronab Sen said, where are people earning and where are people consuming. So, a huge part that money is spent in Kerala.

And so, what I'd done many years back was to compute some sort of a metric or a GSDDI or Gross State, Domestic Disposable Income, similar to India's GDP and overall GDI, Gross Disposable Income at the macro level. Can we do a similar measure at the state level and which states would come very high on this? And it turns out that the state most effected on this metric would be Kerala. And its GSDDI number would be more than it's GSDP number by something more than 30%.

Note, again. Now, Kerala is an interesting place because they were seeing what, 2 million people outside Kerala. There are 2 million interstate migrants also within Kerala. And so, you have about 2 million North Indians now who work in Kerala. So, it's this kind of unique labor market. But the per-capita transfers coming from the gulf, especially to Kerala, are much, much more than what's going back to say Bihar or from there. And so, that is the source of kind of a massive difference. So, even if you take out transfers going out of Kerala into the Northern hinterlands. That's a much tinier number compared to the funds that are coming to Kerala.

Tax-free transfers, remember, so, they're not going to the central government, but it's boosting local sort of goods. Before GSD has had a clear implication, basically money was going to the state government, but not to the Central government. So, there was a clear distortionary structure there. The GSD, obviously a lot of it is now going back...

But one of the biggest tickets that migrants often sent to spend on island markets and housing markets. And a huge part of the revenue kind of is absorbed by the state government in terms of stamp duty, registration fees, variety of things are. So, what we're saying is that this one particular golf channel for Kerala boosts local fiscal resources, but does not show up anywhere in the GSDP numbers. And what we're seeing is then, Kerala is actually relatively shown in the standard fiscal federalism kind of a framework as to be, actually a bit less richer than what it actually is. And the implication being that it's intersections, if you calculate the GS DDI, would actually be much lower. So, as of now, it's in 1.9% to 5% based on the 15th Finance Commission report. They are saying it's going to be substantially lowered actually than that, if you actually look at the disposable income metrics.

Which are the states which are hugely affected by migration and what I would say, creating fiscal distortions. Another two states, which have a massive amount of international immigration? And that's Punjab and Goa. Goa, of course seen again as one of those places that people are going to. But Goa is also remittance economy, which gets a lot of money from outside. And there's a Goa migration survey which has been done. There's also been Punjab migration survey which has done. And my numbers for those, for Goa, it's about 20%. That is the GSDDI is more than just GSDP by about 20% and for Punjab, it's about 10%. So, when you line up all the states of India, these are the three most affected states and they're all rich states was shown to be in this framework slightly poorer than what they are. And so, if you actually took in a disposable income metric for devolution, you basically have to give smaller shares to Punjab, Goa and Kerala. Now, this is on account of international migration because the income is not being taxed anywhere. I mean, it's not going into Indian government.

What about internal migration? And here are the three biggest recipient states, Maharashtra, Gujarat and if you think of Delhi as a territory. But Maharashtra, Gujarat really absorbing a huge amount. And of course, the out migrants are mainly UP, Bihar, Rajasthan, West Bengal, Odisha.

Note, in the last five years, a massive change has happened even in international migration, when now more people go from UP and Bihar to the Gulf than even from Kerala. So, that's a change which has just happened the last five years. If you look at the numbers going on out, at least using labor contracts and so on. So, what we know is that actually a lot of international money, which was going earlier to Kerala, is now also going to UP and Bihar. And so, my numbers for them were not as large as for Kerala, but not as big as 30%, but their incomes are substantially boosted by at least anywhere in the range from 5% to 15%.

So, what we're looking at is basically a clear impact of migrant remittances on boosting consumption and hence local level fiscal resources in certain states of India. It's not affecting all of India, it's affecting certain parts of India. And within those states, as I showed you in the map, few districts. And so, this has clear implications on both not only center state relations, but also state ULV, state to PRF, and so on.

So, to kind of broadly summarize, I would say one of the big issues of how regional inequality shapes the fiscal federalism in India, is that definitely migrant remittances because of the unique way in which it shapes consumption does play a slightly distortionary role in allocation of resources as currently mandated by the finance commission, and that is why maybe we need to move to a metric. Like Dr. Pronab said, one is the price structure and the price structure is in a way also reflective of remittances. For example, Kerala is very expensive, but that's also because so much money comes in from outside Kerala. And that's kind of boosted prices across the board. Which means anything PPP kind of based thing, you'll find Kerala to have one of the highest price structures, which is in a way, synchronous with this idea of receiving large number of remittances.

And the numbers for international reminiscence are very stock. It's $80 billion. A part of that goes to NRA withdrawals. That's mainly in metropolitan bank accounts, but even if we take $40 billion as going to households, they're talking of $40 billion going to - it's pretty much Kayla, Goa, Punjab, and maybe in a few districts now in Pradesh. And so, there's a huge importance of international immigration on regional differences within,

And on internal migration, the per capita transfers are lower. Though the volumes of immigration are much larger in absolute quantities. And so, it's not going to be as big as $80 billion as the international remit. And my estimates about $40 to $50 billion, enhanced and boost accordingly UP or Bihar's disposable income that much less.

At this point out, earlier here we are just pointing out the fact of what's happening in China. And in China, you had this thing called as the hukou system, which was a very unique way of regulating rural urban migration. But that basically said a few people who had access to the city would be given public services and the rest will not. And this was finally kind of thrown out of the door, just about last year. 2020 is when they finally fully reformed the hukou system and they expanded the kind of urban franchise through that many more people. But again, China has had much more inter-province migration than what India has had in terms of inter-state migration. But these numbers are going to go up. And if you think of the, some of the schemes which are being announced now, stuff like One Nation, One Russian Card, there's a CDC issue, which is generated out there as to who's going to pay for this? Or rather, why should Maharashtra government, for example, have to pick up the tab for say, Bihar migrant worker. And it's not very clear to me about how the fiscal rationale of something like a One nation, One Russian or One Nation, One Public policy, which is hopefully the architecture, but you're moving to, plays out.

So, we also need to kind of be aware that we need a fiscal architecture for allowing migrant workers to go and access public services anywhere in India. Because that's one of the things the pandemic showed last year that is people are completely cut out of the social security net the minute they cross a state borders. Having said that, overall state industry migration numbers are not that high as in China, but in at least some of the corridors, the per capita transfers can be important.

What is then stopping us from moving to this framework where we look at disposable incomes rather than incomes is of course data? And the data I've told you is NSS 2007, 2008. We still don't know how do we make this allocation on a yearly basis? Finance commission uses GSDP data, for example, average of 2016 to 2018. You can't really do that because with the disposable income, because all I can give you is a cross section for one year. And so, what we would ideally need for this is very high-quality data on both internal and international reminiscences and some allocation rule of where it is going in India. And so, that is, I think the principal challenge. But if that data part is all done, I think we then do have a reasonable ground for incorporating, especially migrant remittances in the issue of fiscal federalism. With that, I will end. And I will be happy to take questions.

Anoop Singh: Thanks very much. I think what you're also saying maybe that's my reaction is obviously, India's internal migration is yet far short of China and the US is. What's you are probably saying is, as India develops, internal migration, not external, internal migration, is going to increase. And therefore, the implications of that are positive and is very important.

One more point. I keep coming back to inequities within states. I have the impression that you look at Maharashtra and you look at other states and the story coming out of some of these states is of rising inequities within it. Are you saying that, do you have any sense that the internal migration is exacerbating the problem or is too early to say, or we don't have the intuition?

Chinmay Tumbe: It's a good point. I mean, first, I think there's no doubt that intra-state variation are definitely on the rise, at least for a few states, especially Maharashtra, Is migration leading to that widening? One has to, again, balance out the fact that yes, if say migrants from Rakmahrrii would be going to Bombay for the last a hundred years, but there are now these also remittance economy. It's an economy, which is almost completely wired on remittances coming from Mumbai for generations now. If you think of some of the new areas like Vidarbha, they're finding new parts of the Boonie labor market, for example, or this whole industrial corridor between them. It's of course, contributing to the booming of say Boonie and Mumbai, but at the same time, part of that boom is also reflected back home through remittance.

So, in that sense, remittances are also a way to equalize consumption levels across states. And I think that's what Dr. Pronab said, the fact that the average migrant worker in India is a circular migrant worker who does not really have an interest so much to settle down rather than earn a lot of money and go back home. And I think that partly happens because a lot of this is male migration. Women are not moving in China, both men and women move to the cities. And as long as you're going to have this pattern of circular migration, in a way, the migration itself is a natural equalizing force because the people are earning and then putting the money back. So, that's my sense of how this equalization is taking place through the migrant census.

Anoop Singh: Alright. Thank you very much. Okay. Sajjid, we haven't talked about the macro factors yet. I think one important result of the last two years is, we all have assume that you are in the FRBN committee, right? And you set the debt target to be over 40% or 60% central and state. And that was what your committee report recommended will be a target for India. And now wake up and realize that debt is probably not 60% of GDP but over 90%. At the same time, we know we're coming out of COVID and we hope that there we'll be growth, hopefully, more inclusive and maybe it has been. The issue is, what are you able to do with the streets of India? How are we going to balance the need to consolidate, yet, either now or five years from now with the need to spend more, if not on capital expenditure, at least on health and education. How is India going to balance it out or can it be balanced? You know, you are advising us in the finance commission too. How would you recommend this be done state by state, year by year? Over to you. Thank you.

Sajjid Z. Chinoy: Thank you Anoop. Those are great questions. But let me start by just saying what a delight it is to be here at CSEP and Dr. Rakesh Mohan, thank you so much for inviting me. Dr. Anoop Singh, thank you for having me here.

I'm going to just use a few slides and as Anoop said, coming to this from a kind of very macro fiscal perspective in light of the very important questions you raised and talk about. I think the unappreciated heterogeneity of fiscal positions at the state level, and whether we can get to the next level of sophistication for subnational fiscal rules that can hopefully attenuate any divergence and possibly contribute to some conditional convergence. And I'll tell you what I mean by that. This is a very heuristic start, so bear with me, but thank you very much.

So, if we can just go to the first slide and just... Yes, thank you. The first slide there. So, I think this is just to put in a chart, what Anoop and what Dr. Pronab said. They said before that any which way you cut it, there is no evidence of unconditional convergence. In fact, there's unconditional divergent. So just to explain this on the X axis, we're looking at 2011 per capita GDP. Each of these dots represents a different state. This is in 2011 prices. So, you know, notwithstanding the caveat that Dr. Sen made and the Y axis has growth rates. And what you would typically expect in an unconditional convergence model is this line is negatively sloped, that the higher starting point would lead to lower growth rates. Exactly the opposite has happened. And we don't fully appreciate the change in income levels by looking at growth rates, because over a decade, a state growing at 7%, for example, will see its income doubled in a decade. A state doing a three and a half percent and a three-percentage point gap will take two decades for their income levels to rise. So, in a way, the growth divergence is mask how much the levels that are diverging. But this is just to set the record.

If you go to the next page, please. And here again, as Dr. Sen mentioned, the evidence of conditional convergence after controlling for institutional capacity, different starting points, social infrastructure, is at best mixed. I would say, it's very weak. You get the right sign, but you don't get either the economic or the statistical significance.

But one thing that you do get in study after study both at the national level and at the state level, and this is kind of not a surprise is state capital expenditure plays a huge role in impacting state GSDP growth rates. A huge economic significance, a huge statistical significance, right? So, one thing we do know is even if we can get convergence, what we know for sure by boosting capital expenditure, you're going to push up all these boats.

And I guess the next question then is, how big is the dispersion in capital expenditure? And if you can go to the next slide, please, what you will see is, there is a huge dispersion. Now, I've taken away some of the Northeastern States, which have high capital expenditure off a low base. I've taken away Jammu and Kashmir given the special circumstances and just restricted myself to the 22,23 other States. And what you find is a huge dispersion, a weighted average of 2.8% to 3% doesn't do justice to the fact that you've got many states at 4% and 5% and 6%. And many states at 1%, 1.5%, 2%, and this is across income. So, richer states like Maharashtra or Gujarat have got much lower capital expenditure. You've got some other poorer States like an Assam, for example, or a West Bengal that has much over CapEx.

So, I guess the one question we can ask ourselves is, from a policy perspective, can one intermediate objective towards final income, convergence be at least can we facilitate through sub national rules in greater convergence of capital expenditure across states? Can we incentivize states that have not invested in CapEx to push those numbers up towards the average and even higher? And there are many reasons why this would be a challenge, which I'm going to admit, institutional capacity, incentive compatibility. But let me take what in a loops question was the primer face constraint post COVID, which is fiscal positions are going to be really crunched. And how can we in this environment even being encouraging anybody to spend more?

So, if you can go to the next slide, please, and I think the worry in terms of state debt, there's so much talk about consolidated debt that I think we lose the nuance between what's happening to central debt and state debt, which is that the center's data is certainly higher, but given the primary deficit of the center or the path laid out over the next few years and given the difference between R minus G, central debt to GDP will actually come down. The concern has been the trajectory of state debt. So, as Anoop rightly mentioned, back in 2016, 2017, the FRBN and review committee had suggested that state debt kind of stabilize around 20%. We've seen that go to about 27% even pre pandemic. And now the early estimates for the first year of post pandemic will be 31%, right?

So, are we above those targets and more than the level? It's the trajectory that's what... Remember, a sufficient condition for intertemporal fiscal and sustainability is a monotonic rise in debt to GDP. So, more than any level of which we have to be agnostic, I think there's no magic level here, is just to prevent a constant rise in state debt to GDP.

Now, I'm going to just do a little, mumbo-jumbo here for 30 seconds to lay out what's driving debt dynamics here, because hopefully this will inform the future discussion. And so, ultimately, you know, at the aggregate level, debt is just a function of previous debt, the interest I'd be on it, the first equation and my primary deficit. When I express this as a share of GDP, which is the second equation, so the small DT plus one minus DT, essentially, there are two terms that matter. What does my debt last period? And the next term is the R minus G component, which has been made particularly I think, famous around the world because of the recent work of Olivia Blanchard and the primary deficit.

So, the way to think about debt dynamics is that two terms that really matter. R minus G, which is the difference between a statues real GDP growth rate and the borrowing cost on its debt, and the second term, largely the primary deficit. And because, I will show you a chart later that despite a lot of fiscal heterogeneity in state of fiscal position, the borrowing costs are virtually identical. This comes down to two variables, mattering that higher growth rates will all else equal make debt more sustainable and allow states to run primary deficits. And on the other hand, higher primary deficits,ceteris paribus will worsen debt dynamic. So, we have to come down to this horse race between what are the underlying growth rates of states and what are their primary deficits?

So, if we go to the next chart, I want to just lay out the importance of growth first at the aggregate level, and then talk at the sub national level and the heterogeneity across states. I think, Anoop's question, "Shouldn't, we be consolidating aggressively with debt at 90%? And how can we think of more expenditure?"

What's really interesting is given us starting points. The impact of medium-term growth on future debt dynamics cannot be overstated. So, the blue line here is a baseline case to say, let's look at state fiscal positions in line with what the recent budget has laid out, that they go back to about 3% of GDP by FYI 24. And let's for a moment, assume that nominal GDP growth over the next six or seven years is about 9%. That assumed it real GDP of about five and a half percent, because the average deflator over the last decade has been about 3.2. One can argue in a slightly more deflationary environment, you get a slightly higher deflator. So, normally 9% growth is consistent with average real growth for the three years pre pandemic. And what you find is despite the States being asked to go back to that fiscal positions relatively quickly in the next two years, debt to GDP, keeps rising and rising and rising, right? And this is the point that needs to be made again and again, that Olivia Blanchard's hypothesis about as long as G is greater than R, debt is sustainable. Only holds when your primary deficit is very, very small or you're running, or there's no primary deficit, right? It doesn't apply to many emerging markets. If you're going to have a 1% primary deficit, which is what states will have, even though nominal GDP growth of nine is higher than state borrowing costs of seven and a half that R minus G gap is not large enough to offset the primary deficit. And so, state debt to GDP keeps rising.

Now, looking at what a small change in growth does, which is that if real GDP growth were to be 7% as an example, over the next five, six years. So, nominal becomes 10 and a half, just as an example, then without being more fiscal consolidation beyond what the division does the next two years, debt to GDP will flat line and begin to slowly come down. So, therefore that raises the debate that's currently on that there perhaps isn't a way to shrink ourselves out of our debt problem? We'll have to grow out selves out of our debt problem. And the question then is, is it worth doing higher capital expenditure, which is known to have higher multipliers to generate higher GDP growth, even if it means slightly higher primary deficits, will that make debt more sustainable? That is the big question.

Now, if you go to the next slide, I think we should go one every day per here, and look at different fiscal positions. Sorry for this crowded chart. Each of these ovals represents a different state. And so, to understand kind of fiscal space, the X axis has GSDP growth rates and the Y axis has state debt in 2019, 2020. And I've just broken this up into four quadrants to make it a little bit more tractable. So, the simple thinking is, the higher your growth rates, all X equal, you will have more fiscal space and on the Y axis, the higher your debt levels going into COVID, so, all of these will change in a post COVID world, the lower your fiscal space.

So, if you look at top quadrant one, that is a set of states that has relatively lower growth rates. This are growth rates over the last six, seven years and average growth rate, and they have relatively high debt levels. So, these are States where to do a debt sustainability exercise for the next four or five years, you begin to worry about that primary deficits will have to come down given what their growth rates have been historically for this debt to become sustainable.

On the other hand, in quadrant three, you have another set of states where you've got relatively high growth rates, and you've got relatively low debt levels. And prime of facing, these are States that actually have some fiscal space. So, even though the aggregate state situation looks a bit sambal, if you go down, you get this bi-modal distribution. So, Dr. Sen spoke about a bi-modal distribution in terms of per capita income, I'm telling you that there is a bi-modal distribution, both in terms of high debt, lower growth states and higher growth, low debt states. And I would argue that this bi-modal distribution is an endogenous outcome of our current fiscal rules. Because if you go back to our debt dynamics equation, if interest rates that all states are paying is the same irrespective of the underlying fiscal position. So, your R is the same. And as the primary deficits that are broadly mandated, that everybody must go to a 3% fiscal deficit, then if R is going to be the same and your PD is going to be similar or captive, same levels, then the only thing that's driving it is going to be G. So, high growth states will all else equal result in lower debt and lower growth stage over time will result in higher debt. So, in a way, this is an endogenous bi-modality that's arising from our current fiscal rules.

So, if we now go to the next slide, what you will see is now the question is, this is more from an efficiency perspective. Now, let's collapse the space into one dimension, and that's competitive both to capital expenditure and to income levels, talk about convergence. So, my method for fiscal space is a very simple one, almost too simple minded. It's the stock of debt in 2019 divided by your average growth rate over the last five, six years. The higher your debt, the lower the fiscal space you have, the lower growth rates, the less fiscal space you have. So, the arising number on the Y axis suggest fiscal space has been exhausted, the lower your metric, the more fiscal spaces available. On the X-axis,we actually have a capital expenditure to GDP. So, this is just a representation of the dispersion that I showed you in the first chart.

So, what's very interesting is. the dots above the red line are states that don't have very much fiscal space. And the dots below the red line are states that in relative terms of fiscal space. You now look at the bottom left-hand side quadrant. You have a bunch of states where prime of BC, that is fiscal space, and yet capital expenditures are very low. And this has cuts across income levels. Assam, Gujarat, Maharashtra, Haryana, Karnataka, Odisha, Tamil Nadu, Telangana, Uttarakhand. All of these states from a debt sustainable perspective have space. They are higher growth states, they got lower starting debt, and yet their capital expenditure is much, much below average levels. Now, I'm not arguing that a fiscal space is the only constraint, but the first kind of things that comes to your mind is, "Are fiscal rule inhabiting?" States that into temporarily have more fiscal space from spending more on capital expenditure, to the extent that these are states, that will all else equal drive convergence.

We have another group of states in the top left-hand quadrant where fiscal space is very limited when your metric is seven, right? That suggests that you're really overstretched. And yet they've also still got low capital expenditure. So, that's a quick way of figuring out that these are States where a lot of fiscal space has been utilized, but it's not been utilized for higher capital expenditure. It's really been utilized for higher revenue expenditure or one in where tax collection has been much below norm. So, it's clear what the policy implication for those states are, which is that you need to consolidate, and you need to consolidate by cutting revenue expenditure or improving your revenue deficit, not necessarily slashing CapEx. Because, CapEx- So, this is more from an efficiency and re-balancing perspective.

The next chart is the last one. It's really comes to the core of today, which is, can we use fiscal rules for more convergence? Now, we've got the same metric of fiscal space on the, on the Y-axis. And on the X-axis, I'm looking at real per capita income. So, these are in real terms in 2019. So, they're deflated. And so, again, above the red line, are states with limited fiscal space. Below the red line are states that have fiscal space. On the left-hand side are relatively low-income states. On the right-hand side are the very high-income States.

And so, I think the interesting quadrant here is the bottom left. One that you've got four or five states, Assam, Madhya Pradesh, Odisha, Chhattisgarh, Jharkhand, very low income, fiscal space exists, and hasn't been utilized. There are another bunch of states where you've got a high per capita income, you've got fiscal space. The question is, why is a state like Maharashtra, especially given all of the discussion on internal migration that we've spoken about within Maharashtra, why does it have such low capital expenditure levels? Is it institutional capacity? Is it something else? So, you've got states like that in the bottom right-hand side quadrant, where even though the per capita income levels are high, there's a lot of un-utilized fiscal space.

Let me go to the next chart. So, in a way, this was just meant to be hand-waving heuristic exercise to say that, why it's important to talk about state that dynamics, we do that multiple times a week, the fact is there's a lot of heterogeneity across state debt, across state growth rates and across state CapEx. And what does this suggest prima face is to have a more differentiated set of fiscal rules. Fiscal space that's not derived in a static sense from the supply side, "What's my total pool of savings and how much should be spent for central States?" But really derived from some dynamic concept of debt sustainability. Because you've got states with debt at 28% of GDP and states of debt at 40% of GDP. And the implications for them for the same primary deficit are very different.

Now, though, at some level, these new set of fiscal rules can be used to promote both efficiency and convergence, and therefore can be in another metric for equalization quite apart from the horizontal sharing that Anoop spoke about. So, horizontal sharing is the sharing of revenues. The question is going to be designed fiscal rules, which de facto get to more equalization across states? So, states with more fiscal space should clearly be incentivized to spend more than CapEx, no matter what your income level is, to the extent that poorer states have this fiscal space. This will help also with convergence, all else equal and at the same time, if you measure fiscal space on this debt perspective, you'd have some states with big risk of un-sustainability, which will need to consolidate faster than the average laid out in the coming years. So, my point is, if we designed fiscal rules that can help with the convergence of capital expenditure, at least that's a measurable intermediate step, towards income convergence.

My last two slides. Just turn to the next one. I don't want to be overly simple-minded about this. The first thing is, Anoop know better than anybody else here that if you have multiple fiscal rules for states, this is going to come very intractable very quickly. And so, the challenge is, how do you get some differentiation without things becoming intractable? I think that is the policy challenge. Politically economy-wise I can understand just how challenging this is going to be. Why do different states have different rules? Why do we think about different states differently? And so, I fully acknowledge these caveats. Institutional capacity is a huge one. Maybe some states have lower CapEx because that's what they can provide. And fiscal policy is not the only constraint. So, fiscal deficit, they're not the only constraint or cap is not the only driver of growth. I fully appreciate and acknowledge all of these important challenges. And in many cases, you had states with very limited fiscal space, but had low CapEx, suggesting revenue mobilization needs to be an important driver.

So, there are many dimensions of the problem. I've taken a very small sliver to lay out something. And therefore, I think the implication from all of this is having some kind of Inter-governmental body, a central fiscal council, a state fiscal council bodies that work together that do this technical work. I mean, real time. Every two or three years, debt sustainability is going to evolve. And I think our rules need to be dynamic.

The last thing I want to say is ultimately we want to move away to a system, state expenditures are more than the center, state borrowing is quickly approaching central level. That we get efficient signals from the market. So, there is some incentive compatibility and states can self-correct. And I just want to go to the next char, the last chart. This has been a chart I've been using for many years, and it hasn't changed. Quite interesting. Each diamond represents the borrowing cost of a state. The Y-axis is how much you borrow at a typical auction. The X-axis is what your fiscal deficit is. And I could replace the X-axis with debt and nothing would change. And there is zero differentiation by market. Or state with fiscal deficit of 6% of GDP. And the state with definitely is one and a half percent of GDP, pay the same borrowing costs. Why will there be any incentive for a state to reduce its fiscal deficit? What benefit am I getting in terms of lower borrowing costs? And because in a wave of fixing R and we're fixing the primary deficit, you endogenously get this bi-modal distribution.

So, if we just go back to the previous slide, let me end by saying that ultimately, we want to go into a situation where debt sustainability and fiscal position is reflected by borrowing costs. And so all the more reason,having some institution, either existing or new that appreciates the heterogeneity is able to design fiscal rules to facilitate more convergence and move to a system where market signals become more important, think, become crucial. But I'll stopped there. Thank you very much.

Anoop Singh: Alright Sajjid, thank you very much. You've raised so many important issues. If you put that all together and what others have raised, I don't think we have enough time. But I might do right now is let me make a few comments, but more than my own comments. I will try to really go back you some questions that have come in. And I will then pass it over to each of you to address them. And because we only have 15 minutes more, as I pass it back to you, you could perhaps… You could also make out your own...

And from my side, Sajjid, you raised very important point about fiscal... You're implying how will should set very important point. There is a question that's come in education, two questions. I think that question on education applies to you as to Tumbe. The point is if education is attractive, why is migration happening? We need to rebuild education or build education it's states that are exporting labour. So, the question is, is education a factor? And number two, if it is, what we do about it?

Coming back to you. If education for example is a factor, and the states that are exporting labor in migration, already have low education. Is the answer therefore to look at capital expenditure? Or, is it more to find a new way to look at the efficiency of public spending? Because, as you spend on education and health and those important, it may not be capital expenditure that may need to be the focus. That's one issue we should look at here.

The second is about women. And Chinmay, this should go to you too. And that is, in India presumably, interstate migration, as opposed to external migration. I think external too. Interstate migration, the migration of women generally, is probably much less than it might have been. So, the question is is that so? And if that is so what are the implications of that from a broader productivity and work better spot to view. And as we look ahead the next five years after COVID where everything is changing, if women are not moving and that gets worse, what are the implications of that?

And Pronab, I think there's a lot of interest with these two questions where they agree with you, that there must be a broader way to look interstate disparities, and it should not be on simply each year. And a question one person asks, is there a way to construct another? Because I think the person said the reason economic survey on bare necessities and see whether that may give us a better idea of disparities, fall up perspective that is probably more appropriate to see if our growth are produced by these disparities?

So, why don't we start with you Pronab and then go on to Tumbe and Sajjid. And Rakesh, we have only 17 minutes left. So, please, we may all relax in our view and you may have questions on some of these points. And Chinmay, so please use the next few minutes for you also to respond to each other after my time. Thank you.

Pronab Sen: Anoop, do you want me to start or should Rakesh actually do it first?

Rakesh Mohan: No. I think I want all of you to talk.

Pronab Sen: Okay. Alright. Let me first on the focused question of metrics for measurement of inequality. Bare necessities would actually be a bad metric, because all it does is it simply replicates what we do in terms of our poverty estimates. And as we know, if you look at the dispersion of poverty estimates across states, it's not that great, it's not very very high. And bare necessities essentially replicate that. But if you're arguing that we can use bare necessities as a basket of goods and services on which to calculate purchasing power parities, then that may not be a bad way of doing it. It's not perfect. I would not be entirely happy with it, but it's not a bad way of doing it. But if you use bare necessities, you will get very little dispersion and we will be living in a fool's paradise thinking that we're actually a fairly equal society.

Let me make a very short point on something that Sajjid said, which I think is extremely important, which is, he pointed out to the role of growth. And when he was talking about growth, he was talking about nominal growth, because that's what the G minus R is. It's nominal GSDP growth. So, it can either be a higher growth rate off or it can be inflation. Now, here's the million-dollar question at a national level, many countries have, including ours by the way. We have actually grown our way out of debt on sustainability through high inflation. So, if you recall the period when our debt to GDP ratio came down very dramatically, which is the 2000s period, it was very high inflation period also.

Now, here's the million-dollar question which we need to ask ourselves is whereas the central government does have instruments to, in a sense, I won't say encourage. No central government wants to encourage inflation, but to actually determine the cost of inflation. The state governments have it. And have it in the sense that they can inflate the state prices. Do they have that ability? If not, then we really need to talk about how the inflation rate in each state is being determined by essentially what our national level interventions and are those effects asymmetric?

My sense is that it is asymmetric and therefore one really needs to think about it because all the efforts that a state may do in terms of trying to get its growth rate up, maybe offset by a central policy, which pulls down the inflation in that state relative to that of other States.

Anoop Singh: Okay. Thank you, Pronab. You raise inflation level. I will comment on that, but at least another time. Tumbe, over to you.

Chinmay Tumbe: Yes. It's two points. One on education, one gender. On education, one is of course, yes, more Indians are moving for education as these employments are going up, especially in tertiary education, obviously people are moving. But the thing is, if you're looking at from a fiscal framework, will more investment in education in say Bihar or many of these other states, will it reduce out migration or even earlier concerns of brain drain and so on? That's highly unlikely. If anything, we're going to have more migration for education as you know, primary education levels are a certainty.

And again, the classic example is Kerala. And Kerala has been the most educated state of India. And for a long time in terms of a lot of measures and it still had except extremely high rates of migration. And they have evidence on migration education. The more basic education levels are rising, actually migration of both work and education, out migration are increasing in those places. So, I don't think there's a case to be made that with more investment in education from a fiscal kind of devolution rule, we'll be able to curve out migration or for either work or education.

I think in general, India is going to see more surging migration levels for both education as well as work. And I think one person pointed out that Delhi is class example, which absorbs migrants on both camps.

This thing on women migrating. It's true that in some - like Chhattisgarh for example, is sending out a lot of single female migration, and generating such migrations, which are not really seen earlier. But the numbers are very small. And so, my sense is that if you look at just pure migration for work, it's kind of an 80, 20 rule, 80% men, 20% women. So, yes, domestic work as somebody pointed out, is hugely dominated by women. But that's only a tiny percentage of the overall number of jobs done by migrant workers in India.

What are the implications again for production? So, I mean, nobody really knows how this is going to play out in the next 10, 20 years. Everyone got those numbers on female labor force participation will go up. I think, huge debate on that. And if anything is either stagnant or even declining. So, I think that is a larger question, less to do with migration. Though, I think it isn't migration distance? I don't think we are generating enough jobs in our cities. Like China. In China, all those garment factories employed female labour. That kind of equivalent stories, not really emerging in India. And I think maybe that's linked in a way that India stagnant participation. I think a lot of studies have shown the dramatic impact of that on GDP and a variety of things, China, that's 60%, we are at 25% on that one metric alone. So, clearly that's something which hopefully goes up, that number starts going up. But as of now, I don't think there's any evidence that's happening.

What are the fiscal implications of that stuff to really point exactly? I'd be curious to know if any of you have talked about this. But a prime official, I don't see that much of an impact.

Anoop Singh: Sajjid, back to you.

Sajjid Z. Chinway: Yes. I just take a minute or two. I'd love to hear what Dr. Mohan and you have to say. But on this one, our mind is G thing. So, I think the first thing is, Anoop, I was remiss. Capital expenditure in those charts of mine for merely a proxy for any kind of expenditure that boosts total factor productivity and boost medium term potential growth. Because, I was just going to show that trend growth matters so much for debt dynamics at any kind of expenditure that boosts and growth and social expenditure. It will more than pay for itself in terms of fiscal sustainability by pushing down that. So, it was just meant to be a small proxy. Your point is well taken.

On the R managed GDP, I come out slightly differently. I realized that the high inflation 2009, 10, 11, 12 brought the debt stock down, but it created a lot of flow problems for India. That's where we were overheating. It created a current account deficit of 6%. It got us into trouble with the taper tantrum. So that's the tradeoff we have to think hard about.

And secondly, I would say, in a world with more capital account converterability that if you were to get high - because remember both R and G are both nominal variables. So G is going up because of high inflation, R will go up as well. The gap may not be in your favor. Even if policy rates don't go up, as we're seeing in the US. This is Dr. Mohan first question to me "Why our bond yielding going up?" Because, bond traders look into the future and say, "This may well be a country with higher inflation and whether the fed is going to be very patient or not, if high inflation is coming, the 10-year bond will reflect that. And the same dynamics may happen in India where your G curve may actually move up or steepened in anticipation of higher inflation. I'm not sure in this world on can the benefits of inflating your way out of the problem exist to any meaningful degree?

Which therefore goes back to the first point. We need expenditures on investments that enhance DFP and medium-term growth potential. But I'll stop there.

Anoop Singh: Okay. I'm going to give it back to you Rakesh. But before I do it, let me just pick my final point and should pass it to you. I think we usually have a similar event like this one year from now or two years from now. The reason is this, I hope I'm wrong. I do continue to believe that we are in a historic time in India and globally. And we will know the nature and the economy and implications for the longer ramifications we've had for education, health, women, and also the components of recovery in services... If it turns out that the unevenness of our recovery and the country is much more than we think it might be, then long run the implications of inequalities. And so, we need to see how states are spending in the next two years on effective preventative areas. That's my final point. Rakesh. over back to you.

Rakesh Mohan Thank you. Thank you very much, Anoop. Thank you Dr. Pronab, Chinmay and Sajjid. It was really very very substantive interventions with lots of food for thought. Just for everyone's information. We do put out a recording of this session in a couple of days after the session was done so that people, even though, of course, we're not here, will be able to see it.

A couple of substantive comments. Sajjid, on this inflation growth issue. I think one doesn't have to go off into the 2010 to 2012 framework, which is a disaster. I think that we can have or be in the 1996 to 2008 framework, which I call the 5/8 framework. That is 5% inflation, 8% growth, 8% nominal interest rates, stable, that an 8% savings deposits, small savings, et cetera, that is quite financially stable. And if you sort of have even say so in some sense, given that the monetary policy framework is being thought about these days, that in some sense, I would say, look, why not change the target to 5%, not 4%? So, you're not sort of going off to 10%, et cetera.

And suppose you have 5% inflation and say 7% growth or something of that order aspiring to eight, but seven will probably more realistic, that is something that one can realistically think about. Because we have done it before on a stable fashion. Inflation doesn't take off as long as you are doing proper macro product management.

Second, a lot of the discussion on migration. I would have thought that migration is basically endogenous. It responds that everything else is going on, whether it's internationally whether it's domestic, industrial, et cetera. And I think Chinmay was very right in pointing out that contrary to a lot of impression, migration in India, relatively small compared to other countries. One thing he didn't mention is one of the most amazing data points is that across if I'm not mistaken, I think we all know that what we find with 2021 census, if it is held, is that I think from 1980, at least to 2011, the share of rural urban migration in urban population growth was around 20%. That's unusually low for countries at our stage of development and growth. And a lot of that to my mind is to do with macro trade and industrial policies, not encouraging employment in terms of manufacturing as was done in China.

And then that goes back to the fiscal incentives that had much higher proportion of growth being comfortable, very effectively, which it did between 2002 and 2010 or thereabouts and trade actually. It also has a lot of fiscal effects and of course positive social effects.

I would hug back to what Anoop said about health and education, we haven't talked about enough in the series. But India has consistently been under spending on health and education, particularly public health and public education. And I think there's a whole subject central level, state level, local level.

I'll end by just saying on this one issue of manufacturing, that is rural urban migration, that one fscal impact on rural urban migration ought to be, but it isn't is the issue of property tax at the local level. We have about the lowest proportion of revenue from property tax in Nations across the world. Just about that. One would have thought that as property price, as the poverty values rise, we're going to have a greater rural urban migration, though, that's one positive impact on the- but we don't have it because you don't collect it or particularly the local level finances.

That's one issue. I think that one could even have a special session on local level finances and the impact on growth, impact on urban infrastructure etcetera. Those are somewhat unconnected points, but that's what I've gotten by listening to all of you.

It just remains for me to thank all of you for participating, all the listeners to the viewers for participating and just keep watching your emails for future flagship seminars from The Center for Social and Economic policy. And of course, we'll be happy if you give us suggestions on what subjects should be tackled in these seminars.

Thank you very much again.