THE BROOKINGS INSTITUTION

WEBINAR

THE FUTURE OF REMOTE WORK: A FIRESIDE CHAT WITH NICK BLOOM

Washington, D.C.

Thursday, March 2, 2023

FIRESIDE CONVERSATION:

NICHOLAS A. BLOOM Professor, Stanford University

SANJAY PATNAIK

Bernard L. Schwartz Chair in Economic Policy Development, Fellow and Director, Center on Regulation and Markets, The Brookings Institution

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Sanjay Patnaik: Hello and welcome to this fireside chat of the Center on Regulation and Markets at the Brookings Institution. My name is Sanjay Patnaik and I'm the director of the Center. In our series of fireside chats, we explore important topics related to modern day markets and regulations through one-on-one conversations with regulators, business executives and academics. Today, it is a real pleasure to welcome Nick Bloom, who is the William Eberly professor of economics at Stanford University. Welcome, Nick. I'm really glad that you could join us today.

Nick Bloom: Thanks very much.

Sanjay Patnaik: Nick has researched working from home for nearly 20 years and has written extensively on the future of work. In this role, he has had shaped both public and corporate policy and has met with hundreds of CEOs and managers throughout his career. In addition, Nick has published many papers on foreign management practices, the effect of firm organizational performance and surveying business uncertainty. Prior to his tenure at Stanford, Nick worked at the London School of Economics and at McKinsey, and he earned his Ph.D. in economics from the University College London.

So, future of work and remote work, working from home are obviously topics that have really gained a lot of prominence in the last couple of years, mainly because of the pandemic. And so what we saw during the pandemic is that practically overnight a large part of the US population was forced to work remotely, and that was facilitated by recent advances in communication and collaboration technology such as Zoom as we are on today. And you mentioned during the pandemic's peak, 42% of U.S. workers work from home full time, which is a really large share of the economy. Can you give us a bit of a context? How did that compare to before the pandemic? What was the share of working from home there in remote work?

Nick Bloom: Sure. So maybe the best number is actually the share of days worked from home, full paid days. So everyone like, works from home in the morning, in the evenings. But if you think of full paid days, it affects commuting, also affects office space. So before the pandemic, it's about 5%. So it's pretty rare. These are numbers for 2019. So it goes from 5% then absolutely exploded to 60% in April, May 2020. Basically, anyone that could work from home is doing it now, doing it almost full time. And it's now been dropping back, back, back, back. It's now at about 27%. It looks like it will maybe pan out about 25%. So the pre was five and the post is about 25. So that's a

basically fivefold increase, which is like huge. I mean, it's, it's almost impossible to find anything in economics that changes as that speed by, you know goes up 500%.

Sanjay Patnaik: And it's really a shock to the economy, right, that happened overnight, basically. Can you tell us a little bit about when looking back in the last couple of years when so many people had to work remotely, how has the experience been with remote work, both from the employer side and the employee side? And we see kind of like a bifurcation oftentimes when you look at the surveys and media reports. So I'm curious with your interactions with employers and employees, what, what is your sense.

Nick Bloom: Sure, there are three different, three different kind of setups. One is fully inperson. So to be clear about 60% of Americans are fully in-person. So I think of all frontline retail, manufacturing, a lot of essential services, you know, and I teach, I'm not doing full time, so I'm probably a bad example, but people that are teaching, nurses, etc., that's 60%. There's then another group which is now about 30%, which is probably most of the listeners, actually, a lot of professionals, managers, my students from Stanford are hybrid. So typically they're coming to the office three days a week, working from home Monday, Friday, they are like the popular work from home days.

Then there's a third group which is about 15%, and they're fully remote and initially people think well, fully remote, that's like Airbnb and Yelp. It's like, yes, but 15% of the US labor force, that's, you know, the US labor force, one hundred and sixty million so you're linking a 25 million fully remote employees, maybe half a million at most are tech, the huge majority are call centers, HR, payments processing, payroll, etc. So the experience has been, so those three groups, oddly enough, I think hybrid are closer to the in-person.

So the media often confuses fully remote with hybrid. You think about hybrid, you've still got to live in the city and still go in three days a week. It's not so radically different than what we did prepandemic in some ways, because pre-pandemic, sure, we're going in five days a week, but most people are doing a bit of work in the evenings, a bit of work on the weekends maybe. So hybrid is, you know, is also where most of us are kind of settling out. And you've still got to live near work, you basically get a couple of days at home a week, Monday, Friday would be a standard set up or maybe Monday, you know, Thursday, Friday. That's become really dominant. That's really popular. Most people want to go in and socialize two, three days a week, work with colleagues, but also get the, you know, avoid the commute, they're less stressed, they're quiet at home.

Sanjay Patnaik: Well, this is super interesting. And so I think a lot of people have been talking about kind of like what the impact has been of that remote work shock, right, on the economy, on economic indicators. So one question I have is when you look at some of the economic effects, for instance, on productivity or employee happiness, what does the research tell us?

Nick Bloom: Yeah. So I'll start with just on productivity, it depends radically on fully remote versus hybrid. So if you look at fully remote, the evidence is that's kind of problematic in terms of mentoring, in terms of innovation and in terms of building culture. So, for example, there's a nice paper in innovation, there's a paper in nature, there's another in nature, human behavior showing it's harder to be creative. They run some experiments fully, right so it's not like impossible. So there are lots of successful, fully remote firms. So that looks like it probably reduces productivity. If you're fully remote, you may tend to say, why does any company do fully remote? The reason is there are also some big upsides. And the most obvious one is you save on office space, which is about 20% of payroll costs, and you can hire globally.

So I've talked to a bunch of tech firms, and they say things like, I remember talking to one CEO saying, you know, we saved a lot of money in offices. We're now hiring in like Bulgaria, Mexico, Nigeria, the Philippines, India, etc. So you have access to this global labor market, but productivity is down, but costs are also down.

Hybrid is really different. So hybrid, there's a bunch of papers, I've run some randomized controlled trials and I won't go through the details now, but probably the most relevant is we took a 1600-person firm called Trip.com. They're one of the world's big three travel agents. They had two whole divisions, they're coders, marketing, accounting, finance, etc. And we randomized them by even and odd birthdays. So if you're even, you had to come in five days a week, which is the second, fourth, sixth, eighth of the month, etc., if your odd, first, third, fifth, you got to work from home Wednesday, Friday. So you are basically exactly testing what is hybrid. And there you saw a very small positive effect on productivity, like 2, 3%.

Sanjay Patnaik: Mm hmm.

Nick Bloom: And the question may be, you know, why does that, where does that come from? The reason you get a small positive effect appears to be they get their three days a week in the office. They're socializing, mentoring, they're having meetings, etc. The upside of working from home for two days a week is one you save on time. So the average you know, the average these workers,

actually in China, but in China, as in the U.S., people are spending more than an hour a day on commute. And it looks like in the U.S. figures, the average American saves about 17 minutes a day when they work from home, of which 30 minutes they spend more on working and 40 minutes on other things. But if you're an employer, you're getting an extra 30 minutes a day off your employees, and they work from home. So that's benefit one.

And the other is quiet. So the offices are really noisy. It's really distracting. My favorite evidence on this is actually some of the research from psychology going back decades whereby they take hundreds of students and they, they all have to wear headsets and sit this math test. And half of them had nothing and the other half had through their headsets, office noises piped through it. And they find the folks doing the math test with the office noise piped through it significantly lower scores. So it's hard to concentrate, so those are the two big benefits, Monday, Friday, save on commute, it's quieter. So it looks like fully remote is big tradeoffs, big positives and negatives. Hybrid is really pretty much a win win, which is why I, you know, the entire corporate world is really moving to it. There are flavors, like Disney is just work from home on Friday and Amazon and Google are 2, 3 days. But pretty much everything for managers and professionals is ending up there.

Sanjay Patnaik: So this is super interesting, and I want to kind of like talk a bit more about this too, kind of like the hybrid and the fully remote, right. And so let's start about the hybrid, right. And what we have seen now is some announcements from CEOs that they want to force people back into office like five days a week, right. And completely ignore that remote aspect. And we have seen a quite of a disconnect in some of your work, you mentioned that between how some managers see work from home and how employees work from home.

And I think as we see it, overwhelmingly most employees favor work from home, obviously, because especially when you're a caregiver, when you have kids, etc., the managers often don't share that. And so I'm curious, kind of like when you look at that backdrop, what is the future of work in your perspective and why do you think we have that disconnect when clearly hybrid work seems to have clear benefits?

Nick Bloom: So we are kind of in the future now. So-..

Sanjay Patnaik: Interesting.

Nick Bloom: If you look at the data by, you know, in our March 2023, work from home numbers and everything's pretty much stabilized. So most organizations, Stanford certainly fits this

model, Brookings, I'm sure, pretty much all organizations have all three groups. So Stanford has some folks that come in every day, five days a week, this will be your service, security, cleaning. Some people are dealing face to face, student services, etc. They're not always our employees. So sometimes, you know, cleaning may be outsourced, but, you know, they're on our campus and, you know, many companies are going to have and that's, again, 50, 60% of the economy.

There's a second group which are like faculty and staff, managers that are hybrid and are just going to remain that way forever. I think this patent for Stanford is two days a week in the office, three at home. You mentioned Brookings had, you know, some flexibility, but that's a very standard pattern. And then we also have a third group that are fully remote. We have, I think, a thousand employees now that are not living in California, and that would be much more like IT support, health care, payroll. So that is the new normal.

And I think how many days you come in really depends on your role. So for most listeners, which is, you know, typically college grads, you're probably going to be coming in, the average person, just to give you numbers, the average person, so we searched, as I said back, we surveyed 10,000 people a month under this thing called SWAA, the survey of workplace attitudes and arrangements. We've been doing this for like more than two years, since the beginning of the pandemic. We asked people how many days do you want to work from home? And the average is about 2.8. But there's a huge spread.

Sanjay Patnaik: Interesting.

Nick Bloom: So 30% of people say all the time, I want, I want to be like fully remote. They tend to be folks in their thirties and forties with young kids that live far out. So the commute is painful. There's then 20% at the other end that are like, never. I want to come in every day, and they tend to be 20 somethings that, you know, want to be social, they want to get mentored, and their apartments are small. So they're like, look, there are 5 of us living this apartment and I don't want to work from home in my bedroom. There's only one living room, so and then the other 50% of people are somewhere in the middle. So that gives you this average of about 2.8.

If you look under hybrid, most managers want a bit less, but not massively less. Typically managers saying, I want my employees in kind of three. So there's some gap, but it's not enormous. The gap, if you want to have it, is really on the fully in person. So if you survey the fully in-person people, which is the biggest group, they still want to work from home. They're just not able to do it.

Sanjay Patnaik: Because of their type of job. Now, that's super interesting, and I think it shows the nature of the problem, right? Because do you have so many diverse opinions? And we have seen that, we have seen the same in the discussions here at Brookings when we were developing our work policy. So let me talk a bit about the fully remote. I'm curious so, what, what I've seen oftentimes is I think when you have a fully remote team, right, or a fully remote organization, you will have to probably change your way of how you manage, right, how you create culture, how you mentor. And I know there are approaches that are quite novel that [inaudible] use and matching very senior executives with young people, things like that, that you have to be more proactive.

And so I'm curious kind of like have you seen organizations that are doing that very well, whether they can still maintain productivity? Because we have seen remote work teams in multinational companies for quite some time, actually, right? Where you have teams that work across the globe, and they hand off work. So I'm curious what your thoughts are on this and, and kind of like what, what new approaches to management, such a type of style of set up might need.

Nick Bloom: Great. So fully remote is quite common. There are about 25 million Americans that are fully remote. To point out, they're mostly not working in entirely fully remote companies.

Mostly they are like IT support folks in a company where some people are coming in. But you're correct, there are some fully remote companies as well. So Automattic, Upwork, Quora, Airbnb, Yeah, they tend to be in IT. All of them that I mentioned it are like tech. There are some startups, but it's very much a tech thing. The way they make it work, there's a few things they do. As you say, they're very deliberate about scheduling a lot of, you know, repeated Zoom meetings or teams or whatever it is.

They also are very focused on writing things down, turns out to be like Automattic—.

Sanjay Patnaik: Oh, interesting.

Nick Bloom: [inaudible] Keeping or GitHub, a big thing on a very much a written repository. They also still meet in person. The interesting thing is when I talk to the CEOs of, pretty, I think all of those companies and they, well still say, look, we still have retreats like every other month. We all go to, say, Barcelona if you're in Europe or maybe Albuquerque or wherever it is, somewhere nice and we'll meet for four or five days because it's part of building the culture.

And it you know, these folks who live around the world and they're all flying to place X, so maybe the Europeans are flying to Barcelona and the North Americans into, you know, Albuquerque, etc., to meet up to generate some bonding. The final thing that turns out to matter a lot and in fact

goes back to when I spoke to Marissa Mayer about what happened in Yahoo! in 2013 when it was canceled. And it, you know, temporarily it was a big storm, but it is you need good performance evaluation. So, San Diego, you're my boss.

Sanjay Patnaik: Yeah.

Nick Bloom: If I'm in the office, you can kind of see whether I'm working at my computer typing. It's not great. I wouldn't say that, you know, that's kind of five out of ten management watching me, but at least am I there, am I working. Do I see, when you walk by am I, you know, is it on a football match or am I actually doing something. The problem is when I'm remote, you can't see what I'm doing. So some companies fell back to this really horrible, that I really don't like surveillance software of recording keystrokes and randomly taking screenshots and stuff, which is awful. It's borderline illegal, actually.

Sanjay Patnaik: Yeah.

Nick Bloom: But what good companies are doing and what's being picked up a lot now is what I call performance evaluations or output. So you'd say [microphone cuts out] objectives, I don't know, to teach this number of courses, write this number of papers, deal with policymakers, raise this number of grants, I have like seven or eight objectives, and you'd evaluate me against that, use data. Much when I was back at McKinsey, I had, you know, a grid and, and you do that on a regular basis using 360 reviews, etc. That's beneficial for you because you can evaluate me without having to, you know, watch me.

Sanjay Patnaik: Yeah.

Nick Bloom: It's also much better for me because I'm an employee. I know if I'm working from home on Monday or Friday, I want to go pick my kids up for school or go play a game of tennis or go for a run or go, you know, go to the dentist. I can do it without freaking out that you're going to send me an email and I don't respond in 20 minutes. So as an employee, I want to be evaluated in output and have flexibility. And as an employer, you want that too. So that's, these fully remote companies tend to be also very good at performance managing because that's what you really need for work from home, even one plus day a week, you need that to manage people.

Sanjay Patnaik: That's actually a super interesting point, I think. And I've had kind of like the same experience because we were during a pandemic, fully remote. And so what I usually do for our team is I really kind of like focus on output-based metrics, right? As exactly as you say, I don't need to

see the people, but I want to see kind of like the output they deliver to me at a certain deadline and then looking at that.

So that's, that's really interesting, I think, because that probably requires a shift of thinking among quite a lot of managers from, they're like, okay, I have the employee sitting in front of me all day long and I can look at them to, okay, what do I want and kind of like when do I want it by. And then that employee can, as you say, can send it to me after walking the dog maybe, or picking up the kids as long as it fits within the deadline. Yeah, so that's very interesting.

Nick Bloom: It is interesting, if you survey people, we ask them, what do you like about, I'll tell you on both sides, we ask you, what do you like about working from home? Number one, it's like really easy to guess. It is, you know, no commute by a, by a landslide. But number two is actually flexibility. And it's exactly your point that if I want to go to the dentist or I want to go, you know, go for a jog or go pick my kids up or whatever, it's really hard to do it in the office. But at home you can do it.

But in order to do that, you need to be output evaluated rather than somebody checking you're punching a key every 3 minutes. And then if you ask people by the way about what they like about the office numbers one and two are like working with colleagues and socializing with colleagues. You know, we ask them, is it the free food or the equipment or being near your manager. No. So we're basically about face-to-face interaction with coworkers.

Sanjay Patnaik: Yeah. And that's, that's I think I was also key kind of like you probably get different things from, from how you work right, and organizations probably have to adapt to to some degree. And so I'm curious kind of like what other factors should businesses consider when they develop their work from home policies or hybrid policies? I mean, we already talked about the different roles, I think, and the way how you mentioned management, are there other things that that they have to be conscious of that you think might be useful.

Nick Bloom: The, you mean, the two ways to think about it is one is if you get people into the office, you want to do it on anchor days, at least at the team level or maybe the group or the area level. So if I'm, you know, working with you and let's say, Megan, who helped set this up, the three of us are working together. It's like intensely frustrating if you're in on a Monday, the two of us are at home Monday, I'm in on Tuesday, you and Megan are home, Megan's in on Wednesday, you and I, and then like, every day we're in, but nobody's here. We say this is the 2021 experience when people start first started to go back, but firms wanted social distancing, so they wanted people to come in on

different days. And the stories that came out were like, I come in, there's nobody there, the office is empty, there's no energy, you know, why have I wasted my time? I spend all day at Zoom, and I commuted. So that, you know, critical thing one is to coordinate.

So if you're going to come in on one or two days a week, you want to coordinate, and it's basically going to be some combination of Tuesday, Wednesday, Thursday. So anchor days and coordination is pretty critical. People lose choice a bit, but in the surveys, they're prepared to give up some choice. They get some certainty and also, they get the certainty that when they come in, everyone else is there. The other thing is you only need the number of days you really have the amount of in-person interaction. So if most of your job is, you know, individualistic coding, maybe you only need to be in, you know, maybe one day a week, if on the other hand, you're in a role like, I don't know, you're designing products with lots of coworkers, a very collaborative thing, and it's a lot of touch and feel and, you know, rapid interaction, you may think that's a three or four day a week thing.

And so the reason this comes up is that some companies that tried to drag people in for too many days and an employee said, look, I just don't need that much time in the office, we don't tend to spend a lot of time working together like that. So we have the odd meeting, but it's a waste of time. And so what tends to happen is for firms that have worked well, they've maybe said, look, we're going to have everyone in on Tuesday, Wednesday. Those can be really busy days. They have kind of meetings, socials, you know, trainings, lunches, events, etc. People come in and that happens.

And they feel like happy, feel like I've come in for a purpose, you know, I have been in a meeting, I've hardly been on Zoom all day. That works, I'm happy with it. What doesn't work is saying come in for four, they come in and most of the day they're on Zoom and then they're like, why did I come in? And they're kind of frustrated and they stop coming in on every day and then the thing kind of falls apart. So it's like, it's better to get two days working really well than to push for four and have that not working.

Sanjay Patnaik: I think that's a really key point because it, it speaks to purpose, right? Like if you're if you ask people to come back, there should be some purpose to it because as you say, it's not useful if that person that sits in the office is on Zoom calls day or on calls by themselves. And I think another thing that I hear is really flexibility seems to be key, flexibility in terms of the roles and the organizations to some degree at least, right. With, with these anchor days where you can then work around. So that's super helpful.

Another thing that I'm curious about, I mean, I think we really are in a very exciting period of the future of work and so many changes in the labor market also because of work from home. And so what opportunities do you see when you look at work from home, kind of like opportunities for startups, for entrepreneurs in terms of getting new talent? You mentioned some companies, for instance, are trying to recruit globally now, which I think is a very big thing because it really allows companies to source talent in other countries, which previously was not possible because of visa issues or other problems. And then also kind of like opportunities to develop new technology that can, can like help with collaboration. I know like a lot of companies that work on metaverse and augmented reality, like what are your thoughts on this? And kind of like what the space is in this respect.

Nick Bloom: Sure. So the first thing that's kind of really exciting about the take up of work from home is it looks like it's been a big driver, this explosion in startups.

Sanjay Patnaik: Interesting.

Nick Bloom: So you have really good measures of how many new businesses are created in the U.S. from the IRS. So every time you start a new business, and you want to employ somebody, you have to get what's called an employee ID number, an EIN, you applied to the IRS, you fill out some details, they issue you. The IRS has now been counting these and sending the data, the census that publishes that. And so from 2010 onwards, we can see the number of new businesses starting up. It's slowly trending upwards. It's not turning up as the share of the economy, it's just there are more people in the U.S. that's kind of scaling up with the number of people. But it's, it's a very gradual rise.

The beginning of the pandemic, this thing plummeted. You can imagine like who's going to start a new business in March, April 2020. It then rebounds, which is what you'd expect, there's pent up demand for three months of no startups, but then it's fallen, but it's stayed really high. So even at the end of 2022, we're still 20% above pre-pandemic. And it looks like we've now just on a higher level of business creation. So there's just massively more businesses being started in a way that honestly was amazing for many economists. And like, it seems really surprising, I get there's a drop and I get there's a rebound, I'd expect it to go back to trend, much like, you know, we look at eating out or travel or anything else, it's kind of most of back to trend.

And I think work from home is a big driver for a few reasons. One is obviously it's cheaper to start a business if you're fully remote because you don't have to pay for office space. Another fact that

maybe not everyone likes, but a lot of people, if they get their job done, I think it's fine they do other things around it and it turns out that some of the other things they do is start their own business. If you look at businesses, often they're founded by someone who has a current job. They're not sure whether the new idea is going to work, they're doing both.

Eventually, the new business takes off and they quit, and they move to that. But that initial early phase, so I think a lot of it's, is that. I think also a bunch of it is folks in more rural areas or places out of the center of big cities can suddenly more easily access customers and employees. So, all of that is actually very positive for driving growth and driving business creation and dynamism.

Sanjay Patnaik: Mm hmm. That's so interesting. And have you looked at all if there are differences in kind of like work from home policies between startups and incumbent firms in terms of the policies they set internally?

Nick Bloom: Yes, so it's definitely the case younger firms are much more likely to have worked from home. So I won't share a slide, but I can show them around afterwards. But I've been doing some work with the Templeton Foundation and one of the things we looked at is we ask in each, every survey, every 10,000 people we survey every month, we ask them, when was your firm founded? And some of those 10,000 people turn out to be owners of businesses themselves, and we asked them, when did you find your business. So you can get it either from the employees or from the owners, two different ways. Either way, what you see is younger firms, if you look at firm A, just they're young, they tend to have higher rates of work from home, particularly 2019, 2020 onwards. So I think what happened was—.

Sanjay Patnaik: Interesting.

Nick Bloom: The pandemic begins, everyone's moved to home. If your business is really young, that kind of sticks with you. So younger business tend to be more work from home anyway because they have less budget and they're more on the side of somebody's regular job. But also, there's also kind of an, a cohort effect, which is these 2020 onwards cohorts. And that's another reason in the long run, I think work from home may grow.

I was actually having lunch with Hayden Brown, who's the CEO of Upwork, and she was saying, you know, you see a lot of these young firms have founded remote. As they grow and become, you know, ten, 20 years from now, big firms, they may still have a pretty remote flavor or at least, you know, they'd be more remote. They, rather than having people in the office four days a

week, there may be two because they were born into a fully remote setup. And that is one of the things pushing up long run levels of work from home.

Sanjay Patnaik: That's super interesting, actually. That means that could be a really significant generational cultural shift as these companies mature and become, become older, that, that's wonderful, that's really interesting. Another question I had is related kind of a bit to the background of which workers can actually work from home, right. And you have spoken about this, that obviously where remote work is largely confined to the well-educated workers, people with a college degree or at least some college, college work, and then obviously we have a significant workforce still where, that have to be there in-person and that are not as well-educated, that have to be in-person, cannot do remote work.

So what does that mean, kind of like for the future of labor markets? Because I think we already see a bifurcation in these labor markets in terms of opportunities, income, etc. Now we have that added on where one part can work remotely, which is a benefit, and a part of the labor market cannot. What do you see for the future there?

Nick Bloom: This, again, is a really interesting topic, and I'll just step back a minute to give you kind of the backdrop from where I'm heading, because this is kind of a glass half full, a glass half empty. So in the U.S. and in fact, much of, you know, North America and Europe, etc. but to kind of, the U.S. data the best, we've seen a big rise in inequality from 1980 to about 2010. So if we look at difference between college grads and non-grads or the 90th versus 10% is going up and up and up. So inequality is rising to incredibly high levels in 2010. It looks like the growth kind of flattened off around 2010 to 2019, but it certainly wasn't reversing.

So inequality, we've got a very high level in 2010 and kind of stayed at that level. What's been astounding in the pandemic is from 2020 onwards this has dropped quite a bit. So the inflation over the course of the pandemic, I think is average, kind of six, 7% a year. Me, you, most graduates have seen pay increases about 4%, which is higher than pre-pandemic, but is actually less than inflation. So if you look in the U.S., people, college grads have actually seen real wage cuts, whereas if you look at people that left school at high school or less, so you know, people that think of working in frontline, you know, they're working in Chipotle, somewhere, you know, food service, transport, etc., frontline essential service workers, etc. These folks have actually seen pay increases that are much faster than inflation.

So if you go around, you know, going around the local shopping center and every store has helped wanted and everyone knows it's really hard and that's meant their wages have risen faster than inflation. In fact, since the pandemic began in 2020, I think the gap between grads and nongrads has closed by about 10%. So it's a massive gap, it's way more than 10%. So inequality kind of went up a lot to 1980 to 2010, went sideways and is going down a bit now.

Sanjay Patnaik: So that's interesting.

Nick Bloom: Very good news. The interesting thing is why that's happened during the pandemic. And I think work from home is one of the main reasons. So when we survey people, they tell us that work from home, the ability to work from home two or three days a week is worth about the same as a 8 to 10% pay increase. So, yeah.

Sanjay Patnaik: That's huge.

Nick Bloom: You know, I could ask you, Sanjay, I mean, you were talking before the call, we both do some work from home. I would I mean, I hope no one from Stanford is listening—.

Sanjay Patnaik: Right, yeah.

Nick Bloom: Being able to work from home two or three days a week, I could see, would I, would I basically be paid 8% more but I have to go in and sit in the office all day. I don't have a commute. But if you add in a commute, a lot of people, and commuting is very unpleasant.

Sanjay Patnaik: It is especially.

Nick Bloom: Yeah. Danny Cameron and Richard [inaudible], all these people have these surveys from going back 20, 30 years and people, the activity they hate most in the day, more than work is commuting, they actually prefer to work than commute. So if you take that number that, you know eight, 8%, that kind of explains why that gap in inequality has fallen. You have a bunch of grads like us that suddenly that work is relatively more appealing than it was in 2019.

Sanjay Patnaik: That's interesting.

Nick Bloom: So labor supply of college grads is up if you look at labor force participation rates for college graduates in the US, I believe it's above pre-pandemic levels.

Sanjay Patnaik: Mm hmm.

Nick Bloom: Non-graduates, it still hasn't recovered. And the reason is they don't have this perk. And in fact, instead they have you know, there's still some masking, some infection risk. And, you know, life is harder and less appealing than it was in 2019 to come into work. And so interesting

enough, there is a perk from work from home. You're completely correct. It does benefit the already highly paid. But oddly enough, the labor market has kind of adjusted to reverse that in terms of pay. So people that can work from home are getting this nice eight, 10% valuation, but have actually relatively got 8 to 10% less pay versus people that can't.

Sanjay Patnaik: This is super interesting.

Nick Bloom: Yeah, it's entirely through changes of labor supply and I'll stop there. So I don't know whether you see that as good or bad, but it's kind of, you know, you giveth a nice work from home and you taketh away on, you know, salary. So I'm—.

Sanjay Patnaik: [inaudible].

Nick Bloom: In some ways are roughly net on where they were versus 2020.

Sanjay Patnaik: So that's super interesting, [inaudible] extra demand and the negotiating power for people maybe that have to be in person has probably gone up because of that, also. That's super interesting. And other, another aspect that also you have written about is what fascinates me about remote work is that it has the potential to really draw in talent from parts of the world and parts of the economy that we might not have been drawing otherwise, right. And what you'll find is that in one study that women and people with children are the ones that also disproportionately benefit from work from home policies.

And so can you talk a little bit about that aspect? Because I think this is something that is often really overlooked, right? Like, especially when we look at the divide between rural and and cities, cities are super expensive, a lot of the cities where the jobs are. California is a prime example for that, San Francisco area, same with D.C. And so there are also oftentimes people that have caregiving responsibilities, they might not be able to move or might not be able to do kind of like the full 9 to 5 with a two-hour commute, right. So. Well, what did you find with that regard? I'm curious.

Nick Bloom: Sure. So I think, again, I think it's a very positive part of work from home. It could increase labor, labor force participation rate, so how many people can and want to work, which again, would drive growth, help contain inflation in the long run. So that's really good. It could easily push up, well, it's hard to know, but labor force participation rates by 1, 2, 3%. I mean pretty large numbers actually, that several millions of Americans that now may work. Where does that come from? In the, so I have this summary I'm just about to put out with Jose Berrera, Shelby Buckman and Steve

Davis. We interestingly don't see a huge difference on gender on preferences and levels of work from home. So women have a—.

Sanjay Patnaik: Interesting.

Nick Bloom: Slightly higher preference and actually slightly higher levels of work from home. But the difference isn't huge. What do you see is people with young kids, there's a really quite a large gap there. So both men and women of young children have a much higher preference too, and much higher take up rate of work from home. Other areas is folks towards the end of their life, people with disabilities, maybe— and we don't measure it as well— but maybe students.

So there's a lot of people that might want to work, say 20, 30 hours a week. So I think of my parents, you know, they went from kind of going into commuting every day, a kind of pretty punishing lifestyle of having to go and commute, work, commute back. And then, you know, that generation, it kind of went from full to nothing. It just stopped because he retired.

Sanjay Patnaik: Yeah.

Nick Bloom: So a lot of that generation say, look, I'd be very happy to work three days a week, particularly if two are home. And if the one, you know, there are seven-hour days. So there are folks in that end, there's a bunch of people with, you know, physical disabilities that could easily, you know, be totally, perfectly actively working, but the thing that's often challenging is the commute. If you allow them to work from home, there's a big increase in labor supply. People with young kids as you mentioned, I've visited a number of work from home workers pre-pandemic and actually there are often people with either elderly relatives or young children they needed to be at home for. So that I see is really positive.

Or students, another group by the way, students, they often you know might want to work 10 hours or 20 hours a week. Campus may not pay very well; you know, Stanford University and every other university knows that has this captive pool of undergrads wanting to work so they don't have to pay that much probably. So, you know, if you as a student, you can go and get an online job for 10 hours a week. You can probably get a much better offering. So all of that, I think is really good. You also mentioned international.

Sanjay Patnaik: Yeah.

Nick Bloom: Yes, that's another angle. When I talk to companies, they are often very excited about the potential to have some international employees, some offshoring. Right now, U.S. labor

markets are really tight, it's very hard to hire people, you know, call centers, payments processing, HR, this kind of thing. Some of it, as long as the data is not sensitive, I think it's actually going to be moved to, say, Central and South America, same time zone, or maybe places with good English language skills, the Philippines, India, etc. Again, I think, you know, again, that's positive for driving growth, for kind of helping push back on inflation.

Sanjay Patnaik: Mm hmm. It's just very interesting and very fascinating. And another aspect actually that was brought up by one of our audience members relates to kind of like bias, right? Like oftentimes we know in the workplace there are biases against, gender biases, racial biases. We also have sometimes bullying, right? Like and things like that. So how does work from home affect that? Is there a way that this reduces this kind of behavior that it maybe is more inclusive, can foster more inclusive workplace, or could it lead to kind of like a bias against remote workers, on the other hand, which some people are worried about? So what does the research say here?

Nick Bloom: So certainly I've heard lots, lots of people have talked about this. And I'll tell you the two things we have data on. You know, this certainly this discussion has come up a lot. I remember really early on in the pandemic, some kind of like founder of a kind of 50 person CEO firm was telling me that she was saying, look, when it was in person, it was always like the same people would speak up, they tended to be loud, confident, often, you know, Native Americans as in, as in, you know, people that were kind of born and grew up in America. And she said some of the overseas workers felt, you know, they just got shouted down a bit. She said, it's on Zoom, it tends to be much more balanced, and she has she said she was very happy with a bigger mix. I've heard stories in different directions.

The two bias things I have seen, one, there's, there's a lots of evidence on there's what's called presenteeism bias. So presenteeism bias is a real thing and it's definitely worth people being aware of, which is an issue that if there's a team, let's say of 20 people and 18 of them are coming in four or five days a week and two of them are working from home, you know, three or four days and can only coming in once or twice, they could easily lose out on promotions, they could lose out on training, they could get forgotten about.

To give you an example, I ran a randomized control trial back in 2010 to 2012 on call center workers. And again, we randomize by even and odd birthdays. I think that time the even one, but you know, they got to work from home four days a week, come in one day a week, and the odd people

came in all five days a week. They're all doing the same thing. There's calls dropped into the headset, they're answering, they're typing stuff in.

Sanjay Patnaik: Interesting.

Nick Bloom: We followed, we run the experiment for nine months and then we followed them up for another 21 months. We saw that the folks that were randomized to work from home were much happier, they're more productive, their quit rates were down. This is all good. The one bad thing is that promotion rates were almost 50% lower.

Sanjay Patnaik: Wow. That's huge.

Nick Bloom: Which is enormous. Again, we're comparing people who are almost fully remote to people who are coming in full time so taking kind of a pretty extreme outcome. We went to interview the firm and the managers, and they said, well, look, there's two things going on. One is maybe there is a bit of, you know, prejudice. We're just forgetting about them. They're out of sight, out of mind, and we, well we're going to work more on this and have training and use data, etc. They said the other problem is harder to deal with, which is some of the stuff you're doing in the office over lunch, over chit chat that may look like wasted time, it's kind of, you know, connecting to office culture, knowing what's going on. Some of it's even putting yourself forward for promotions.

Sanjay Patnaik: Interesting.

Nick Bloom: One of the pieces of advice I give to companies is try and within teams have the same cadence of coming in, because what you really don't want is some groups that are at home, some in the office. The demographics tend not to always be the same. You can imagine people that opt to work from home more may not be the same groups that come in, which then generates a horrible issue over you know certain demographics get promoted, it is really not a good place to be.

So generally it's as much to try and make sure people come in on say, two, three days, but also to nudge them away from coming in five days a week, particularly managers. Because if you're my manager, you come in five days a week. I [inaudible] I notice others are coming in. I'm like, wait, I better come in, because otherwise I'm going to get left behind. And this work from home policy kind of falls apart. So I've been trying to encourage firms to say—.

Sanjay Patnaik: That's interesting.

Nick Bloom: Look, if you are going to do three days a week, try and stick to three, but make three work, but try not to do five and try not to do one either. So I mean, maybe if it's two or whatever

it is, actually you want to kind of encourage people, if possible, to actually particularly managers, senior managers to be at home on the home days. Because otherwise, if I were an employee and my managers in, then I don't feel like I can honestly work from home without losing out.

Sanjay Patnaik: And then you might have employees that maybe don't have kids at home or something that feel like they have to come in on the same day because they know the boss is in. And then you start having these network effects and social connections. Well, that's super interesting. I want to move a little bit to kind of like work from anywhere, right. And so my, my former colleague Raj Choudhury has done some work in that space. And so you also have written about kind of like when businesses embrace remote work, you might see that like people are moving from kind of like the city center to the suburbs and rural areas that maybe before might not have been as attractive, but now it's easier for them to do.

And so kind of like, do you think that we have seen some of the play out in the last few years where actually people have moved away from metropolitan areas more into like cheaper areas and and kind of like how we, how will cities adapt to it? I mean, I know it's a problem in D.C., for instance, where even the mayor now and the federal government, some people are saying like, look, everyone has to come back because our shops are dying. And so the question is, I don't think the work is perquisite to maintain the local economy. There has to be some reimagining of what will be in a downtown. So I'm curious what are your thoughts on this.

Nick Bloom: I totally agree. First, I'll just give you some facts from what we've seen. So so in another project with Arjun Ramani and [inaudible]. we've been looking at how much, what's happened to what's called the donut effect. So just to explain, we see from 2020 to now using U.S. Postal Service data, we know change of address data, that there's been an enormous movement of about a million Americans out of big city centers into the suburbs. So you have Washington, D.C. in your backdrop. I'm, live between San Francisco and San Jose.

I was actually up in San Francisco last week for an event in city hall. So San Francisco, like New York, like D.C., has seen a lot of people that are basically hybrid saying, you know what, if I only have to come into the office two or three days a week, I, you know, I want a bit of space, I can put up with longer commute, I'll move out to the suburb. So most of these people are left are not going to, you know, rural Wyoming or, you know, Alaska or, you know, Hawaii. They're mostly over, you know, almost 60% are going to the suburbs in the very same cities they came from.

Sanjay Patnaik: Okay.

Nick Bloom: This is what we call the donut effect, because what it's doing is pushing up property prices and rents in the suburbs and relatively moderating them in the city centers. So I, I can't remember the exact numbers, but it's in the paper if you look across America's 12 largest cities, home values actually in the very city centers have risen by less than inflation. So it's actually down in real terms since the pandemic. Home values maybe in the center of big cities are up like apartments, maybe 8%, but inflation is 15% over that period. An inner city, which is the next ring, is also about flat. If you look at the suburbs and the outer suburbs, what we call the exurbs like more than an hour commute, they're up massively. So the rent and home values are dramatically up because people moved out from the city centers to suburbs.

That in many ways is not a bad thing. So if you think about who should be in the city center, if a lot of techies and bankers move out to the suburbs because they can, essential service workers, people that work in retail, you know, police, nurses, etc, that need to be in work every day in the city center, it makes more sense for them to be in. And so if relatively, city center accommodation has become a bit cheaper, that's a good thing. So that's one trend that's gone on. I think it's here to stay.

Raj, you mentioned Raj Choudhury's done some fantastic work. He's looked at also going fully remote. That's another trend we see. The numbers of people going fully remote aren't quite as big, but they have a large impact on some areas. So we think of really nice holiday resort type places like kind of Tahoe, which, you know it's, probably nice beach resorts, probably our Martha's Vineyard and places like that. They've seen a flooding of people from, you know, city centers out to these areas that are now going fully remote and pushing up prices as well. So low-income rural areas have not seen that much movement out, but some rural areas have seen a lot of movement out from you know, techies that are now working fully remotely.

Sanjay Patnaik: That's actually interesting. And I think that might actually be a chance to revitalize some of those areas that really have lost out on some of these new knowledge jobs, right. Because if you have the right infrastructure in place, high speed Internet, you could attract some of those workers and revitalize communities that would be otherwise not in good shape.

Nick Bloom: Yeah, so there's a nice piece, I think it was maybe in the Times or the Journal, I can't remember about places like, you know, in Missouri or Columbus, Ohio, I can't remember the exact state, they picked on a few cities, Toledo maybe, they're saying these are cities that aren't

fearsomely expensive, have good connectivity, there's some good schools there, there, you know there isn't you know, the crime is kind of under control and they're actually really appealing.

If you get a job that's fully remote, you can actually move out there and have a much better quality of life than say, if you're, you know, if you're in central San Francisco or New York, where it's really expensive. And so some of these places, their proposition has been come out to place X, even if you're only in the office one day a week, you can come in or commute from in Columbus, Ohio, into New York once a week or something. So, yes, I think it's less the really rural areas that are benefiting it is more towns, you know, ranked 50 to 200 odd cities in America that are seeming to benefit.

Sanjay Patnaik: That's interesting. And I do think it causes a lot of challenges for city planners in the big metropolitan areas, right. And, and for mayors, etc., to try to re-imagine what to do with downtown areas where you might not need as much office space as you historically needed, right. And I think, have you seen any novel thinking in that area because I've not seen too much novel thinking. I've seen a lot of like, oh, let's try to get people back rather than thinking, how can we reimagine how the city looks like and works?

Nick Bloom: Yeah, the event last week in San Francisco, some of the numbers are pretty shocking, actually. San Francisco, by the way, is very similar to New York, probably D.C., San Jose, Seattle. So pre-pandemic office vacancy rates were about 10%. So just any one given point of time, 10% of office space is vacant, which was the normal. Apparently, during the height of the dot com crash, they were up to about 20%. So that's a very high level, that was the previous high watermark. Currently it's about 30 and rising to reach potentially 40. And the more shocking thing is the forecast where it may not get back down to ten, 15% until about 2033.

Sanjay Patnaik: That's crazy.

Nick Bloom: I know. I was like, that's a decade, a decade [inaudible] you're like, why can't it adjust faster? The reason is 95% of this office space can't be converted to residential. So if you have a small office, what I call a European office, like you know, when I was back in London, it's small, it only has, you know, two or three rooms per floor, it's a quaint old building. That stuff you can knock through and convert just about. It's expensive, but it's possible. If you think of massive skyscrapers, they don't have enough windows and they don't have enough bathrooms. Because if you think of your house, very few houses have rooms without windows. And every house has, you know, multiple

bathrooms. That's nowhere near enough in skyscrapers. Turns out it's just incredibly expensive to convert this. So, you're now—.

Sanjay Patnaik: Interesting.

Nick Bloom: Looking at a situation where there's a lot of this office space is now empty. Actually, a lot of the retail space is empty, too. If you think of Starbucks and Au Bon Pain and Pret etc., they rely on the office workers and they're not there. And it's hard to repurpose it. It is actually genuinely, really tough. You know, and I agree with you that I think governors saying people need to come back in to revitalize our city center doesn't make a lot of sense because they're currently spending the money just out in the suburbs and it's going [inaudible].

Sanjay Patnaik: Yeah.

Nick Bloom: Why would we take business away from the suburbs and move it back to the center? I think there is some creative thinking needed. It's, it's a hard problem. I mean, one of the things is ideally is getting people living back in city center. So, to address, obviously, the affordability crisis. Zoning, it's not easy, actually. A lot of these office buildings are hard to reconvert. I mean, the main thing is to not build anymore. The last thing you want is any more buildings.

Sanjay Patnaik: Yeah, that's true.

Nick Bloom: And over time, slowly convert these guys or find other uses for them, turn them into, you know, gyms. I mean, it's going to have to be some creative use of them.

Sanjay Patnaik: Mm hmm. I totally agree. We actually got an interesting question from one of the audience members live. And so they asked, when you say productivity declines or there is a small positive effect, how are you defining productivity and what kind of data are you looking at for that? It's an interesting question.

Nick Bloom: It's a great question. So we had four different measures. So one measure was in the company I mentioned Trip.com, they have a very rigorous performance review process, happens every six months. Managers give feedback, employees write what they think. They go out to other people, they collate, they come up with a performance review, it's a five-point scale. That performance review wasn't changed. At the end of the six-month experiment, and in fact, we ran it another six months later, about to get further six months out. Promotion rates, which is maybe a slightly harder date as they have a minor promotion, which is a pay increase, a major promotion change of role that was unchanged.

There's also lines of code written and product shipped for the coders. There are about 600 of them out of the 1600. Lines of code is not a great measure, but product shipped is a lot better, because if I write 200 lines of rubbish code, it doesn't go out. If I write five lines of good code, it goes out. That was up about 5%. Okay. And then the final question was self-assessed productivity. Interestingly enough, at the beginning of the experiment, the average self-assessed productivity of work from home is about zero, with managers claiming it's about -2% and employees about plus 1%. So management—.

Sanjay Patnaik: Oh that's interesting.

Nick Bloom: Was likely to be bad, employees were positive. At the end of it, the average went from zero to about plus 2%, with managers now positive and employers even more positive. So it looks like experience I've seen this in other studies, experience and exposure to work from home, maybe it's moderate tends to lead people to think it's mildly positive for productivity. But there are a number of hanging questions over this.

You know, we're on Zoom. I was speaking to Eric Yuan about yeah, in the long run, if we're remote, does it damage long run, creativity, innovation, more of our measures tend to be short run. So all the stuff I've seen is probably if you're getting people into the office three days a week say for hybrid and they're focused, they're meeting together, they're working together, that's probably pretty good. In fact, the evidence from psychologists is to be creative, you need some quiet time to think. You know, having a quiet Friday.

Sanjay Patnaik: Right, yeah.

Nick Bloom: Is good for thinking as well as problem solving meetings on a Thursday. I think if you're fully remote it's not that you can't be creative, but I think it's generally harder. And in fact if you're full in the office, it may actually be harder because it's so hectic and busy. You don't get any quiet time.

Sanjay Patnaik: You don't get the time to think and actually like, stew over what you want to do, right.

Nick Bloom: There's always someone hovering, running in, and, you know, disrupting you.

Sanjay Patnaik: Yeah. And you see I mean professions that where you need a lot of thinking like faculty members right, like they oftentimes take the time in between to think about new research before writing a new piece and have that on time. So another thing is obviously like here in DC, we're

very kind of like concerned about what policymakers can do and what's the impact for policymakers and trends in the marketplace. And so when looking at work from home, right. I mean, one thing obviously that policymakers can do is try to expand broadband access to areas that maybe not have it right now or have very spotty coverage.

What are some other measures policymakers might consider to accommodate a US remote workforce or work from home? Because I think one challenge that I've observed is oftentimes a problem with like having fully remote teams or fully remote positions is labor laws, right? You have all these different labor laws and tax laws in different states. Organizations that maybe have never done that before are not set up to deal with that. And so what are kind of like the policy measures that could help transition us to a more flexible economy where we can accommodate these different work arrangements that we discussed today.

Nick Bloom: Great. So, yeah, three thoughts. The first two completely overlap with what you had, Sanjay, which is one is yeah, broadband availability, you know, and also pricing. So some of the issue I think this is what from Brookings that broadband, you know sometimes available is incredibly expensive because of, you know, monopolistic supply. So that's one for sure. That's facilitation.

You're totally correct on tax and legal issues. I've talked to many employers that have said it's kind of like a nightmare like, we're based in Connecticut, and we let employees, you know, be fully remote or some employees and now they've moved to other states and are supposed to file returns in that state. Some have told me, you know, but, you know, confidentially, that would rather they told us they're in Connecticut. Even if they're not, because at least we don't have to deal with it, you know?

Sanjay Patnaik: Right.

Nick Bloom: I suspect they're not, but please don't tell me, you know, it's like a horrible situation to be in. So for Californian firms, I mean, as soon as you cross the borders in Nevada or Oregon, you have, you know, different legislation. So that is a big thing. And trying to harmonize and also trying to figure out how you deal with remote workers. If I'm four days a week in Nevada, coming to California one day a week, do as a firm I now have a substantial presence in Nevada. Should I be paying corporate income tax in Nevada? Yeah, there's a lot of stuff that's actually quite painful.

And then I think the final thing is actually generally for politicians just to stay out. I think it's, in the US, in Europe, there's a lot of regulation that's being debated about forcing people to work from home and forcing companies to do that. Mostly when I talk to companies, pretty much always, they go

for hybrid because it makes them money. So, you know, it's not part of a social movement. They're saying, look, yeah, employees really like it. So it's really helpful retention, recruitment, saving us hundreds of thousands of dollars, you know, per team per year or that endlessly retraining and millions hiring people. Also seems to help productivity a little bit. Also maybe saves a bit of space, can at the margins also be helpful for DEI. So companies are adopting it as a big driver of profit. So it's really—.

Sanjay Patnaik: Interesting.

Nick Bloom: The government forcing it is not useful. In the US, the two problems I've seen has being on the right, there are some of the kind of very populist Republican governors like Youngkin have said they want all the office workers back five days a week because it's kind of the, the politics of envy. If you look at who's voting for those politicians, they tend to be people that can't work from home. It's a perk they've not got. They feel envious. I kind of get it, but it's maybe it makes good politics, it makes bad policy.

I mean, you're basically, you know, for federal government workers, forcing them back in five days a week makes no sense. And it makes it much harder to recruit and retain good employees, so you eventually damage public services. The other extreme for the Democrat mayors in cities like San Francisco, Washington, New York, I understand why they want people back in, but it's not really in the national interest particularly.

Sanjay Patnaik: Yeah.

Nick Bloom: If you get, if London Breed gets more activity in the centers, I can totally understand where she's coming from because it's her tax and her economic activity. But it's taking it out of Oakland, it's taking it out of South Bay, taking it out of other areas. Same in D.C. So I can see mayors will lobby. You know, I get it. They lobby for what's in their own self-interest, but the federal government should not be involved in shifting people around. I mean, there's no reason why suburban D.C. is more or less deserving than central D.C. of economic activity.

Sanjay Patnaik: That's true. I think that's a really great point. It's kind of like that interference I think, could be more harmful actually in the market. So that, that's super helpful. And you mentioned Europe that I've seen that too, that kind of like proposals for legislation to make like remote work and new workers, right, right. Have you seen anything in that like any movements from unions or even the U.S., kind of like seeing it as a new benefit or a new right that workers should have legally?

Nick Bloom: So firstly, it's definitely a benefit. I'll tell you, you know, now when you talk to employers, there's health care, pension and work from home. Those are like, oh.

Sanjay Patnaik: Okay, that's big.

Nick Bloom: I remember talking to some recruiter and she said, look, you know, this isn't tech. Forget it if you're going to force people back in your office five days, I'm not even going to take that case, that's unrecruitable at this point.

Sanjay Patnaik: That's interesting.

Nick Bloom: And firms and yeah, firms are responding. You know, this is why hybrid has become totally dominant. And you know, this, 45, about 40% of Americans work from home one plus day a week. And you know there's a reason, because it makes, it's in firms' interest to do it. Whether you want to regulate, I don't see why you'd want to, it's a bit like having a regulation, I'm going to force firms to make profit. It's kind of like a weird regulation, like why do you force them to? And of course then you just blow them up and it's like red tape and you have to tick boxes.

And the Europeans, maybe, my experience of having talked to a lot of European countries and in fact collected a lot of data in Europe is work from home is also pretty common in Europe. So it's not clear this, government should be regulating and other things like obviously pollution and matching labor laws and not laying people off, you know, with no warning at all and health care, etc. But this is an area where typically it's an employee's, employer's interest. They basically get it when I talk to them and there doesn't seem to be a real problem with forcing people. I mean, there are few exceptions. So I, you know, there's Elon Musk, but I mean, even Musk's changed his mind. I don't know if you noticed, but.

Sanjay Patnaik: Oh, no, I haven't heard that.

Nick Bloom: Well, he's closing down the Seattle and one other office and telling people to go fully remote.

Sanjay Patnaik: So that is quite a change from like two months ago.

Nick Bloom: Yeah. And apparently people are still not going into Twitter every day. So because I don't know, again, this was two or three months ago, but he said people have to come back and then two days later he changed his mind because apparently, he's got a mass resignation. So employers get it. I mean, if you try and force people back in, coming back to the 8% number I mentioned, currently the employment cost index is about 6%, rising 6% a year.

So if you're an employer, just to tread water, you've got to be putting up salaries by 6%. But if you then say, I want you all back five days a week. You've got to add about another 8% to that to compensate for this loss of this valuable perk. So now you're like putting up salaries 14%. And nobody has the money to do that. So this is not happening.

Sanjay Patnaik: So this is super helpful. And I think kind of like where the role of government could really be here is maybe to facilitate, as you say, kind of like some of these complex labor and tax challenges to make those easier. Right. Because I think this is really where, it stands in the way of of a future of work where with this flexibility, this new work model can work better, right across state lines within the same country.

Nick Bloom: Exactly right.

Sanjay Patnaik: Well, this has been really wonderful. We're at the end of our time. But I really appreciate your time. I know you're super busy and in very high demand. So thank you so much for being here today and for this wonderful discussion.

Nick Bloom: Yeah. Thanks so much, Sanjay, it was great. Thank you very much for the questions and for being interested. I was saying before the call, I've been working on this for 20 years and up and, you know, no one really cared that much about work from home. And then suddenly in March 2020, you know, it's come to the, you know, who knows where this will be three years from now. But certainly the last two or three years there's been a lot of interest in this as a topic.

Sanjay Patnaik: Must have been a rollercoaster ride for you.

Nick Bloom: It has. Yeah. You know, you just like, I talked to someone who's an epidemiologist, they said no one paid much attention to their work and suddenly.

Sanjay Patnaik: That's true.

Nick Bloom: This for a better reason, actually, this is, at least this is a nice reason that, you know, people are, the work, well, the pandemic's obviously terrible, but the work from home itself is is generally seen as a pretty positive thing for society.

Sanjay Patnaik: Yes, that's true. All right. Well, thank you so much, I really appreciate it.