Centre for Social and Economic Progress

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INDIA IN ASIA
DEEPER ENGAGEMENT

March 3-5, 2023, Neemrana Fort-Palace

Compendium

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Centre for Social and Economic Progress (CSEP)
CSEP Research Foundation

6, Dr Jose P. Rizal Marg, Chanakyapuri, New Delhi - 110021, India
Phone: 011 2415 7600 | Website: www.csep.org

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प्रधान मंत्री
Prime Minister

Message

It is a pleasure to learn that Centre for Social and Economic Progress (CSEP) is organising the first edition of its international conference – 'India in Asia: Deeper engagement'. That this is happening at a time India is holding the G20 Presidency enhances the importance and relevance of the Conference.

Today, there is an increasing conviction in the world that the 21st century is the century of Asia. The participation of delegates of various nations from across Asia, fostering deeper engagement is a boost to the region's socio-economic future.

As a nation rooted in the principle of Vasudhaiva Kutumbakam, India advocates the motto of 'One Earth, One Family, One Future'. Such an approach is imperative to achieve a unity of purpose and action for the larger benefit of the continent and the planet. I am positive that the deliberations at this Conference will be action-oriented, inclusive and will help future-proof the region's growth.

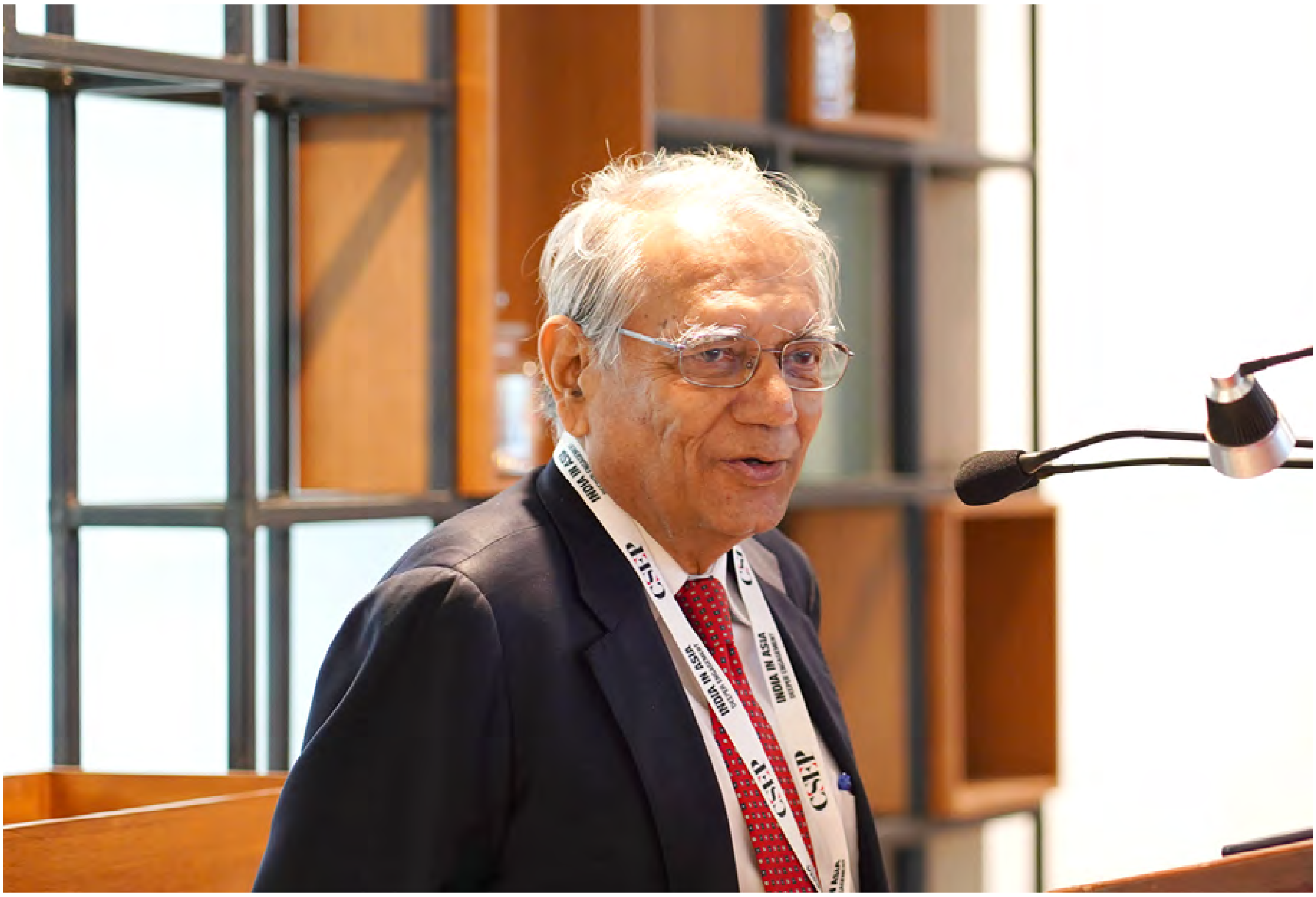
Asian nations are bound together by a rich cultural past and a glorious history. As a democratic, accountable and transparent nation, India remains firmly committed to play a positive, decisive role not just in the Asian context, but in the global perspective as well. Nations across Asia are enhancing people-to-people contact, making efforts to enhance security, cooperation and prosperity across a diverse sphere of activities including technology, finance, industry, trade & commerce and climate change.

I am sure that this gathering of policy makers, thought leaders of the corporate and business world and thinkers will engage in vibrant exchange of ideas that leads to greater engagement between India and its Asian friends.

Best wishes to every nation, delegate and the CSEP for fruitful deliberations at the Conference.

(Narendra Modi)

New Delhi
फाल्गुन 12, शक संवत् 1944
03rd March, 2023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Introduction

Rakesh Mohan

The hyphenated word pan-European is defined in the online Cambridge dictionary as "including or relating to all places in Europe." However, one draws a blank if the meaning of pan-Asian is sought in the same dictionary. It appears that there is relatively less credence given to a pan-Asian identity. This is understandable as the differences in the levels of economic development across the Asian economies are greater. Further, Asian peoples with their separate histories, ethnicities and cultures have interacted and overlapped but perhaps not to the same extent as European nations.

India's orientation to the East began to change in the 1990s with the initiation of the official "Look East" policy and was then strengthened more recently with the enunciation of the "Act East" policy. Although some progress has been made over the past two decades, India does not yet have sufficiently extensive person-to-person and non-governmental institutional engagements with the Asia region.

In this context, the Centre for Social and Economic Progress (CSEP), initiated what we hope will become an annual conference, which is designed to help deepen India's current and future engagement with Asia. This annual conference is aimed at building and deepening intellectual engagement among experts who have government, academic, private sector or think tank experience about the Asian region. The focus would be on economic-financial issues along with inter-weaving relationships with political and strategic developments.

Asia is expected to incrementally contribute a higher proportion to global GDP and trade over the next couple of decades than in the past. The centre of gravity of the global economy is shifting gradually from the Atlantic Ocean towards the Indo-Pacific after almost 300 years. This incremental yet steady economic change has already brought about consequences in its wake which have worldwide political and strategic ramifications.

Over the next decade or so, the Asian region economies including Japan (it is a G7 country, yet geography locates it in Asia), China, ASEAN, South Korea, and South Asia combined could collectively be larger in nominal US$, not just in purchasing power parity terms, than the United States plus West Europe put together. COVID-19 has slowed down global economic growth. However, the longer-term trend of higher GDP growth in populous Asia is likely to reassert itself. Consequently, what would be the future roles and prospects of countries in the region including that of India in the coming years in the economic and political-strategic spheres? How will India engage with countries in this region as it assumes greater economic, political and strategic salience in the world?

Within East and South East Asia, a dense network of institutions has emerged over the past few decades, which has connected countries in the region with one another and has deepened relationships incrementally in various spheres. Such institutions and related financing-trading-investment arrangements include ASEAN, AMRO (ASEAN+3 Macroeconomic Surveillance Organization), Chiang Mai Initiative, SEACEN (Southeast Asian Central Banks Initiative), AIIB (Asian Infrastructure Investment Bank, Beijing), NDB (New Development Bank, Shanghai), RCEP and others. India is not a member in any of these institutions-arrangements (except AIIB and NDB), although it now has observer status in some of them. Over the years, membership in these organisations has provided opportunities for the development of institutional and deep personal relationships among policymakers, officials, academics, and other opinion-makers. This has contributed greatly in fostering mutual understanding among influencers across the region. At the same time, India is relatively less well-connected in terms of non-governmental interactions with the rest of Asia. Closer interactions without government oversight should foster better understanding across civic societies in the region, particularly about defence, mutual security and knowledge promotion.

Initiating an Annual Conference

In view of the region's increasing importance in the world, it is evident that India and others should promote processes which can make up for lost time and deepen engagement. This could happen through greater interaction across think tanks, academics and other influencers. It is to foster deeper research and intellectual relationships between institutions and individuals in the region, that CSEP has initiated, as a small step, this conference to draw together academics, influencers and policymakers (past and present) from India and the Asia region.

We feel gratified that the *"India in Asia: Deeper Engagement Conference"* successfully brought together academics, influencers, and policymakers to discuss and explore the implications of Asia's growing significance. The conference served as a platform for knowledge exchange and collaboration, with the aim of strengthening relationships and furthering research in the region. As a follow-up, CSEP plans to build on this success and make the conference an annual gathering of scholars, academics, government representatives and think tanks.

This compendium demonstrates the breadth and depth of papers and discussions that took place in all the sessions. Since the conference was residential and was held over a period of two days in an exclusive heritage hotel, it was characterised by continued informal animated discussions over lunches, dinners, and teas. We are therefore confident that the objective of fostering deeper engagement at the personal level will take place successfully over a period of time through these annual conferences.


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YOSE RIZAL DAMURI


ROHAN SAMARAJIVA
AMARJEET SINHA
YOSE RIZA


VIKRAM S. MEHT

Opening Remarks

Vikram Singh Mehta

My name is Vikram Singh Mehta. I am the Chairman of CSEP, the Centre for Social and Economic Progress.

I am honoured and delighted to welcome you all to this conference. It is my personal pleasure to welcome you all to my home state. I am from Udaipur, the city of lakes - and regarded by many as one of the more beautiful cities in North India. If any of you have any time after this conference, I do recommend, you drive to Jaipur and take a flight to Udaipur.

Aman put this fort of Neemrana on the map. But for many who straddle the world of public policy and academics, it is Rakesh who brought Neemrana to prominence. This is because in 1998, Rakesh, as Director General of NCAER, started the NCAER annual conference of economists from India and the US. This conference was named the Neemrana Conference because it was held in this fort. It was held continually for 25 years. So, it is particularly apt that CSEP's first international conference has been organised under Rakesh's leadership in Neemrana.

The earlier Neemrana Conference was conceptualised at a time when the United States bestrode the world of geopolitics. Since then, power has pivoted towards Asia. It is therefore timely to bring together think tanks and public policy researchers from across Asia to talk about deepening engagement between India and the rest of Asia in this new global environment. I am delighted that this gathering is happening under the umbrella of our think tank CSEP.

CSEP was earlier Brookings India. Brookings India started ten years back. It was renamed CSEP in September 2020.

I was the first person to join Brookings India in November 2012.

Today when I look back, I am proud of the progress we have made. Brookings India, and now CSEP, is one of the larger policy research think tanks in Delhi, if not in India. It has about 65 people today and we have 25 job descriptions out in the public domain.

The focus of CSEP is to address issues of policy relevance to India, through rigorous, empirical and analytic research, with the objective of impacting public policy. It is independent, multidisciplinary and does not hold an institutional view. Scholars are free to take any stance. CSEP only demands that their work meets its threshold of quality and analytic rigour. Further, CSEP is not a lobby group.

It is a matter of pride for me to inform you that our PM has congratulated us for organising this conference.

Before I close, let me introduce our guest of honour, Tharman Shanmugaratnam, who is the Senior Minister from Singapore.

You all have the short brief that we have provided in the booklet. That brief does not do justice to him. I cannot, in the few minutes that I have, fill the gaps. But I can perhaps add a bit more colour than what is in front of you.

According to reports I have read, the Senior Minister is quoted as admitting that he was an aimless youth, disinterested in studies. He is reported to have said 'I never had a job in mind. No ambition and career'.

Well, clearly, he corrected course quickly. For, we have amidst us a gentleman who graduated from Cambridge University and became Minister for Education. And during his many years in the cabinet, he was regarded by everyone as arguably the most brilliant member of a cabinet that had an IQ level unmatched by any cabinet in the world.

The Minister is passionate about poetry and music. When David Bowie died, the Minister posted lyrics of David Bowie's classic "Space Oddity" and called David Bowie a musical genius. He also penned four poems for a 1978 anthology which is called "But we have no legends".

So, ladies and gentlemen, let me introduce the former deputy Prime Minister of Singapore, Senior Minister, poet, David Bowie fan and our guest at CSEP.

Keynote Address "Opportunity and Responsibility"

Tharman Shanmugaratnam

Thank you, Rakesh, for inviting me to join all of you in Neemrana. It is a real pleasure to be here. And thank you, Vikram, for your exceedingly generous introduction.

I should say immediately that it has been a real privilege for me to interact with colleagues from around the world over many years: amongst Singapore's immediate neighbours as well as those in India, China, Japan, and in the West and the rest of the world. Perhaps it is because I come from a small country. Our standard operating procedure has been to keep meeting people, keep exploring and keep absorbing lessons from elsewhere that are useful for us. Singapore did not invent anything. We just kept learning and adapting, and it is what has to keep us going.

India in Asia: a new era of opportunity

I believe the motivation for this conference has been part defensive or corrective, and part opportunity-driven. We are making up for lost time in the relationship between India and the rest of Asia, especially East Asia. We have had deep and profoundly significant historical links in many dimensions – cultural, intellectual, social, trade, and so on. But over the course of the last half-century at least, we have each tended to look in other directions. So, the relationship was put on pause. It did not really deteriorate, but we did not make the most of it. We are now seeking to make up for lost time.

But the real issue is how India, Southeast Asia, Japan, China, the rest of East Asia, can now create a new era of opportunity, growth, equity, and sustainability. India and Southeast Asia are particularly well positioned for this because we are less caught up in the sharp edges of the largest geopolitical conflicts of the day. We are less caught up in the sharp edges, and you would not find us at either pole of any of the major tensions that we see in the world today.

The other reason is that we are societies that are still looking outward and looking upward. Unfortunately, it is a little rare in the world today – societies where the majority of people, ordinary people, are hopeful and expect to improve their lives. They see a real prospect of doing so. And by and large, we still like the idea of looking outward – whether it is trade, investment, or knowledge, or being part of the global digital economy.

We have to make the most of that. Both our geopolitical positioning as well as the social gaze in an evolving India, Southeast Asia, and a good part of the rest of Asia, puts us in a special position in this next phase in the world economy, and in the global order.

I say global order, but I say it with some hesitation – every time you get a major calamity or crisis in the world, a major new complication, we dub that a new global order. I do not know what the truth is geopolitically - whether we in fact are in a new order; whether we remain in the old order save for the fact that we have interacted more in the past 30 years and seen unusual peace; or whether we are in between the old and new orders.

But what is clear is that if you look beneath the geopolitics, we live in a very different global economy now - compared not just to 50 or 60 years ago when many of us were starting out on the path of independence, but even if we go back just twenty years. It is a very different global economy.

The rise of China is a huge fact, but it is not just the rise of China. We are now in a vastly more interdependent global society. Knowledge, technologies, of course, trade. For all the talk about deglobalisation, trade remains roughly where it was about 10 years ago, and far higher than where it was 30 years ago. Plus, we have a much higher degree of interpenetration of foreign direct investment and financial investments. Plus, data.

We are in a globalised world, and it shapes politics domestically, it shapes geopolitics, and it shapes both the constraints we each face as well as the opportunities we have.

Taking responsibility to sustain multilateralism and build cross-regional coalitions

The largest challenges we face are now the challenges of the global commons. The shifts in the earth's environment - climate change, the loss of biodiversity, and the global water crisis - are the largest changes that we all face, wherever we are in the world, whether we call ourselves part of the Global South or North.

The globalised nature of the world, the frictions it causes as well as the opportunities it brings, sets the conditions within which we now have to address the challenges of the global commons. It is becoming a more fractious global environment. Not unexpected. It has gone together with the rise of new powers economically, and gone together with the loss of domestic cohesion within societies themselves. But we are in a more fractious environment, and it is unlikely to change.

Partly a consequence of that, we are in a less resilient world. Our ability to anticipate and pre-empt global disasters, whether pandemics or extreme weather events that are a manifestation of underlying environmental shifts, is weak. We are less resilient in the face of challenges that we never thought much about 30 or 40 years ago – the challenges of global commons.

The challenges now demand much stronger multilateralism than ever before, but the supply of multilateralism is weaker than ever before.

So, my first theme in these remarks is that we have the responsibility – and a particular responsibility in India, Southeast Asia and Japan - to build resilience in multilateralism, regionalism, and coalitions that are not just regional but cross-regional. We have that responsibility.

If we embark and persist in those strategies, if we do it well, we will be providing a basis for optimism amidst the tensions between the major global powers. We must provide a basis for optimism through our own domestic strategies, as well as through the ways in which we collaborate regionally and internationally. India, Southeast Asia, Japan, and some others in East Asia are in a favourable position to do so.

National security and economic interdependence

National security considerations, particularly in the US but also amongst several other advanced nations, are now shaping economic relations.

We cannot be purist about this. It would be naive to think that technological advances in one major power do not have implications for national security in another.

At the same time, we have to always ask ourselves a very important counterfactual. Yes, global economic interdependence, interdependence between the US and China, does not assure us of peace. But think of the counterfactual. Think of a decoupled world. Supply chains decoupled; financial flows and capital markets decoupled; data and technology decoupled. That will surely be a profoundly dangerous world.

There is no assurance of peace coming out of economic interdependence, but it will be surely safer than a decoupled world. I should add that it is facile to argue Ukraine shows that economic interdependence does not assure us of peace. Europe was not economically interdependent with Russia. It was heavily dependent on Russia for natural resources and had a huge concentration risk.

We are making strides in creating a basis for optimism. India is on a roll economically, as is Southeast Asia. We are each doing our part to strengthen coalitions and strengthen multilateralism. On India's part, the International Solar Alliance that it launched and the Indo-Pacific Ocean initiative are good examples. Not universal in membership, but you are developing coalitions, and there is some momentum that is been created in the direction of multilateralism – starting with some nations but with the potential to broaden out.

A more expansive and long-term approach to digital interdependence

My second theme is that we do have to think in a more long-term way about the digital economy, in fact, a digital global order. It has huge potential for India, for Southeast Asia, for all of us.

If you think about it using the old framework of economic development that the Japanese economist Akamatsu first introduced in the 1930s – the flying geese model of economic development or 'Ganko Keitai' as he called it. It was basically a model of catch-up. Countries could develop through the flow of technologies and knowledge that came from the leader of the flock. Everyone moved ahead together, and countries were able to move faster because they were part of a flock of flying geese. The knowledge transferred from one to the other; technologies; direct investments transferred from one to the other.

What the digital economy does is accelerate the speed of catch-up. But it also leads to a much more fluid pack of flying geese because leadership is going to change much more quickly. Whether it is health care or robotics or anything else, leadership in particular sectors is going to change much more quickly. The goose at the front of the pack may be a player that may have low overall per capita income, and many other problems in its development, but the digital economy allows for faster catch-up and leapfrogging, starting in some sectors.

It is a good opportunity for India and Southeast Asia. But we are not governing the digital economy in a way that will maximise its potential. Data sovereignty, basically a nationalist attitude towards data, is not the most creative way of dealing with the concerns that countries have, be it national security or social cohesion, or any other concerns. It is a crude way of dealing with the situation and will have repercussions for economic growth and inclusivity. We have to think of a more enlightened and long-term way. It requires a framework of rules that allows for the open and trusted flow of data across countries – in ways that allow each of us to cater to national security needs, as well as ensure that each of us plays a role in value creation rather than simply having data extracted and the value all being created elsewhere.

There are ways of achieving it, and we must think in a more expansive way and hopefully more long-term way, about how we make the most of this data and digital economy.

I think India is in a particularly strong position to embark on this because obviously, both through its own domestic efforts in the India stack and its companies' prominence in global IT services. It is well-positioned to be a leader in this regard. Singapore and India are in fact working very closely together. Some of you may have heard about the UPI-PayNow linkage launched just two weeks ago by our prime ministers. It allows an ordinary labourer to transfer money across borders to his or her village with only a mobile telephone number. Cutting out the middleman, cutting out the hawalas and the rent.

But there is a lot more to do to develop open and trusted flows of data, and interoperability in regulations, and I want to highlight its importance for all our futures.

Avoiding complacency in Asia

A third theme. We must guard against complacency. The geopolitical winds are now moving the economics in favour of countries outside China. Supply chains are being gradually reconfigured, new alliances are being struck. It is a geopolitical tailwind that is in favour of India, Southeast Asia, and some other regions.

But it's worth recognising that nothing in geopolitics lasts forever. Further, there is nothing in the often-cited demographics that assures us of economic success. It has not always done so in the past. The demographic dividend in a good part of Southeast Asia and South Asia, India in particular, is about population growth. It has not, in the past, led to productivity growth, and higher incomes – the true measures of economic success.

So, let's avoid the complacency that comes from the fact that we have a demographic bulge. It is both an opportunity and a challenge, and we have to respond to the demographic bulge by providing the conditions for individuals from every sector of society to maximise their potential to climb. That is what leads to economic success, not the mere fact of demographic advantage.

When we think about our future, India, Southeast Asia and the rest of Asia, we therefore have to think about the fundamentals. Not just whether the geopolitical winds are moving in our favour, not just the demographics. How can we generate good jobs for the future? How do we generate productivity growth, and therefore generate rising income levels, for the mass of our populations, the ordinary people?

I think the basic lessons coming out from the Asian experience, particularly the East Asian experience are still true. First, openness. It does make a difference, and it makes the difference not just because we've got markets out there in the world, it makes a difference because of something that was more intrinsic to the Asian growth story, which was about learning curves. That was Japan, Korea, Taiwan, Hong Kong, Singapore, and some other Southeast Asian countries like Malaysia and Thailand.

The learning curves that occur in industry when you are plugged into a global economy are much steeper. You move up there much faster than in a domestically-oriented economy, or in a non-traded sector of the economy. This is a very strong empirical regularity, regardless of where you stand in economic philosophy. If there was a shortfall of the so-called Washington Consensus, it was that it focused minds too much on macroeconomics and demand, rather than on this micro-economic and micro-social dimension of economic growth. I should as an aside however say that the Washington Consensus is, I think, mocked a bit too easily. It was a broadly sensible set of prescriptions, basically macroeconomic, and took lessons from failure in Latin America. Latin America had bombed out on its macroeconomic policies.

What the Asian stories have taught us is that what really matters is not just the macro. Macro stability is a pre-condition for growth. But we've got to think about the micro, think about learning in each sector, so that our societies can truly move up. That has to be part of the evolving Asian consensus.

We do not yet have an Asian consensus. No Tokyo, Shanghai, Delhi, Singapore or Jakarta consensus. We will only feel confident that we have a consensus when we have succeeded on a broader scale, more consistently, and together. I do believe the Asian emphasis, particularly in East Asia, on learning curves, and on the social and economic policies that help make possible those learning curves, are an important part of this future consensus.

We should view with some circumspection the new emphasis on industrial interventionism. It is now on a roll in the United States – the CHIPS and Science Act, as well as the Inflation Reduction Act. There were always strong elements of it in China, although I think, a bit exaggerated in terms of their actual impact compared to market competition in China.

Yes, there is in the Asian experience, and the Asian way of thinking about economic strategy, a somewhat more expansive role for the state compared to the more liberal economic model. But there is a big difference between a role for government that focuses on building ecosystems for market development - including social and skills development ecosystems, knowledge sharing ecosystems, maximising of industrial synergies within clusters - as opposed to thinking about how the state could pick a winning sector, let alone firms. In general, the latter has not worked very well anywhere, starting with Japan. The jury is out as to whether it is now going to work, whether in the advanced world or in developing Asia.

The social drivers of growth

A fourth theme I thought I should touch on is that we can never lose sight of the social policies that underpin both growth and inclusivity. It remains a surprisingly stubborn challenge around Asia, outside of a few countries which have achieved high incomes. It is a surprising challenge that we still have a very high rate of childhood stunting – about 40% in India among children below the age of 5; a high percentage in parts of Southeast Asia. We know the problem, it does not require very sophisticated solutions, we have the resources. It can be addressed.

In fact, if we look at India, there are impressive gains in specific localities. The Anganwadis and nutritional clinics that have been set up at a local level, many have been working very well and improving outcomes significantly. We can scale these initiatives up.

There is no higher return on investment than in eradicating childhood stunting.

We are not going to be able to succeed as societies and economies if a large proportion of our young grow up with their potential stunted at a very early age. No society can.

The broader point is that if there has been something about the East Asian experience that is worth spreading, it has been the focus on education, not just in the nominal sense of getting people to attend school and chalking up the attendance numbers and participation rates on the charts. The participation rates on the charts have improved, but if you look at the work of Pradhan in India, and other NGOs elsewhere in Asia, learning poverty is still a huge issue. A large proportion of kids at age ten, or at age fourteen, are years below the learning levels expected at their age in mathematics, reading, speech.

China did pay attention to basic education, and so did Vietnam, starting from Ho Chi Minh's time. They paid attention to basic education at a mass level and have moved up from there. They have huge problems of a different nature – China still has an overly academicised education system, and hence a big mismatch between graduates and the needs of the market. But they took care of basic education and early nutrition.

Every country has to do that. It is not especially expensive, it is not difficult to organise if you think of the teaching force and what is required of the teaching force – how you train them, motivate them, reward them. It can be done. We are doing far more difficult things in our countries than taking care of education.

We will not succeed, and we will not create a vibrant economic region without focusing more on education, and I do want to underline that.

Back to the future

Finally, to return to where I started. On making up for lost time and building opportunities for the future. There is obviously a lot of good growing between India and the rest of Asia. There are no lasting enmities between Southeast Asia and India and in fact, a lot of goodwill that goes back a long way and in such a deep way – the historical links we all know about, especially the cultural influences.

Think for a moment about Rabindranath Tagore. He set up Santiniketan, with the vision of it being the confluence of every civilisational stream. It was visited from around the world, including from China. Interestingly, there was a two-way flow of knowledge and culture coming out of this. My wife just reminded me today that when Tagore visited Indonesia, sometime in the 1920s, he brought back to Santiniketan many samples of Javanese Batik, done using the dye-and-resist technique. In fact, no one really knows where Batik comes from. Possibly India itself or someplace further west, or China, or from Southeast Asia, no one really knows. But perhaps we do not need to know, because it appears to have evolved through the to and fro between these regions. Tagore was fascinated by what he found in Indonesia because it was a lost tradition in India by then.

It is an illustration of the interflow of knowledge and culture that has to be our future. Staying open, tapping on every stream of civilisation in Asia, and in the West which remains at the forefront of knowledge and technology. Having the self-confidence to remain open as we grow. Having the domestic strategies to help everyone maximise their potential, and to promote solidarity within our societies - not by being closed to others but by investing in our people.

If we each do that, we build a collaborative future amongst our nations as well as a future more inclusive within our own societies. India, Southeast Asia, Japan, some others in Asia, have the opportunity to create this new social and economic consensus, in a world of great power tensions and rivalry.

Inaugural Address

Shivshankar Menon

Hon'ble Tharman Shanmugaratnam, Senior Minister, Singapore, Vikram Mehta, Rakesh Mohan, Distinguished guests, Ladies and gentlemen, Thank you for coming to the initial CSEP conference on *India in Asia: Deeper Engagement.*

Over the next two days, you will discuss India's engagement with Asia east of India. This is an issue that will seriously influence India's trajectory and our success or failure in transforming India into a modern, prosperous, and secure country where every Indian has the opportunity to achieve their full potential. I daresay it will also have broader effects in the region.

Your discussion is necessary, topical, and opportune. It is necessary because of sins of omission and commission in the past and our need to learn lessons from those experiences. It is topical because we are in a new situation and should therefore revisit old certainties. And it is opportune because I think that there are things that we can do to deepen India's engagement with Asia in multiple fields. Let me elaborate by briefly considering the past, the present, and the future of this engagement.

The Past

Sadly, our discussion is necessary because of actions in the past which resulted in a distancing between India and Asia after an initial burst of enthusiastic engagement in the first flush of independence and decolonisation in the 1950s and 1960s.

In 1938, India was largely a trading economy. Asia was India's major trading partner, and the share of Indian exports in Asian imports is estimated as having been between 20–30%. The ratio of India's foreign trade to Asia's foreign trade steadily dropped from 1:10 in 1938 to 1:11 in 1960 to 1:36 in 1980. The West, or the rest of the world, had little to do with India's decommercialisation. The primary causes lay in our policies, which lost India's Asian markets through an overvalued exchange, technological backwardness, the government's role in commerce, and what can only be described as politics in command of economics. And those policies and actions were, like all policies, rooted in mindsets, intellectual attitudes, and ideologies.

India's economic retreat from Asia in the 1960s and 1970s was accompanied, possibly even triggered, by a steady attenuation of intellectual, popular, and political links after the initial burst of hope and optimism in the early 1950s.

So long as Asia's primary intellectual, political, and ideational pursuits were directed towards obtaining our freedom through independent but mutually reinforcing freedom struggles after WWII, trade, migration, intellectual and other exchanges continued to flourish. India's early role in support of Indonesian independence saw Soekarno as the chief guest at India's first Republic Day in 1950. From the Asian Relations Conference in 1947 to helming the Neutral Nations Repatriation Commission in Korea to chairing the International Control Commission in Indochina after 1954, India was active in Asia's politics in the early post-colonial period. The high point of that political engagement was no doubt the Bandung Conference, attended by treaty allies of two superpowers—China and Japan—but motivated by Pan-Asianism and a desire to strike out on their own. But the heady post-WWII brew of nationalism, socialism (in varied forms), and Pan-Asianism soon evaporated. As the Cold War solidified into alliances such as Southeast Asia Treaty Organization (SEATO) and Central Treaty Organization (CENTO) in 1954–1955, space for independent action was constricted, and political and security attention turned to nation-building—which, in many cases, revived old feuds and enmities within Asia—as a part of the construction of new nationalisms. Instead of the brave new world promised at Bandung, what we saw in Cold War Asia was war, civil war, the choice of autarchic development models, and, often, the return of traditional elites to power and favour with support from the US in the struggle against communism.

Through the 1980s, in particular, India and most Asian countries east of us differed in their approach to the major political issues of the day—the Soviet invasion of Afghanistan, Kampuchea, and the rise of Vietnam.

The distancing only began to reverse when India opened its economy and dismantled the Licence Raj in 1991, and Prime Minister Narasimha Rao announced a Look East (now Act East) policy in 1992. India became a dialogue partner of the Association of Southeast Asian Nations (ASEAN) and entered into free trade agreements and Comprehensive Economic Partnership Agreements


MUHAMAD CHATIB BASRI
AMAN NATH
VIKRAM S. MEHTA

(CEPAs) with ASEAN and its members, as well as with Japan, Korea, and others in the first decade of this century. As India looked East in the 1990s, ASEAN countries began to look West, admitting new members, which brought ASEAN to India's doorstep.

There is no question that this combination of "looking east" and "looking west" has brought a considerable improvement in trade, political, defence, and security links between India and Asia east of India, particularly maritime links. India–ASEAN trade stood at approximately US$110.4 billion in 2021–2022. But this was dwarfed by ASEAN's trade with China, Japan, and South Korea (US$503 billion, US$195 billion, and US$153 billion, respectively, until September 2020) and by India's trade with China and the US. The change has thus been patchy, limited, and far from realising the ambitions or potential recognised by its initiators. The Lowy Institute Asia Power Index 2023 shows India performing worst in economic relationships—a result of the country sitting outside the regional economic integration agenda. However, India performs best in the future resources measure.

This potted summary suggests to me that with brief exceptions, India's past engagement with Asia has been driven less by economic logic than by geopolitics and politics at home. To put it another way, geopolitics has been front and centre in India's engagement with Asia. And that has imposed limitations.

The Present

Today, after two decades of the Look East and Act East policies, India is more engaged with East Asia, but not to the extent that satisfies either side. The ISEAS NUS State of Southeast Asia Survey, 2023, says that only 1% of ASEAN elites expect India to lead in the maintenance of a rule-based order, in itself, an improvement of 0.1% since 2022! Confidence in India as a third party to deal with the uncertainties of US–China rivalry has grown across all ASEAN countries to 11.3%, well behind the European Union and Japan. Overall, while India has enjoyed a significant increase in trust levels—with 25.7% confident that India will do the right thing compared to 16.6% in 2022—doubts about India are still pronounced at 44.2%. We have much to do. I daresay the picture is only marginally different among northeast Asian elites.

In India, too, hesitancy about joining the Regional Comprehensive Economic Partnership (RCEP), unwillingness to participate in the trade leg of the Indo-Pacific Economic Forum (IPEF), and doubts about deepening trade and economic integration suggest domestic opposition or, at best, indifference to closer Indian economic engagement with Asia. This raises a two-fold question: are we doomed by structural and domestic political factors on both sides to repeat the unsatisfactory patterns of the past 75 years in India's engagement with maritime Asia? Or are we at a moment of opportunity to break out of the patterns of the past, given the far-reaching changes in Asia and the world economy?

In the hope of provoking reactions, let me tell you what I think. I believe that we may indeed be at a moment of opportunity for greater engagement and integration. Geopolitics, which was a limiting factor in the past, may be an enabler of closer engagement today. Why do I say so?

1. Today's geopolitics is different. There are balancing, hedging, and other options for independent action today that did not exist in the Cold War bipolarity or the unipolar moment when China and the US worked closely together. This is an era of coalitions rather than alliances, of unalignment rather than nonalignment. The world is between orders; it has returned to its normal state for most of history—the absence of world order. Northeast and Southeast Asia responded creatively and successfully to previous geopolitical shifts from a bipolar Cold War framework to a unipolar moment. So did India, though we chose different responses. Now that both have to respond to a world adrift between orders, India and other countries in maritime Asia seem to be responding similarly.

2. The new frameworks of cooperation in Asia east of India are open not closed as they were in the Cold War and the unipolar moment. The Quadrilateral Security Dialogue (the Quad), IPEF, RCEP, and Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) are open and inclusive rather than exclusive and closed as the Asia-Pacific Economic Cooperation (APEC), SEATO, CENTO, and other earlier arrangements were. The new pacts reflect the fluidity in the Asian balance of hard power, both economic and military.

3. Just as China's economic rise created opportunities for the rest of Asia, its political ambitions pose challenges and possibilities in other less predictable and, often, unsettling ways.

4. The arc of instability in maritime Asia—whether it be from the East China Sea to Taiwan to the South China Sea to the India-China border—challenges ASEAN to use its convening power and experience to assume a larger political and military role in the resolution or management of crises such as the one in Myanmar. ASEAN centrality now needs to be exercised in a new context.

5. Asia now has the capabilities needed for deeper engagement. Southeast and Northeast Asia's records of building extensive networks for intellectual and other engagement are truly remarkable and eminently replicable and scalable. We, in India, should learn from these precedents through our Look East and Act East policies in the extended neighbourhood, as well as in the subcontinent and Indian Ocean region.

6. Difficult geopolitics should motivate us to do more and find new solutions to political and security problems ourselves since the international order and multilateral systems are missing in action. As US-China tensions have risen, so have military budgets throughout the Asia-Pacific. Between 2017–2022, military budgets (adjusted for inflation) grew by almost 60% in the Philippines, over 35% in China, and around 10–15% in South Korea, Pakistan, Vietnam, and Indonesia. If this is worrisome for what is fast becoming the economic and geopolitical centre of gravity of the world, we must find better ways of keeping the peace, managing crises and differences, and mitigating the effects of great power rivalry on Asia's future prosperity.

7. India and its Asian partners today need to diversify, find new sources of

growth, and avoid over-dependence on either of the economic giants, China and the US, whose strategic rivalry seems to be here to stay for the foreseeable future. Increased engagement between India and Asian partners could help. This would require more than tweaks to economic policies and practices and would extend to institutional and intellectual engagement and change. Hopefully, a greater challenge will lead to a bigger and better response.

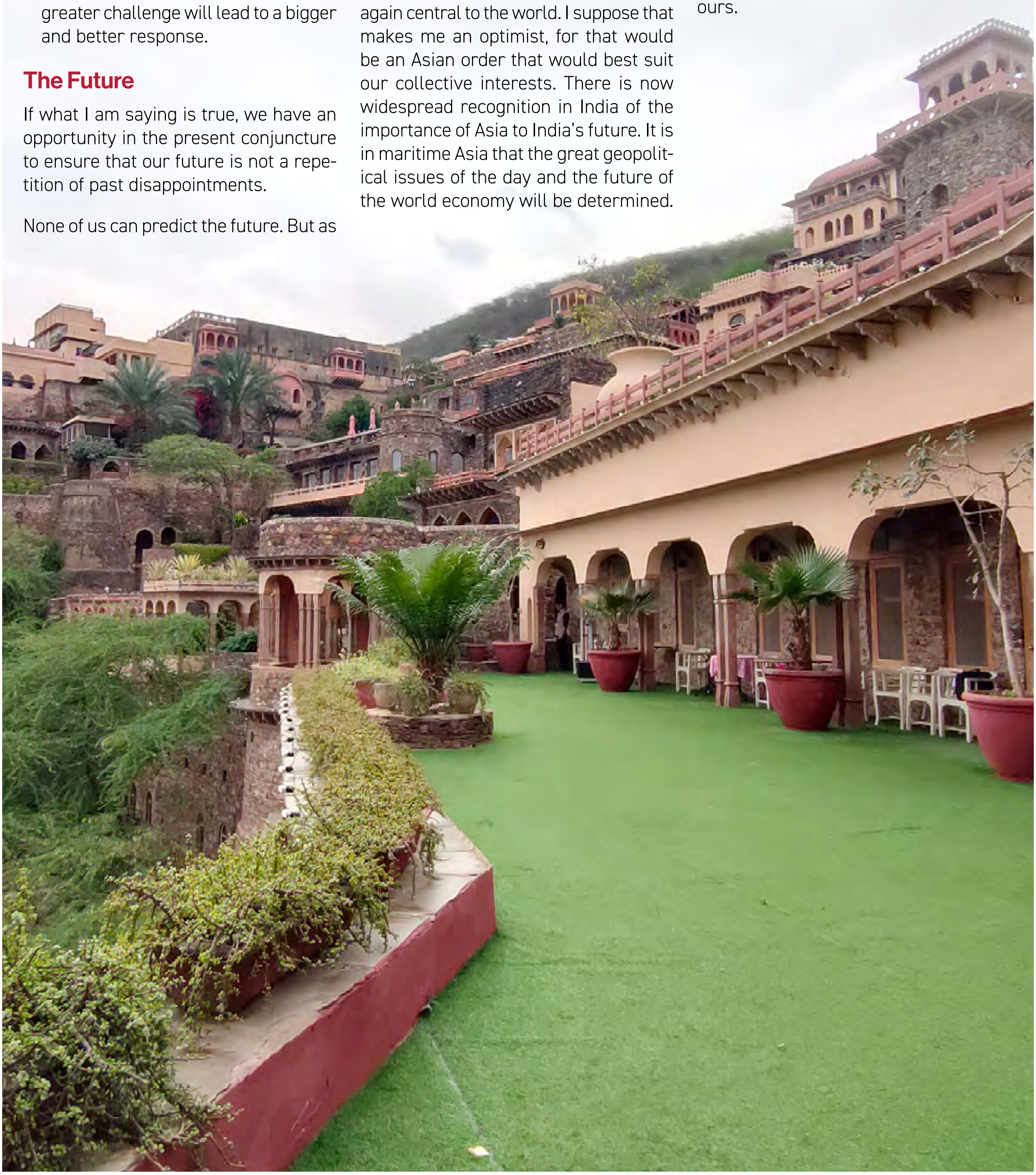
The Future

If what I am saying is true, we have an opportunity in the present conjuncture to ensure that our future is not a repetition of past disappointments.

None of us can predict the future. But as the basis for our actions, we construct scenarios and ascribe probabilities to them, changing the probabilities with changing circumstances over time. In my mind, Asia has multiple possible futures. For me, the most likely future for Asia is not an Asia centred on or dominated by one power or another or an Asia that is a free radical in the international system—rather, a truly open and inclusive Asia that is once again central to the world. I suppose that makes me an optimist, for that would be an Asian order that would best suit our collective interests. There is now widespread recognition in India of the importance of Asia to India's future. It is in maritime Asia that the great geopolitical issues of the day and the future of the world economy will be determined.

I hope that our discussions over the next two days will suggest ways in which India and Asia could begin a process of much deeper intellectual engagement and understanding as the basis of successful joint action to take advantage of the present opportunities and build an Asian order that ensures our security and prosperity.

I wish you all the best in your endeavours.



Opening Session

Rakesh Mohan

A warm welcome to everyone to this first *India in Asia: Deeper Engagement Conference,* especially our guests from abroad.

Let me give you a background on how we came up with the idea for this conference. I was executive director for India, Bangladesh, Bhutan, and Sri Lanka at the International Monetary Fund (IMF)—during 2012-15 when Tharman was the chairman of the International Monetary and Financial Committee (IMFC). During my last year there, I wrote a working paper on IMF quota reforms. When I wrote that paper, I did some quantitative work and concluded that the centre of gravity of the global economy is in the process of moving from the North Atlantic to somewhere between the Indian and Pacific Oceans. Also, the pace of change in this process has really accelerated in the last 20 years, in fact, since about 2000—the turn of the millennium. If you look at the previous 50 years or so, there really was not much change during that period. So, we are entering a very, very new era. In fact, this change is taking place, after about 200–250 years of the ascendancy of the West. So, we are living in epochal times when we are going through a major change.

What strikes me the most is that the last time a big change took place, it was the movement from the United Kingdom as the key global power to the United States—it took two World Wars and inter-war chaos for that process to happen. Given that this movement from the Atlantic to the Indo-Pacific is taking place now, in economic, political, and strategic terms, it is very, very important that we understand its gravity and avoid what happened the last time around.

So, that was when I first started thinking about the importance of Asia Pacific to us in India. And then, when I returned to India in 2020, after almost 10 years in the United States, during COVID-19, I kept on thinking. Of course, in those days we could not do much more than think because we could not meet people for a year and a half year to two years. I kept reflecting that, given that this change is taking place, is India equipped to understand and benefit from it? Unfortunately, I have to say that we continue to be mesmerised by the West and do not look or act enough to the East.

India pulled out of RCEP;[1] we have not yet signed up with the trade pillar of IPEF;[2] and we have not participated in discussions related to the CPTPP.[3] Tharman, of course, is much more diplomatic than I am, so he said the same thing but in a much more Tharman-like manner! So, I feel concerned that, if we do not become a part of this movement toward the Indo-Pacific, we will not realise our economic, political, or strategic potential.

So, that is when I started thinking that we should do something.

Then I wondered how many economists and other policy influencers do I know in Asian countries. I could count them on my fingers. I asked my friends in India, to give me names of people whom I can call for such a conference. Most of them said there are not many people you can call from Asia. In any case, they do not speak English! So, I said what rubbish. Because I have been travelling in East Asia since 1980.

Then, in June 2022, I heard that Tharman had agreed to attend the Kautilya Economic Conclave, which was co-hosted by the Indian Ministry of Finance and the Institute of Economic Growth. So, I wrote to him that "I hear you are coming to the Kautilya Conclave, I'd like to see you". The reply came in less than 24 hours. He must be the only person in the world who has been a deputy prime minister and senior minister—and everything else that he has done—who actually replies himself to emails in 24 hours. I could not believe it. So, that is how I met him, and we spoke for almost an hour. I put forward the idea of this conference. And he gave me what, at least to me, was enthusiastic encouragement. So, that is how we started, that is when I started thinking about it and writing to all of you. And, in the same manner, in the last six months, his email responses have really been of quality and speed. And that is his humility. I do not remember when I first got to know Tharman. Perhaps when I went to Singapore a lot in the 2000s as the co-chair of the India-Singapore Comprehensive Economic Cooperation Agreement. That, I think, was in 2003.

1 Regional Comprehensive Economic Partnership. Its members include Australia, Brunei, Cambodia, China, Indonesia, Japan, South Korea, Laos, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, Thailand, and Vietnam.

2 Indo-Pacific Economic Framework. Its members include Australia, Brunei, Fiji, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Vietnam.

3 The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Its members include Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam.

So, that is the time since I have been involved with Asia.

I then began my interaction with our government to get their support and encouragement. I met officials in the Ministry of External Affairs, the Finance Ministry, and the Prime Minister's Office—and all of them were very encouraging. The proof of that is the message that we received from the Prime Minister today. We have received this even though these days have been extremely busy for him: the G20 foreign ministers' meetings, the Raisina Dialogue, the Shanghai Cooperation Organisation meeting and so on.

Both Tharman and Shankar Menon have talked about the key issues affecting the lack of interaction between India and Asia to the East of us. From ancient times, we have had intense interaction: the biggest and most successful export from India to Asia has been Buddhism. This export was so successful that nothing was left here! Since then, somehow, we have not had very successful exports, particularly in goods. Different projections suggest that the likelihood—over the next 20 to 30 years—is that 60% or more of incremental global economic growth will come from Asia. Maybe more. I include South Asia, ASEAN, China, Japan, and Korea in this group of countries. The kind of Indian influences one sees in Asia—whether in Myanmar, Thailand, Cambodia, Indonesia, Japan, and otherwise—testify to the high degree of commerce between India and East Asia, in thought as well as in commerce.

While I was at Yale for four years recently, teaching economics, I took the opportunity of attending some art history classes under the influence of my wife; and, of course, I had nothing better to do apart from teaching! These courses exhibited slides that illustrated the influence of India on their art in most Asian countries, through both Hinduism and Buddhism. Such influences are even evident in Tōdai-ji, Nara, Japan. This is perhaps not surprising since, in the early 8th century AD, it was an Indian scholar and monk, Bodhisena (Bodai-Senna), from South India, who was among the people who carried Buddhism to Japan, apparently travelling through Cambodia, Vietnam, and China on the way. So, this is just one example of the deep relationship that India has had over centuries, with the rest of Asia to the East of us.

I was also cautioned that if you have only Asians in the conference, they do not talk! And in any case, if they talk, you cannot understand their English! And Indians talk too much. So, I was very pleased to observe at lunch today that this group, obviously representing change in Asia, has no difficulty talking. I suggest to our guests that you try to restrain us from talking too much, so we can learn more from your wisdom.

I want to welcome all the spouses; thank you very much for taking the risk of coming to this meeting. I suggest to you that if you find any sessions interesting, just throw out your husband or wife from the main table and displace them. But that is between you. I know all the spouses are accomplished professionals in their own right. Even if you are not at the table in the sessions you attend, do not hesitate in raising your hands to speak.

Okay. Now I come back to the more boring stuff. The logistics. One, because you have the whole list of all participants, with all their backgrounds, there will be no introductions. We made an exception for Tharman, even though he is the best-known among us. But since he is the keynote speaker, I thought we must introduce him, so I asked Vikram Mehta to do so. Two, as you will see from the programme, it is a very, very packed programme. So, an appeal to all the chairmen as well as the speakers, just please be disciplined, otherwise we will not get to lunch or dinner every day. We have a tinkle bell, which we will sound when your time is up. So, do not mind that; it is totally informal. Three, the lunches will be very near here. So, you do not have to walk very much. The dinners will be a little further. And anyone who needs assistance in walking, just do not be shy and say so and someone will help you. You will not be able to find your rooms without help because there is no signage. We do not have signage because we want people to get lost and see the fort much more. Do not hesitate to ask because Aman has many staff around. And if you get lost, wander around a little bit…and the same thing for coming back for breakfast, lunch, dinner, etc. You do need to remember your room name. The Hindi name and not the translation. Just remember your room name—that is very, very important. Otherwise, no one can help you. Four, one thing for the spouses. Tomorrow morning, there is a new Neemrana University here that is very proud of its zero-emission, zero-energy accomplishment. So, there is a tour in the morning, if we have enough people for the tour, they are ready to welcome you.

Now, I need to do some thank yous. First, I have already thanked the spouses for being here. Second, among the spouses, of course, I would really like to thank Jane—Tharman's wife—in particular, since she has been brave enough to come despite some reported mobility issues. The Singapore High Commission is really efficient and solicitous. They felt that the Fort may be too uncomfortable and arranged the nearby boring Ramada Inn for Tharman and Jane. So, what I did was I got the photograph of the room they are supposed to be in; sent that to Tharman; and said, "We will take care of Jane, do not worry, she will not fall". And, so, we have a lady among us who is supposed to be with her all the time. So, very welcome, Jane. Thank you very much. Tharman is saying he would like to see Jane in a palanquin. Last week, I also had some problems with walking. So, one of my staff said that I should arrive here in a palanquin and with a trumpet. Luckily, my mobility has improved since last week.

A very, very, very big thank you to The Rockefeller Foundation, represented here by Deepali Khanna. Please raise your hand. Thank you so much. We do not call them sponsors; we call them philanthropic partners. And to Mitsui O.S.K. Lines Ltd. as well. We have their president here, Mr Takeshi Hashimoto. And to BP India Private Ltd. for their philanthropic generosity.

I think that I have taken just the right amount of time. So, we are 10 minutes early for the drinks and dinner. You must be punctual for breakfast and sessions tomorrow and the day after.

Finally, I really want to thank all my colleagues at the Centre for Social and Economic Progress (CSEP) for arranging everything. We did not have any outsourcing except printing. It was all done in-house. And we have never organised a conference before. I would like you to give them a big hand.


YOON-JE CHO
BILAHARI KAUSIKAN

SESSION 1

Impact of Geopolitics on Asia's Economic Options

SESSION NOTE

Jaimini Bhagwati

Session 1 is intended to focus on the economic realities that Asian countries are adapting to because of bilateral frictions or armed conflicts around the world. This session is expected to propose and explore the collaborative efforts and specific economic policies which would enable lower per capita Asian economies to gradually catch up with the more affluent Association of Southeast Asian Nations (ASEAN) and in due course the developed West.

Background

Geopolitics has either supported or hindered economic development in Asian countries or cooperation between them for a long time. For example, the impact of the Cold War, and membership in security pacts, such as SEATO,[1] on trade and foreign direct investments was evident after World War II, until SEATO was dissolved in 1977. The economic heft and military might of the US were crucial in designing economic exchanges between the West and several newly independent Asian nations. Communist China, which was initially closer to the USSR, crafted trade and investment ties with the US after 1971, and democratic India maintained a measure of strategic and economic autonomy from the permanent members of the UN Security Council. Since the 123 Nuclear Agreement between the US and India in September 2008, India has visibly increased its purchases of defence equipment from the US–West.

Over the past several decades, with the help of the imported capital and markets of the developed West, initially Japan and South Korea, and later ASEAN nations, provided labour-intensive and subsequently higher technology-driven products to the rest of the world. This economic engagement thrived for a little short of two decades, between the US's "End of History" moment starting

1 SEATO, the Southeast Asia Treaty Organization was set up in 1954 by the US. It included Philippines, Thailand, Pakistan, and New Zealand. SEATO was headquartered in Bangkok, and disbanded in 1977.

in the early 1990s (Fukuyama, 1992) and the West's financial sector meltdown in 2008. Nobel Prize–winning economist Joseph Stiglitz expressed discontent with globalisation (Stiglitz, 2002). However, for the most part, consumers in developed nations and producers in Asia chugged along merrily thanks to the free movement of capital and goods, and the setting up of global value chains (GVCs) across Japan, South Korea, the ASEAN, later China, and others.

The breakup of the Soviet Union and other factors enabled communist China to glide below the West's radar and build a formidable exports sector. Now that China is the world's largest economy in purchasing power parity (PPP) terms, the West, still led by the US, but with growing self-doubt particularly among European Union (EU) nations, does not wish to give China or other Asian countries a free pass. For Germany in particular, other G7 countries, and most Asian nations, some exports are critically dependent on imports from China and/or on fossil fuels from Russia. It is apparent that from now onwards it will not be business as usual for hitherto smoothly functioning GVCs or for cross-border trade and investment. Japan and South Korea are distinct from other Asian nations since they have substantial US military presence on their soil. This complicates their economic choices more than those of others, now that the rift between the US and China is out in the open.

Ukraine Conflict: Implications and Repercussions

A highly unfortunate development is the ongoing conflict in Ukraine, which is now about a year old (in early January 2023), and has polarised the world in several ways, somewhat along Cold War lines. Focusing only on the economic ramifications, the battle lines have been drawn. The West, led by the US is on one side, with Russia on the other. China has taken a conciliatory approach to Russia and at the same time it is a highly significant trading partner with most Western countries including the US. The US is uncomfortable with China's huge trade and investment footprint around the world and its Belt and Road Initiative (BRI). Asian countries, including the ASEAN, have been careful not to roil political or economic waters including at the Asia-Pacific Economic Cooperation (APEC) or G20 Summit, which took place during November 2022 in Bangkok and Bali, respectively.

The West's economic sanctions against Russia have also impacted countries which are geographically removed from the confrontation in Ukraine. For example, the prices of oil, gas, fertilizers, and rare earths are higher than they would have been but for the scarcities caused by the physical stoppages of, or transportation restrictions on, the movement of goods into and out of Russia. Even under usual circumstances the trade and investment arrangement agreements that countries choose are based not merely on costs but also on strategic considerations. Non-economic factors have begun to carry higher weightage in inter-state relations than in the recent past, and it appears that this sub-optimal economic environment may last for some time. Asian countries have become more conscious about building adequate FX reserves and retaining access to their hard currency reserves, particularly given their trying experience during the economic crisis of 1997–1998. This continues to be an important issue, particularly for countries whose currencies are only partially convertible in the capital account.

In 2000, in the context of access to convertible currencies, a few Asian nations created a currency swap agreement called the Chiang Mai Initiative. The participating countries included the ASEAN, China, Japan, and South Korea. This arrangement provided for bilateral swap agreements using the convertible currency reserves of member nations. This initiative was meant to help participating countries access hard currencies in times of FX shortage. Currently, the US has sequestered about US$600 billion of Russia's FX reserves. Still, the Chiang Mai Initiative would not be a way out if the West decided to prevent encashment of FX reserves held in sovereign G7 debt securities.

The Society for Worldwide Interbank Financial Telecommunication (SWIFT) is central in the process of receiving or making hard currency payments related to trade and foreign direct or portfolio investments. The SWIFT system is managed by the US, Switzerland, and the Netherlands. As of December 2022, the US and others in charge of the SWIFT system have excluded some Russian banks from this payments system. As such, Asian nations must find other modes of receiving or making payments from or to Russian companies.

On December 5, 2022, the EU capped the price of Russian oil at US$60 per barrel, and the EU's ban on seaborne crude oil originating from Russia also came into effect. Presumably the ban was only on seaborne oil since, as per media reports, the overland supply of Russian oil and gas to Western Europe is expected to continue. In December 2022, the EU designed a complicated scheme to manage energy markets to slash the flow of petrodollars to Russia while avoiding a global oil supply shock. Further, the UK and EU countries have forbidden their insurance companies from providing cover for the transportation of Russian oil (Wallace, 2022). These are examples of unsettling moves not just for Russia as an oil exporter but also for countries around the world, whose economies are not diversified and depend on a few export items to maintain current account buoyancy.

Large Western companies such as Apple are indicating that they are concerned about what they call "concentration" risk in China. This is the risk that too many production or servicing facilities may be located in one Asian country. According to media reports, a few Western companies are considering relocating production units out of China to centres in neighbouring economies. As such, choices of strategic affiliation may determine, more than in recent decades, the extent of economic constraints that Asian nations could face and even sanctions for reasons beyond their control.

Recently Formed Strategic and Economic Groupings

The high rates of economic growth in several Asian nations over many decades have changed relationships within Asia and in the global pecking order. New groupings of countries have emerged, reflecting strategic and economic affiliations. For example, the QUAD consisting of the US, Japan, Australia, and India is a strategic formation. By contrast, the trade- and investment-driven Comprehensive and Progressive Agreement for Trans-Pacific

Partnership (CPTPP) came into force in March 2018. The CPTPP has 11 members including Singapore, Malaysia, Vietnam, Mexico, Canada, Japan, Australia, and New Zealand. The 14 participating countries of the Indo-Pacific Economic Framework (IPEF), which is intended to promote trade and investment, include the US, Japan, India, South Korea, Australia, and several ASEAN nations.

A bloc of 15 nations called the Regional Comprehensive Economic Partnership (RCEP) includes China and most ASEAN nations. The RCEP also includes Australia, New Zealand, and Japan. The five-nation Brazil, Russia, India, China, and South Africa (BRICS) grouping is now less cohesive than when it was established. This is because Brazil, India, and South Africa have country-specific priorities while Russia and China are, to an extent, getting distanced from the West. The eight-nation Shanghai Cooperation Organization (SCO), which has summit meetings periodically, includes China, Russia, India, Pakistan, and all Central Asian countries except Turkmenistan; it has strategic, territorial, and border differences among its members. The lower-level foreign minister forum of Russia–India–China called RIC is meant to air this group's thinking on global issues and not bilateral matters.

Chinese and Indian troops clashed at Galwan along the Line of Actual Control (LAC) between the two countries in Eastern Ladakh in June 2020, and there were casualties on both sides. More recently, the Indian government has confirmed that in the early hours of December 9, 2022 altercations took place between Indian and Chinese soldiers along the LAC in the Indian state of Arunachal Pradesh. Asian countries would naturally like to steer their economic ships away from the shoals of a further deterioration in US–China relations, and any conflicts between India and China about their land border.

Multilateral Development Institutions

Although government-to-government lending by G7 countries to Asian nations is minimal, the Bretton Woods Institutions namely the World Bank and International Monetary Fund (IMF) continue to be relevant. The Asian Development Bank (ADB), headquartered in Manila, came much later in 1966, and its equity base was supported by Japan as it rose out of the ashes of the World War II. ADB is owned by 66 nations of which 49 are in Asia. Even though China has huge hard currency reserves, it is currently the largest borrower from the International Bank for Reconstruction and Development (IBRD), which is the World Bank's lending arm for loans to governments. China's official explanation for why it continues to borrow from IBRD is that it benefits from the domain expertise of World Bank experts.

At the end of 2022, IBRD's loans outstanding amounted to US$227 billion. The World Bank's soft lending arm is called the International Development Association (IDA), and IDA's loans amounted to US$175 billion in June 2022. Separately, at the end of 2022, the total portfolio of IMF's three major lending facilities was US$81 billion. The private sector lending arm of the World Bank group is called the International Finance Corporation (IFC), and IFC's total investments added up to US$44 billion in 2022. The Multilateral Investment Guarantee Agency (MIGA), also headquartered in Washington DC, had a total guarantee exposure of US$24 billion in 2022. The ADB's disbursed loans totalled US$138 billion in June 2022. The European Investment Bank (EIB) is headquartered in Luxembourg and its mandate is to lend mostly within Europe. EIB's loan portfolio totalled US$473 billion at the end of 2022. Cumulatively, over the last 10 years, the EIB has invested about US$74 billion outside Europe.

Another multilateral lending institution is the European Bank for Reconstruction and Development (EBRD), which is headquartered in London. Among other institutions set up by the West are the Inter-American Development Bank (IDB), with headquarters in Washington DC and focused on Latin America; the Global Environment Facility (GEF); the African Development Bank in Abidjan; and the Rome-based International Fund for Agricultural Development (IFAD). These organisations, the Bretton Woods Institutions, EIB, and ADB provide reasonably impartial analyses of trends at the global level, and serve as reliable repositories of country-wise data. And, as of now it appears that these multilateral institutions set up by the West will remain important in lending and providing technical assistance to governments and private sector companies in Asia. However, further deterioration in relations between the West and Russia, and more significantly China, could negatively impact the working of these multilateral institutions.

For its part, China has set up the Asian Infrastructure Investment Bank (AIIB), with headquarters in Beijing. As of the end of 2022, AIIB's disbursed loans totalled about US$14 billion. Separately, the BRICS grouping of five nations has set up the New Development Bank (NDB), with its head office in Shanghai. The BRICS nations include China and India, and the NDB's loan portfolio probably amounted to about US$7 billion at the end of 2022. Given the differences between India and China regarding their land border in the Himalayas, and Russia's preoccupation with the war in Ukraine, it is unlikely that the NDB will rival the AIIB, let alone the EIB, World Bank, IMF, or ADB, any time soon.

Scientific, Technological, and Economic Excellence and Dominance

An indicator of the West's continuing scientific and technological dominance, is that their nationals are still winning most of the annual Nobel prizes in the pure sciences. The West plus Taiwan, South Korea, and Japan are also ahead in significant areas of civilian and military technology, while other Asian nations including China have some catching up to do. A relevant example is the December 13, 2022 claim of the Lawrence Livermore National Laboratory in the US that it may be at the cusp of a breakthrough in harnessing clean energy from nuclear fusion.

Taking a step back in time, for the last three and half centuries Western hemisphere countries either colonised or exercised economic control over Asian nations. In the last 100 years or less, Asian countries including India have thrown off the colonial yoke and established their own governments. In the past 30 years it has become apparent that the global economic centre is shifting eastwards. Yet, language barriers, even though English is used extensively in Asia, differing histories, past misunderstandings, and armed conflicts have kept Asian nations tethered to a psychology of Western intellectual and economic dominance. All things considered, as of January 2023, it appears that the West may have overplayed its economic hand. It is likely though not inevitable that the West's economic dominance will atrophy further over the next few decades unless Asian countries fall into the trap of engaging in counterproductive boundary or other disputes.

To provide context for discussions in Session 1 of this Conference, Tables I to III list the surface areas and populations in 2020. These tables also lay out the projections for 2027. Canada has a surface area marginally larger than that of the US, but a substantial part of the former country experiences severe cold weather in winter. China has about the same surface area as the US, and Russia is almost double the size of the US, Canada, or China. Five years from now, in 2027, Asia's population is projected to be more than four times that of Western countries.

A comparison of the projected gross domestic products (GDP), in Tables IV and V, shows that in PPP terms the West's GDP will be 79% that of Asian nations in 2027. This difference in relative economic size may widen further over time since GDP growth rates are likely to be higher in Asia than in developed Western nations. The median ages in several Asian countries with large populations, such as India and Indonesia, are lower than those in Western Europe, and this may keep Asian consumption rates higher for another decade or more. Although the total population of Asian nations is likely to rise faster than that of the developed West, Japan's population may stagnate or even decline, and China's seems to have plateaued as well.

Tables IV and V also provide the numbers on the trade in goods and services of developed countries and Asian economies. In 2020, Asia's goods exports to developed countries were valued at US$8.1 trillion, which was higher than the imports of US$7.4 trillion from the same set of countries. In 2020, exports of services from Asian countries were valued at US$2.6 trillion while total imports were higher, at US$3.2 trillion. The same numbers for the new groupings of RCEP and IPEF are listed in Table VI. Tables VII and VIII provide the 2020 numbers on goods trade and trade balances between select Asian and developed Western countries. It is apparent that the US is the most significant trading partner for both China and Japan and for Asia as a whole.

Conclusion

Over the next several decades Asian economies may grow at a faster clip than the West's developed countries. For Japan, South Korea, India, and several large ASEAN economies, economic linkages with the developed West are likely to be sustained. It is possible that the dissonance between the US and China and differences over Taiwan's future may throw a shadow on Asia's economic prospects. Separately, differences on border issues between India and China could slow trade and investment between these two countries. In this context of fraught international relations and bilateral differences, Asia's economic growth may face constraints which would need deft handling.

TABLE I: Select Developed Economies

	Population in 2020 (mn)	Population in 2027 (mn)	Surface Area (mn sq km)
US	331	338	9.6
Germany	83	83	0.4
UK	67	69	0.2
France	65	67	0.5
Italy	60	59	0.3
Canada	38	41	9.9
Rest of the EU*	237	239	1.6
Total	881	896	22.5
Russia	146	144	17.1
Australia & New Zealand	31	33	8.0

Source: IMF World Economic Outlook and World Bank Open Data

*Notes: *Rest of the EU consists of countries in the EU except for France, Germany, and Italy; mn: million; sq km: square kilometres.*

TABLE II: Select Asian Economies

	Population in 2020 (mn)	Population in 2027 (mn)	Surface Area (mn sq km)
China, People's Republic of	1412	1404	9.6
India	1380	1469	3.3
Japan	126	122	0.4
Indonesia	270	287	1.9
Korea, Republic of	52	51	0.1
Thailand	70	70	0.5
Vietnam	98	103	0.3
Philippines	109	119	0.3
Malaysia	33	35	0.3
Singapore	6	5	0.001
Rest of the ASEAN	77	81	1.1
Total	3633	3746	17.8

Source: IMF World Economic Outlook and World Bank Open Data

*Notes: *Rest of the ASEAN consists of Brunei, Cambodia, Laos, and Myanmar; mn: million; sq km: square kilometres.*

TABLE III: Select Asia-Pacific Economic Groupings

	Population in 2020 (mn)	Population in 2027 (mn)	Surface Area (mn sq km)
RCEP*	2282	2312	22.6
IPEF**	2506	2636	24.8

Source: IMF World Economic Outlook and World Bank Open Data

*Notes: *RCEP is a free trade agreement between the 15 Asia-Pacific nations of Australia, China, Japan, South Korea, New Zealand, and all ASEAN countries; **IPEF is an economic initiative and consists of 14 members: Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, the US, and Vietnam; mn: million; sq km: square kilometres.*

Table III shows that the trade pact grouping of RCEP countries which includes China, Japan, South Korea, Australia, and the ASEAN nations is comparable in surface area and population with the US-sponsored trade and investment promotion grouping called the IPEF.

Table IV: GDP and Trade in Goods and Services of Larger Developed Economies

	GDP PPP in 2020 (tn USD)	GDP PPP in 2027 (tn USD)	Goods IM in 2020 (bn USD)	Goods EX in 2020 (bn USD)	Services IM in 2020 (bn USD)	Services EX in 2020 (bn USD)
US	20.9	30.3	2351	1429	460	706
Germany	4.6	6.3	1139	1357	316	319
UK	3.0	4.5	564	397	212	386
France	3.0	4.4	572	505	236	255
Italy	2.5	3.5	394	472	94	86
Canada	1.9	2.7	420	390	98	94
Rest of the EU*	9.8	15.0	2618	2857	1208	1320
Total	46	67	8058	7407	2624	3165

	GDP PPP in 2020 (tn USD)	GDP PPP in 2027 (tn USD)	Goods IM in 2020 (tn USD)	Goods EX in 2020 (bn USD)	Services IM in 2020 (bn USD)	Services EX in 2020 (bn USD)
Russia	4.1	5.3	240	333	64	48
Australia & New Zealand	1.5	2.3	248	290	51	61

Source: IMF World Economic Outlook and World Bank Open Data

*Notes: *Rest of the EU consist of countries in the EU except for France, Germany, and Italy; IM: imports; EX: exports; tn: trillion; bn: billion.*

Table V: GDP and Trade in Goods and Services of Larger Asian Economies

	GDP PPP in 2020 (tn USD)	GDP PPP in 2027 (tn USD)	Goods IM in 2020 (bn USD)	Goods EX in 2020 (bn USD)	Services IM in 2020 (bn USD)	Services EX in 2020 (bn USD)
China	24.2	42.1	1999	2510	381	229
India	9.0	17.9	377	282	116	203
Japan	5.3	7.2	604	631	198	164
Indonesia	3.3	5.8	135	163	25	15
South Korea	2.3	3.5	437	518	104	90
Thailand	1.3	2.0	186	227	47	32
Vietnam	1.1	2.0	252	283	18	8
Philippines	0.9	1.7	82	48	18	32
Malaysia	0.9	1.5	152	185	33	22
Singapore	0.6	0.9	314	418	204	210
Rest of ASEAN	0.4	0.6	32	31	4	2
Total	49.3	85.2	4570	5296	1148	1007

Source: IMF World Economic Outlook and World Bank Open Data

*Notes: *Rest of the ASEAN consists of Brunei, Cambodia, Laos, and Myanmar; IM: imports; EX: exports; tn: trillion; bn: billion.*

Table VI: GDP and Trade in Goods and Services of Asia-Pacific Economic Groupings

	GDP PPP in 2020 (tn USD)	GDP PPP in 2027 (tn USD)	Goods IM in 2020 (bn USD)	Goods EX in 2020 (bn USD)	Services IM in 2020 (bn USD)	Services EX in 2020 (bn USD)
RCEP*	41.8	69.5	4441	5304	1083	864
IPEF**	26.2	44.8	2794	3052	815	836

Source: IMF World Economic Outlook and World Bank Open Data

*Notes: *RCEP is a free trade agreement between the 15 Asia-Pacific nations of Australia, China, Japan, South Korea, New Zealand, and all ASEAN countries; **IPEF is an economic initiative and consists of 14 members: Australia, Brunei Darussalam, Fiji, India, Indonesia, Japan, South Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, the US, and Vietnam; IM: imports; EX: exports; tn: trillion; bn: billion.*

Table VII: Bilateral Trade in Goods of Larger Asian Economies with Select Developed Economies, 2020 (bn USD)

	EX US	IM US	EX UK	IM UK	EX Canada	IM Canada	EX EU	IM EU
India	49	27	8	5	3	3	37	35
China	452	136	73	20	42	22	438	229
Japan	119	72	11	6	7	11	63	61
South Korea	74	58	4	4	5	4	50	51
ASEAN	212	97	18	14	10	6	136	78
Total	906	390	114	49	67	46	724	454

	EX Russia	IM Russia	EX Australia	IM Australia
India	3	6	3	7
China	51	58	53	118
Japan	6	11	12	36
South Korea	7	11	6	19
ASEAN	6	8	31	24
Total	72	93	107	203

Source: UN COMTRADE

Notes: EX: exports; IM: imports.

Table VIII: Trade Balance of Larger Asian Economies with Select Developed Economies

	US	UK	Canada	EU	Russia	Australia
India	23	3	0.07	3	–3	–4
China	316	53	20	210	–7	–64
Japan	47	4	–4	2	–5	–24
Korea	17	0.13	1	–1	–4	–13
ASEAN	115	4	4	57	–2	8
Total	518	64	21	270	–21	–96

Source: UN COMTRADE

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PAPER 1

Impact on Asian Economies of Changes in G7 Trade and Investment Practices

Eisuke Sakakibara

Given the high rate of growth of Asian countries, G7 countries formed various strategic and economic affiliations with Asian countries. Quad including the US, Japan, Australia, and India is one such grouping. The Indo-Pacific Economic Forum (IPEF) which is intended to promote trade and investment includes the US, Japan, India, south Korea, Australia, and several ASEAN nations. Regional Comprehensive Economic Partnership (RCEP) includes China and most ASEAN nations. RCEP also includes Australia, New Zealand, and Japan.

Chinese growth rate in 2021 was 8.11% and that of India was 8.70%. Among big countries, they were the fastest-growing countries in the world. The world average in 2021 was 5.9% while that of the US was 5.9% and Japan was 1.7%, Australia's growth rate was 2.2%, Indonesia's 3.7%, Korea's 4.1%, Malaysia's 3.1%, New Zealand's 3.7%, Pakistan's 6.5%, Philippines' 5.7%, Singapore's 7.6%, Sri Lanka's 3.3%, Thailand's 1.5%, Vietnam's 2.6% (The World Bank data).

The high growth rates of China and India stand out and their high growth rates had continued for more than 40 years. The average annual growth rate of China between 2012 and 2021 (ten years) was 6.70% while that of India during the same period was 5.46%. They are the two big and most populous countries in Asia and how they perform would influence other countries in Asia such as ASEAN. Accordingly, Asia stands out as the most rapidly growing area in the world.

In 2021, most Asian countries, other than China and India, achieved high growth rates as mentioned earlier. They are expected to continue rapid growth in 2022 and 2023, as well. In 2022, Bangladesh would grow 7.2% and in 2023

6.0%; Cambodia 5.1% in 2022 and 6.2% in 2023; Indonesia 5.3% in 2022 and 5.0% in 2023; Malaysia 5.4% in 2022 and 4.4% in 2023; the Philippines 6.5% in 2022 and 5.0% in 2023; Thailand 2.8% in 2022 and 3.7% in 2023; and Vietnam 17.0% in 2022 and 6.2% in 2023. All in all, the weighted average GDP growth rate for Asia is around 6.1% in 2021 up from 0.8% in 2020, and land at 4.7% in 2022 (The World Bank data).

In 2021, on the other hand, European growth rate was 5.4% and would land at 2.7% in 2022. Compared to Asia, the growth rate would be quite low. American growth rate in 2021 was 5.7% and would go down to 3.9% in 2022. As in the case of Europe, American growth rate is lower than Asian countries. Thus, it is quite obvious that Asian growth rate is much higher than European countries and the United States. Most Asian countries developed much later than G7 countries but precisely because of that, it is growing rapidly to catch up with developed countries. Asian population in 2022 is 4.7 billion which is 59.76% of the total world population. Asia is indeed the most populous region in the world.

In 2020, China had a population of 1.44 billion, 18.47% of the world population, while India had a population of 1.38 billion, 17.70% of the world population. China and India, together, had 36.17% of the world population which is more than one-third of the world population. Following China and India are Indonesia (3.51% of the world share), Pakistan (2.83% of the world share), Bangladesh (2.11% of the world share), and Japan (1.62% of the world share).

As mentioned earlier, together, they account for about 60% of the world's population. Asia is the most populous region and the highest-growing region in the world. The period when the world was dominated by the US and European countries seems to be slowly ending and Asia has emerged as the centre of the world, both in terms of population and economic growth rate. In particular, China and India stand out as the two major drivers in Asia which is expected to continue for a prolonged period in the future. Indeed, the 21st century should be the century of Asia. Both in population and the economic rate of growth. Asia would exceed G7 countries including the US and advanced European countries. Perhaps, African countries such as Nigeria, Egypt, Congo, Tanzania, and South Africa would follow Asian countries in the late 21st century and 22nd centuries.

The Asian Development Bank (ADB), headquartered in Manila was established in 1966. ADB is owned by 66 nations of which 49 are from Asia. ADB's largest capital providers are the US and Japan, both of which have 12.751% of the total capital. They are followed by China (5.347%), India (5.347%), Australia (4.913%) and Indonesia (4.641%).

G7 countries such as the US and Japan have a crucial role in ADB which exemplifies their keen interest in the rapidly growing Asian region. G7 countries other than the US and Japan, also have a significant share of ADB. For instance, Canada has 4.469%, Germany 3.747%, France 2.196%, the United Kingdom 1.924%, and Italy 1.737%. They invest heavily in the fast-growing Asian region. In 2022, ASEAN-5 had an economic growth rate of 5.3%, the highest among various regions. The world average was 3.6%, and the US grew by 1.9%.

According to Price Waterhouse Coopers (PwC), in 2050, China will have a GDP of 58,499 billion US dollars, the highest in the world, followed by India with 44,128 billion US dollars (both PPP-based forecasts). The United States would be third, while Japan would be eighth. According to the PwC, between 2016 and 2050, the highest-growing country would be Vietnam (5.0% annually), followed by India (4.8% annually) and Bangladesh (4.7%), Pakistan (4.6%) and the Philippines (4.2%), all of which are Asian countries. G7 countries' growth rates would be much lower, 2.1% for Canada, 2.0% for the UK and the US, 1.9% for France and Germany, 2.0% for Japan and 1.7% for Italy.

The economic strength of the region would move, by 2050, from G7 countries to Asian nations such as China, India, and Indonesia and G7 countries would try to maintain their economic power by investing heavily in Asian countries, as is exemplified by their heavy investments in ADB.

According to the chief economist of PwC, the GDP share of E7 (China, India, Brazil, Indonesia, Mexico, Russia, and Turkey) would rise to around 50% while that of G7 would go down to only 20%. Of course, the forecast is based on the assumption that the current conditions would continue into the foreseeable future without major problems and the management of developing countries such as E7 would be well coordinated. It is quite possible that G7 countries would keep their strength through their strategic investments in the rapidly growing area and maintain their current share of GDP. Particularly if the economic management of E7 countries does not go smoothly, and if some political crisis takes place, the growth rate of these countries would be significantly reduced. In such cases, G7 countries may maintain their economic dominance for a prolonged period.

Discussant Comments

Tetsuya Watanabe

Thank you. I am very honoured to be a part of this important inaugural conference organised by CSEP under the leadership of the esteemed scholar, Dr Rakesh Mohan, President of CSEP. I also thank Dr Jaimini Bhagwati and Dr Eisuke Sakakibara for their wonderful scene-setting presentations.

The world we live in today is going through seismic changes which present tremendous uncertainties: US-China geopolitical tensions, the climate crisis, energy security and macroeconomic uncertainties. But despite this, the future is for Asia - for India and ASEAN in particular. India and ASEAN are the epicentre of global growth and dynamism. This region's impressive GDP growth rate is much higher than the global average, as both Dr Bhagwati and Dr Sakakibara pointed out. This region is also home to a growing population and the booming middle class with flourishing innovative spirits. With its strategic location at the crossroads of the Indo-Pacific, India and ASEAN also play key roles in providing peace and stability to the wider region.

Whether this region will continue to grow and whether the economic strength will shift from G7 countries to India and ASEAN will be contingent on whether this region will successfully address the key challenges ahead.

Here I would like to highlight three specific issues as food for thought for our later discussion. No.1, supply chains resilience; No.2, energy transition to a carbon-neutral economy and society; No.3, digital innovation and entrepreneurship.

First on supply chain resiliency, particularly as related to key products and technologies. Semiconductors are at the heart of the technological rivalries between the US and China. The CHIPS Act demonstrates the United States' ambitions on this matter. In Japan too, with an investment from the Taiwanese corporation TSMC, a new factory for logic semiconductors is currently being constructed and will begin operations next year.

Toyota, Sony, and other private companies have pooled their strengths to create "Rapidus," a company that will develop cutting-edge semiconductors. "Rapidus" will utilise IBM's technology for fabricating the 2-nanometer generation of logic chips. Of course, when it comes to digital technology, it is India. We should remember the dense supply chain crisscrossing East Asia. In the future, Japan and this region will have great opportunities to work together in the areas of research and development.

Number 2: the geopolitics of the transition towards carbon neutrality. China has been developing decarbonisation supply chains from upstream to downstream; basic metals, rare earth, batteries and EV. This will change the global power balance and geopolitical landscape for years to come.

For India and ASEAN too, the energy transitions are an urgent matter. As the economy in this region follows a different growth path than that of Europe, this region needs to continue to use fossil fuels for decades to come. Half of the power generation in this region still comes from coal firing. This region needs to ensure the availability, accessibility, and affordability of energy supply.

Fuel switching from coal to natural gas is a pragmatic way for early decarbonisation. The development and deployment of transition technologies such as cofiring with hydrogen and carbon capture, utilisation, and storage (CCUS) will be deployed. Ammonia, Hydrogen and Biomass, co-firing with coal and CCUS will play a critical role. Transition financing for these technologies is also crucial for this region to achieve the net-carbon targets in 2050 or 2060.

My institute, ERIA, the Economic Research Institute for ASEAN and East Asia, is now working on identifying the appropriate transition technology list and on engaging financial institutions from ASEAN, Japan, the US and Europe to facilitate financing of these technologies.

Issue Number 3: the digital economy and social entrepreneurship. Digitalisation is the key to realising a more integrated, innovative, inclusive, and sustainable economy in India and Southeast Asia. As this region is in the process of digital transformation, we need to work together not only to build digital infrastructure, but also to focus on sharing best practices in critical areas such as digital governance, cybersecurity, cross-border data flows, and addressing the digital divide. Just a word on digital governance. When we discuss geopolitics, we tend to highlight rivalries between the states. But big tech companies and digital platforms are also actually playing key roles in geopolitics. States rely on the private sector for technologies and supply chains to implement their own public policy and to fight strategic rivalries with other states. In this regard, governance of big tech companies and emerging technologies are also important policy issues. We need to explore a new governance model for this region, not totally controlled by states nor by big tech companies.

This region is also home to a young population, making them the incubators for young entrepreneurs who are keen to use digital technologies, solve social problems, promote social inclusion, eliminate poverty and inequality and realise a sustainable economy. The demographic dividend also gives this region a unique advantage in the global marketplace.

I would like to conclude my comments by emphasising the importance of the interactions we are engaging in here today. All the issues I highlighted above need close communication among various stakeholders in society: political leaders, business leaders, investors, think-tanks, academics, young entrepreneurs and non-profit organisations.

Together, we have to address challenges ahead with the spirit of optimism as Senior Minister Tharman emphasised at the Opening Session last evening.

I hope this inaugural conference will be the first milestone of such a process by building networks and confidence among different stakeholders and perspectives.

Thank you for listening.

PAPER 2

Rethinking the Global Safety Nets

Poonam Gupta, Ayesha Ahmed and S. Priyadarshini

Introduction

India has recently weathered an emerging market-wide reversal of portfolio flows, lasting from November 2021 to October 2022. The capital outflows occurred due to an unprecedented tightening cycle of monetary policy by the US Fed, during which it has already raised its policy rates by 450 basis points.

India fared better than many other large emerging markets in the tumult caused by the sell-offs, yet the disruptions were evident. At the peak of the event, the cumulative portfolio outflows from India were worth nearly $30 billion; the exchange rate (with respect to the US dollar) had depreciated by 10 per cent; and foreign reserves had declined by 17 per cent.

This "Emerging Market Sell-off" episode was not a standalone event. A similar exodus of portfolio flows from emerging markets took place in 2013 when the US Fed first announced the intent to start tightening its monetary policy. The phenomenon played out again in 2018 when the US initiated a tightening cycle lasting for more than a year. The event has repeated itself a third time in 2022.

All three episodes bear the following commonalities. First, the genesis of the sell-offs was due to the tightening of monetary policy by the US. Second, they were preceded by a period of unprecedented policy easing by the US, resulting in unwarranted and inabsorbable amounts of reversible capital inflows into emerging markets. Third, when this capital was reversed, foreign investors did not discriminate between countries with either sound or shaky fundamentals. The large emerging economies with liquid markets bore the brunt as investors found it easier to rebalance out of such countries. Fourth, even if each episode lasted only for a few months, their gravity placed a question mark on the effectiveness and adequacy of the policy toolkit available to the central banks.

Managing these reversals necessitated a delicate balancing act in which the central banks allowed their exchange rate to depreciate gently, simultaneously using foreign exchange reserves to avoid large fluctuations in the exchange rate. They postponed expansive fiscal policy measures to reduce pressure on their currencies. They matched the tightening of US monetary policy by tightening their own policies, even if the latter was not amenable to their domestic economic cycles.

During the last two decades, emerging-market economies, including those in Asia, have made significant progress in strengthening their economic policy frameworks (Table 1). These have resulted in market-determined exchange rates, low and stable inflation, and more sustainable fiscal deficits. Despite the progress, they have not been able to insulate themselves from the reversals of capital flows and their disruptive impact on the currencies, financial markets, and the real economy (Figure 1).

This paper highlights that the existing global financial safety nets, including swap lines, regional financing arrangements, and contingency lines extended by the IMF, have been inadequate to safeguard against capital flow volatility. It suggests changes in the global economic and financial architecture designed to make the world a safer place for emerging markets and developing countries. These issues ought to be deliberated actively as a part of the G20 discussions.[1]

Central Bank Swap Lines

Bilateral swap lines have proliferated in recent years (Figure 2). There now exists a large network of bilateral swap

1 This section draws on Eichengreen and Gupta (2023).

lines worldwide (Perks et al. 2021). Swap lines extended by central banks have been effective in calming financial markets in times of volatility. Of these swap lines, the Fed's dollar swaps have been seen to be especially important, given the dominance of the US dollar in cross-border financial transactions and the magnitude of cross-border claims on banks operating in the United States.[2]

Since 2010, about one-third of all swap lines have been extended to Asian countries. Out of the 91 Bilateral Swap Lines that have been offered between 2007 and 2020 across the globe, 28 are with Asia (Table 2). China has extended the maximum number of such lines and Indonesia has received the maximum number of them, among Asian economies (Figure 3).

The Federal Reserve and other central banks have extended these lines selectively and only to a limited number of partners. Emerging and developing members of the G20 are all recipients of swaps of one form or another, but most smaller countries are not. The G20 should encourage central banks to broaden their networks of currency swaps. The Federal Reserve can afford to extend swaps to additional central banks without balance sheet risk to itself. Other central banks with partners that do business in the former's currency can similarly take steps to provide swaps more widely. Central banks with ample dollar reserves can make these available to partners. The Reserve Bank of India might negotiate similar arrangements in South Asia, while the South African Reserve Bank to do likewise in Southern Africa.

Alongside bilateral swap agreements, countries have also developed a number of regional financial agreements (RFA) (Table 3). These include the BRICS Contingent Reserve Arrangement (CRA); Chiang Mai Initiative (CMI); European Stability Mechanism (ESM), and Fondo Latinamericano de Reservas (FLAR).

These RFAs were aimed at creating a pool of resources from constituent countries, providing initial unconditional financing and to supplement subsequent financing extended by the IMF in times of increased foreign exchange requirement. Their proliferation also reflected the discomfort and perceived unreliability of the IMF to step in during country specific or region wide balance of payment crises.[3]

However, these regional financial agreements have only been used sparsely. The Chiang Mai Initiative has not been drawn upon in its two decades of existence. Only the smaller agreements, such as the Latin American Fund and SAARC have been used. Overall, there is a notion of stigma involved for medium-sized and large countries in becoming a party to these agreements. Many of these agreements have the condition of being in an IMF program after the initial funds have been drawn, contributing to the perceived stigma.

IMF's Contingent Credit Lines[4]

The IMF's contingent credit lines can, in principle, fulfill the same functions as the bilateral swap lines or the RFAs. The IMF has three contingent lines. The Flexible Credit Line (FCL), introduced in 2009, was intended to encourage countries to seek IMF assistance before a full-blown crisis occurs. Pre-qualified countries can draw on the FCL at any time within the period covered. Qualification requires a country to have 'very strong fundamentals'.

Subsequently, the Precautionary and Liquidity Line (PLL) was added to provide liquidity to countries with sound economic fundamentals but with some remaining vulnerabilities that prevented them from qualifying for FCL. Short-Term Liquidity Line (SLL) was established in 2020 in response to the COVID-19 pandemic and was designed to be drawn by countries with very strong policies but facing temporary adverse capital account conditions.

In the first decade, only five countries signed up for an FCL or PLL: Mexico, Poland, Colombia, Macedonia and Morocco. Three more countries, Peru, Chile and Panama joined in 2020-21. Of these eight countries, only Macedonia, Morocco and Colombia have actually drawn on these facilities. Their limited uptake has been attributed to the adverse signal that signing up for these lines sends to the markets. Application to the PLL may be further discouraged by the need to subject the country to IMF conditionality, regular staff monitoring, and periodic Executive Board oversight.

Measures should be taken to enhance the role of these credit lines. Suggestions include that the IMF could prequalify countries rather than requiring them to apply. It could include in the Article IV reports whether a country qualifies and the amount of the line. The charges attached to the initial qualification could be eliminated entirely. Lines could disburse automatically when there is an Emerging Market sell-off identified by IMF staff and verified by the Executive Board.

Reforming the Rating Agencies

Emerging markets and developing economies are meted out unfair treatment by credit rating agencies. India and the rest of Asia are no exception. Griffith-Jones and Kraemer (2021) show that sovereign credit ratings assignments are influenced both by hard economic data and subjective judgments, resulting in a bias in favour of advanced economies. The emerging markets perennially receive ratings below what would be dictated by their economic performance and resilience.

The authors attribute the bias to the location and origin of the staff of the credit rating agencies. The headquarters of credit rating agencies are located in the US. This itself contributes to the bias in favour of the US. Besides, they fear being legally sued by advanced economies for granting the latter ratings lower than what they think they deserve. A majority of the managers and analysts in the rating agencies have been trained at universities based in advanced economies, resulting in 'group think' and

2 Bahaj and Reis (2022) find that deviations from covered interest parity are smaller for currencies issued by central banks with access to Federal Reserve swap lines than for currencies issued by central banks lacking such access.

3 As Medhora (2017) points out, FLAR and the CMI were stablished in response to dissatisfaction of the IMF's handling of various Latin American debt crises and the 1997-98 Asian financial crisis respectively.

4 For details on the different credit lines offered by the Fund and which country drew funds from these credit lines, refer to Eichengreen and Gupta (2023).

'home bias'. Finally, given the oligopoly in the rating industry, the raters mimic each other, perpetuating the bias. A recent example of the purported bias is seen in the changes in ratings post the COVID-19 pandemic, wherein different countries faced economic challenges of differing intensities. Growth was more adversely impacted and the public debt accumulation was larger in the advanced economies during the pandemic. Yet the rating downgrades were more frequent and steeper in the emerging market countries.

Our own analysis of the credit ratings of the G20 countries confirms this bias. We compute the average numerical ratings of the three largest credit rating agencies, viz., Moody's, S&P Global, and Fitch, on a scale of 1 to 20. While the average rating of an advanced economy is almost a perfect 19, that of an emerging market is 7.5 points lower, at close to a junk grade of 11.6 (the junk grade is accorded to a rating of 11 and below). The differential is not explained by the levels of growth rate, debt or fiscal deficit of these countries. The emerging countries live under the perennial threat of a potential downgrade to below the junk grade.

It would be worthwhile for India and other Asian countries to engage with credit rating agencies to better understand their metrics. The G20 could help by establishing a committee to identify best practices for risk weighting and regulation at the national level. It can encourage more systematic and regular dialogue between rating agencies and government officials.

Rating agencies should be asked to improve their credibility by becoming more objective in the assignment of ratings. Competition in most cases improves accountability and performance. It might be useful to support the establishment of credit rating agencies which specifically specialise in rating emerging market economies.

Conclusion

Since the financial crisis of 1997-98, Asian countries have implemented substantial reforms. Today, Asia includes some of the largest and fastest-growing emerging markets and frontier economies which are on their way to becoming emerging markets. These economies have actively adopted more prudent fiscal and monetary policies. They have built their foreign exchange reserves, kept inflation low and stable, and adopted flexible exchange rates. Yet they, along with emerging markets elsewhere, are subjected to volatile capital reversals such as the one that happened in the aftermath of the Federal Reserve's tapering talk, and most recently in 2022.

We propose in the paper that the extension of global financial safety nets can play an important role in safeguarding these economies. Swap lines extended by the Federal Reserve are most effective at curbing volatility. We suggest widening the network of the Fed's swap lines and other bilateral swap lines; strengthening the regional financial agreements and making them count; as well as extending IMF's contingent credit lines to more countries. The buildup of foreign reserves should be encouraged. Reforming the rating agencies will make access to capital markets fairer for emerging markets.

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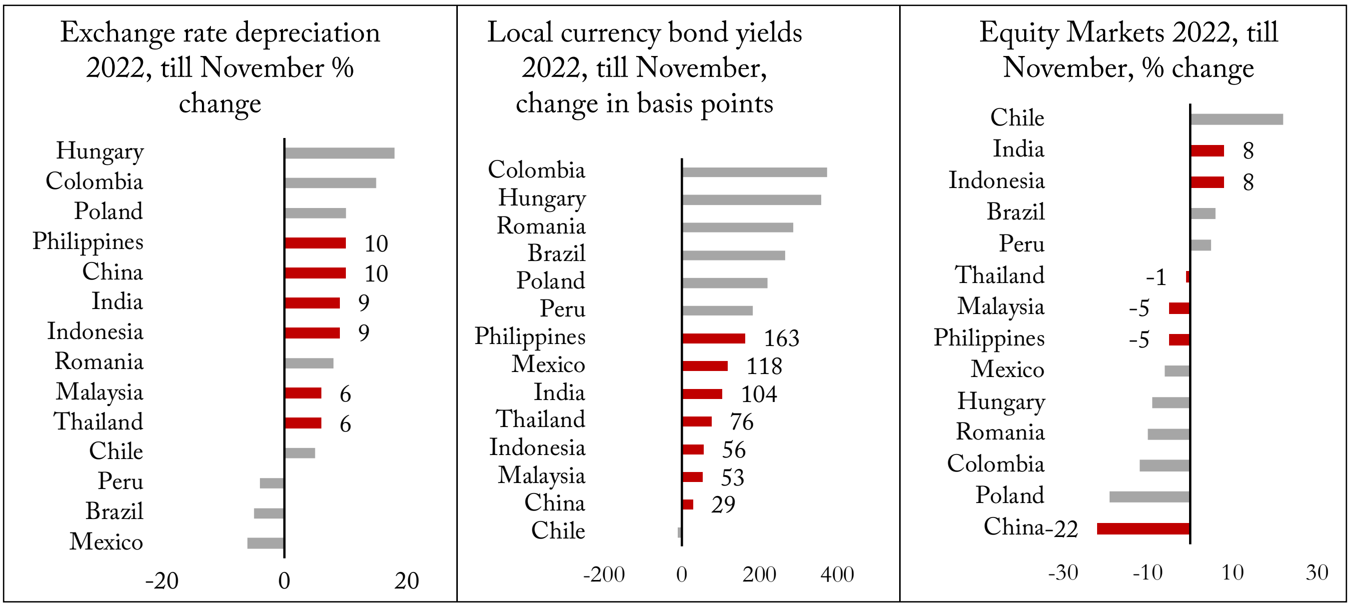
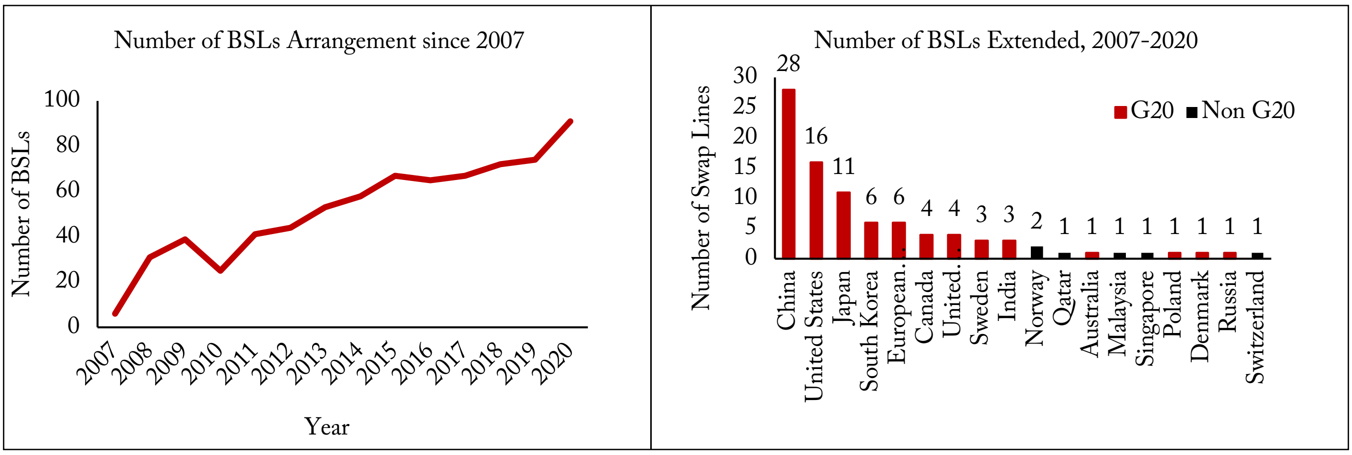
Figure 1: Entire 'asset class' of emerging markets were negatively impacted by capital flow reversal during 2022



Source: Global Markets Monitor, IMF. Data is as of November 30, 2022.

Figure 2: Number of Bilateral Swap Lines (BSLs), 2007-2020



Source: Perks et al (2021), downloaded from [IMF website](). *Two-way arrangements are counted only once.*

Figure 3: Number of Bilateral Swap Lines Received by Asian Countries, 2007-2020

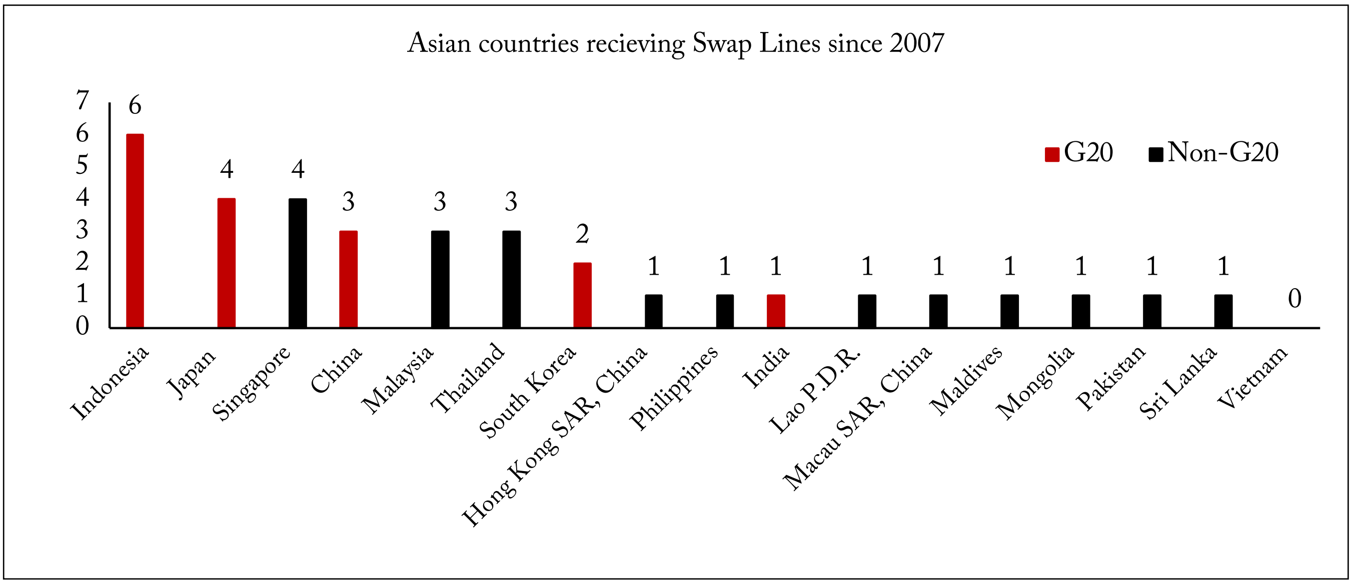


Table 1: Macroeconomic frameworks for select Asian economies

Country name	Monetary Policy Framework1/	Central bank's independence2/		Exchange rate regime (de jure)	Fiscal rule5/
		2007	2017		
India	Flexible inflation-targeting framework (4% +/- 2%). Target measure is CPI inflation rate.	0.44	0.53	Floating	**Budget balance rule:** Fiscal deficit to be reduced to below 4.5% of the GDP by 2025-26. **Debt rule** (since 2018): The general government and central government debt should not exceed 60 and 40 percent of the GDP respectively by the end of FY 2024-25.
Indonesia	Inflation targeting framework. The target is set by the Ministry of Finance in coordination with the central bank. Target for 2022 and 2023 is 3% +/- 1%. Target measure is CPI inflation rate.	0.83	0.86	Floating	**Budget balance rule:** consolidated national and local government budget deficit to be limited to 3 percent of GDP. **Debt rule:** Total central and local government debt to not exceed 60 percent of GDP.
Malaysia	The Central Bank of Malaysia Act 2009 requires BNM to pursue a monetary policy whose primary objective is to maintain price stability while considering developments in the economy. The instrument to signal the stance of monetary policy is the overnight policy rate.	0.54	0.58	Floating	**Budget balance rule:** Government follows the golden rule, whereby it only borrows for development/capital spending. The 12th National Plan committed to a deficit target of 3-3.5 percent of GDP by 2025. **Debt rule:** Domestic debt ceiling of 55 percent of GDP has been raised over time in line with the reduction of external debt limits. The government raised the debt limit in 2020 to 65 percent of GDP until 2022. There are no formal sanctions in case the government breaches these rules. The government has formally always complied with the rules.
Philippines	Inflation targeting framework with a target set for two-year period (3% +/- 1 pp for 2022 and 2023). Target measure is CPI inflation rate.	0.66	0.66	Free floating3/	
Thailand	Inflation targeting framework with a target for CPI inflation that is reviewed annually (1% to 3%)..	0.14	0.37	Floating	**Expenditure rule:** Capital expenditure must be at least 20 percent of the annual budget and not less than the fiscal year budget deficit. Numerical limits on the share of central contingency fund (2-3.5 percent of total budget), principal repayment (2.5-3.5 percent), new multi-year commitment (less than 10 percent of total budget). **Debt rule:** (1) Public debt should not exceed 70 percent of GDP; ii) the debt service to annual government revenue not exceed 35 percent; (iii) foreign debt to total public debt kept below 10 percent; (iv) foreign currency debt service to exports of goods and services less than 5 percent.

Vietnam	Exchange rate anchor. The de jure exchange rate arrangement is a managed floating and is determined by the State Bank of Vietnam based on a currency basket of countries with trade, financing, and investment relationships with Vietnam.	0.23	0.23	Managed floating4/	**Expenditure rule:** The revised limits set a floor on development investment (28 percent of total expenditures) and a ceiling on recurrent expenditures (62 percent of total expenditures). **Revenue rule:** Per the 2021 revision, the floor on the revenue of the state budget is 16 percent of GDP. **Budget balance rule:** Deficit ceiling of 3.7 percent of GDP on average during 2021-25 and budget deficit target of 3.7 percent of GDP or below by 2026. Deficit limits for central and local governments were accordingly set to 3.4 percent and 3.7 percent of GDP, respectively. **Debt rule:** Statutory limit of 65 percent of GDP on public and publicly guaranteed debt (PPG). Government debts cannot exceed 54 percent of GDP and external debt cannot exceed 50 percent of GDP. The debt service for external debt should be less than 25 percent of total export receipts. The total government debt service should not exceed 25 percent of total annual revenues.

Notes: 1/ Data for monetary policy framework and exchange rate regime arrangement have been taken from the IMF's: Annual Report on Exchange Arrangements and Exchange Restrictions 2021 | imfsg.

2/ The index for Central Bank's Independence is from Romelli, 2022 (CBI Data | Davide Romelli). The index is normalized over [0, 1].

3/ The de facto arrangement was reclassified as crawl-like arrangement in March, 2019.

4/ The de facto arrangement was reclassified as crawl-like arrangement in March, 2020.

5/ IMF's Fiscal Rules dataset provides information on types of fiscal rules followed by countries which: i) have an independent fiscal council, ii) are consistent with the OECD Principles for Independent Fiscal Institutions, and iii) are functional and visible institutions, such as maintaining a regularly updated website or other forms of public communication. It does not include data for China and Philippines.

Table 2: Bilateral Swap Lines (in USD Billions) as of 2020 1/

Year	Number of BSLs		Amount of BSLs with limits (A)		Amount of unlimited BSLs2/ (B)	Total Amount of BSLs (A+B)
	Global	o/w Asia3/	Global	o/w Asia		
2000	3	0	6	0	0	6
2005	3	0	6	0	0	6
2010	25	7	207	110	293	500
2015	67	19	631	328	610	1242
2019	74	25	757	466	610	1367
2020	91	28	1275	496	610	1885

Source: Reproduced from Perks et al (2021).

Table 3: Regional Financial Arrangements

RFAs	Established	Members	Capital/swap amount (bln USD)	IMF involvement
Arab Monetary Fund (AMF)	1976	Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, West Bank and Gaza, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.	3.6	
BRICS Contingent Reserve Arrangement (CRA)	2014	Brazil, China, India, Russian Federation, and South Africa.	100	If access > 30% of maximum
Chiang Mai Initiative Multilateralization (CMIM)	2010	Brunei Darussalam, Cambodia, China, Indonesia, Japan, Korea, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam, and Hong Kong Monetary Authority of Hong Kong SAR, China.	240	If access > 30% of maximum
Latin American Reserve Fund (FLAR)	1978	Bolivia, Colombia, Costa Rica, Ecuador, Paraguay, Peru, Uruguay, Chile and Venezuela.	2.9	
The South Asian Association for Regional Cooperation (SAARC) currency swap facility	2012	Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.	2.0	

Source: Gallagher et al. (2020); ECB Occasional Paper Series No 207 / March 2018.

Discussant Comments

Hoe Ee Khor

Introduction

Agree with the main points by Dr Poonam Gupta:

- Financial globalisation has led to volatile capital flows which has been a bane for emerging markets since the 1980s.
- Agree with Dr Gupta's basic argument that capital flow volatility is a big problem for emerging markets (EMs) and developing countries (DCs) – as they have become more frequent and are not country-specific.
- Need for stronger international financial safety nets.

In the following sections, I will discuss the underlying cause of capital flow volatility and the impact of such volatility shocks on emerging markets (EMs) and developing countries (DCs), the policy response taken by many of them to protect themselves against such shocks, and the costs to them in terms of lower growth and loss of monetary policy autonomy. I will end with some suggestions on the financing options for EMs and DCs.

Cause of capital flows volatility – the globalisation of finance capital in USD

- Capital flows have become more volatile over the years, they have become more frequent and the flows have grown in size.
    - The breakdown of the Bretton Woods system in 1971-73 led to the liberalisation of capital accounts, floating exchange rates, financial liberalisation, and financial innovations (from bank loans to bonds and other forms of securities and derivatives).
    - Financial and capital account liberalisation led to a massive surge in finance capital from the US and other advanced economies (ACs) into EMs and DCs in search of higher yields, especially when interest rates are low in the US.
    - The capital inflows are prone to sudden stops or reversals, especially when the US Fed tightens monetary policy which leads to risk aversion of investors.
    - The sudden and massive capital outflows in turn lead to a balance of payments and financial crises in many EMs and DCs.
    - Since 1971, there has been a succession of financial crises starting with the Latin American debt crisis in the 1980s, Asian Financial Crisis in the 1990s, the Global financial crisis in the 2000s, and the European sovereign debt crisis in the 2010s.

Capital flows volatility – cause of many balance of payments (bop) and financial crises in emerging markets (EMs) and developing countries (DCs)

- Shifts in capital flows are normally triggered by changes in US monetary policy which leads to changes in risk aversion, and portfolio rebalancing by institutional investors and hedge funds, which have nothing to do with the economic fundamentals of EMs and DCs.
    - The movements in capital flows lead to global financial cycles reflecting the dominance of the US dollar in international trade and finance
        - accounts for 60% of foreign reserves.
        - 90% of financial transactions in global financial markets.
    - Changes in US monetary policy are transmitted across the world through close linkages in global financial markets
- Global financial cycles normally start with a surge in capital outflows from the US and other AEs into EMs and DCs, usually reflecting easy monetary conditions in the US and Europe, and low-interest rates.
    - The capital inflows would put upward pressure on exchange rates in EMs to appreciate. Exchange rates tend to overshoot and become overvalued.
    - Central banks, especially those in ASEAN EMs, need to intervene to prevent their exchange rates from becoming overvalued.
    - However, the liquidity from the interventions would lead to a credit boom and asset bubbles.

  - Central banks, therefore, need to mop up the excess liquidity by issuing central bank bills.
  - However, this can be costly to the CBs because of the carry cost (differential between the domestic interest rates and the rates earned from investing the foreign reserves in US T-bills).
- Moreover, the capital inflows will reverse when there is a tightening in US Fed policy.
  - Investors become risk-averse and rebalance their portfolios.
  - They pull their funds out of EMs and move them into safe assets in the US.
  - The outflows can be massive for some countries (e.g. Thailand, Malaysia, Korea during the AFC, fragile 5 during the taper tantrum).
  - Exchange rates will come under strong depreciation pressure.
  - Depreciation in the exchange rates can lead to panic and capital flights which exacerbate the pressure on the currencies (Asian financial crisis).
  - Depreciation can also lead to a financial crisis if the corporate sector or banks have borrowed in USD because of their low interest rates (Asian financial crisis, ESDC).
  - CBs are forced to intervene to support their currencies.
  - However, intervention is limited by the available foreign reserves and may be ineffective.
  - Capital outflows lead to a balance of payments crisis when the CBs run out of reserves (LA debt crisis, Asian financial crisis).

Building resilience against capital flow volatility shocks

  - Strengthen economic fundamentals – implement fiscal rule, adopt inflation targeting regime, allow more flexible exchange rate, deepen financial markets.
  - After the Asian financial crisis, crisis-affected countries (Malaysia, Thailand, Indonesia and Korea) undertook many structural reforms.
  - Strengthen regulatory and supervisory framework – implement Base l, II and III.
  - Strengthen balance sheets of banks, corporate and households – recapitalise weak banks after the AFC (Thailand, Malaysia, Indonesia, Korea).
  - Control foreign currency borrowings – introduce guidelines, approval procedures.
  - Accumulate more foreign reserves – buffers against capital outflows, interventions to avoid excessive volatility (Thailand, Malaysia, Indonesia, Philippines).
  - Impose capital controls against excessive outflows (Malaysia, China).
  - Develop and deepen local currency financial markets, especially bond markets.
  - Establish long-term saving institutions such as pension funds, life insurance, mutual funds.
  - Establish bilateral swap agreements (BSAs) with central banks of major economies and trading partners.
  - Establish regional financial safety nets (CMIM, ESM, FLAR).

Macroeconomic costs of measures to protect against volatility shocks

- Lower growth - emerging markets and developing countries are compelled to run current account surpluses in order to build up sufficient foreign reserves as buffers against capital outflows.
  - To run a current account surplus, EMs and DCs would have to increase their saving rates by reducing consumption or reduce their investment rates which lead to lower growth.
  - After the Asian financial crisis, the crisis-affected countries (Indonesia, Malaysia, Philippines and Thailand) reduced their investment by about 8-10 percentage points in order to run current account surpluses to repay external debt and build up their foreign reserves. The lower investments, in turn, reduced growth rates by about 2 percentage points.
  - The reduction in investment rates was achieved by cutting down on infrastructure investment. As a result, the infrastructure of the countries (Indonesia, Thailand, the Philippines) fell behind in terms of capacity and quality which has deterred foreign investments.
  - Loss of monetary policy autonomy.
  - Another aspect of the global financial cycle is that it forces many EMs and developing countries to align their monetary policies with those of the US in order to support their exchange rates. As a result, they lose their monetary policy autonomy.
  - A good example is last year when Fed raised its policy rate aggressively which strengthened the USD and put all other currencies under pressure. At that time, CBs were under pressure to follow the Fed in raising interest rates in order to avoid excessive weakening of their currencies. However, that would have been procyclical because the economies were still recovering from the pandemic and output gaps were negative.
  - Hong Kong and Thailand are good examples of this.

What is to be done?

- Agree with the recommendations of Poonam Gupta.
  - There should be more readily available USD liquidity facilities.
  - US Fed should be more generous and inclusive by offering swap lines to EMs.

- IMF should make it easier for countries to qualify for FCLs.
- Reduce the dominance of the US dollar in international trade and finance.
    - Countries should diversify from the use of the US dollar in international trade and finance.
    - Build alternative international payment infrastructure to facilitate the use of non-USD currencies.
- Establish financial institutions that can provide affordable financing for infrastructure investment.
    - Existing MDBs should ramp up their financing for infrastructure investments.
    - China should continue to help EMs and DCs in their infrastructure investment through the Belt and Road Initiative.
    - Advanced economies should establish their own programs to provide affordable financing for infrastructure investment to EMs and DCs.

Discussant Comments

Naushad Forbes

The Chair's background note for this session asked us to consider "collaborative efforts and specific economic policies that would enable lower per capita Asian economies to catch up with more affluent ASEAN and the West". These comments are offered in that spirit.

As has often been noted by many others, elsewhere and in this volume, we live in a time of great uncertainty. Much of the uncertainty is driven by geopolitics: war in Europe, US-China tensions, and the threat of a bipolar world with its "with us or against us" message. This international factionalism shows up, too, within countries. Many are more polarised than they've been in decades, which too many political leaders try to profit from instead of unifying.

My perspective is that of someone from industry running a firm that is active across many Asian countries. In the short run, we must be concerned about financial stability and exchange rates. Uncertainty, here, rears its head with daily changes. Just 2022 saw exchange rate crises hit normal trading in several countries. In Sri Lanka, Bangladesh and Egypt we have customers who have placed orders with us, have the cash in their accounts and are themselves strong exporters and foreign exchange earners, but cannot execute the transaction. They face gummed-up financial systems that come in the way of normal trading relations in everyone's interest. I won't say more about this, as a presentation in this session has covered this very well, including suggestions for stabilisation.

Supply chains of flows of goods and services are less volatile than exchange rates, but even here we have seen wild swings — huge increases in the cost of semiconductors, for example, and disruption in supply both from natural (COVID) and manmade (Xi Jinping's zero COVID policy) causes. Other chapters cover this very well. I'd like to talk about something we can control and influence to our collective benefit: our higher education system, and benefits that can flow from much greater collaboration across Asia.

Here's the opportunity: around 1.3 million Indian students study overseas. Of these 460,000 are in the US, 180,000 in Canada and 100,000 in Australia. Just 80,000 study in all of South East and East Asia, clearly a huge opportunity.

Take publications within our higher education system for further opportunity. International collaborations have become increasingly important, ranging in Asia from a quarter of all published papers by Indian academics to two-thirds by those from Singapore. I don't have a breakdown of which countries the collaboration is with, but an anecdotal and

preliminary look would say that Asian academics collaborate with academics in the US and Europe much more than they do with academics from other Asian countries. With that background and opportunity, what can we do? Here are three proposals.

Can we foster student exchange combined with work experience? India and the UK recently launched a scheme where each provides 3000 students a year with a two-year work visa valid in each other's country. Can we do the same bilaterally across India, Singapore, South Korea, Japan, Thailand, the Philippines, Malaysia, Indonesia and Australia (and welcome any other country that wishes to join in)? The familiarity with each other's country, and the enrichment of our education systems through much greater internationalisation, would have long-term benefits.

Second, can we, across the same set of countries foster faculty exchanges a year at a time preferably supplemented by one to three-month visiting lectureships? When faculty meet faculty, research collaboration and joint publication should follow.

Third, as a representative of Indian industry, can we across two or three hundred leading Indian companies offer internships for students from across South, Southeast and East Asia? As students get familiar with living and working in India, they will hopefully go back home as our lifelong ambassadors. Familiarity should breed everything from trade to tourism.

As a firm doing business across South Asia, the Middle East and South East Asia, our short-term future would benefit greatly if we could get work visas and move people for fixed durations in both directions. We must be able to take this for granted, instead of each move being a project involving lawyers and hours of form-filling and facilitation. Our medium-term future would benefit from greater higher education connects, which meant we could recruit for Asia from colleges across Asia instead of being limited to local talent everywhere. And in the long run, a better flow of talent, talent which combines solid theory with practical exposure, talent which has international exposure and is comfortable living across cultures, will do more for our success than any industrial policy. Ultimately the source of competitiveness, productivity and catch-up will depend on talent. We would simultaneously secure a more resilient future, regardless of what uncertainty the world throws at us.


VINOD THOMAS
TETSUYA WATANABE
NAOKO ISHII
MADHAV DAS NALAPAT
VO TRI THANH
ROHAN SAMARAJIVA
SHYAM SA


CSEP
IN ASIA

SESSION 2

Human Development and Health Policy in Asia

SESSION NOTE

Sandhya Venkateswaran

Home to 1.97 billion people, the Southeast Asia region[1] includes about one-fourth of the global population (WHO, n.d.). As a result of numerous economic, political, and environmental challenges, the region has a significant burden of mortality and morbidity. The diversity among Asian countries with respect to demographic and epidemiological profiles, economic development, social profiles, and political systems is vast. The Southeast and East Asian regions include an entire range of countries, from those that are on top of the economic curve to those that have remained at low-income levels, along with others in the middle, at the low-middle-income to high-middle-income levels. Alongside varying economic contexts are differing demographic and disease profiles. The low-income countries continue to grapple with communicable diseases and high infant/child and maternal mortality rates, while the high-income ones have rapidly ageing populations and a high burden of non-communicable diseases (NCDs).

While there exist differences across countries, at an average, communicable diseases account for 7.4% of deaths in the region and NCDs 85.8% (World Bank, n.d.). With 2.4 million deaths each year due to air pollution, the Southeast Asian region, as defined by the World Health Organization (WHO), has the highest estimated number of deaths due to climate change (The Lancet, 2022). Challenges of specific diseases continue: South Asia has the highest TB burden, accounting for more than a quarter of the global burden. Disruptions to essential services due to COVID-19 placed additional pressures on systems and health status. Indeed, WHO estimates suggest that TB may have resulted in the deaths of about 0.5 million people in 2020, due to service disruptions.

The COVID-19 pandemic had far-reaching effects on the countries in South

1 The WHO category for the region varies from the World Bank one—the latter includes China, Korea, and the Pacific Islands. For the purpose of this note we use the two interchangeably for ease of data availability.

Asia. Not only were services such as immunisation, family planning, antenatal care, and NCD diagnosis and treatment impacted by the disruption of essential services, but life expectancy also decreased by one year between 2019 and 2021 in the low-income and lower-middle-income countries (OECD & WHO, 2022). The pandemic also exacerbated economic and social issues; levels of poverty are estimated to have increased by 170 million in 2020 on account of the pandemic; and gender inequalities significantly worsened (Choi et al., 2021).

While challenges persist, the region has made significant progress on multiple health fronts (Table 1); this progress has been significantly higher than the world average.[2] Infant mortality rate (IMR) reduction for the world between 1990 and 2019 was 57%, compared with 74% for the South Asian region. Similarly, neonatal mortality rate (NMR) reduction was 53% and 74%, and under-five mortality rate (U5MR) reduction was 60% and 75%, respectively. Life expectancy in this region has been better than the world average since 1980.

Table 1: Progress in Key Health Indicators

Change between 1990 and 2019 (%)	India	Southeast and East Asia	World
IMR reduction	68	74	57
NMR reduction	62	74	53
U5MR reduction	72	75	60

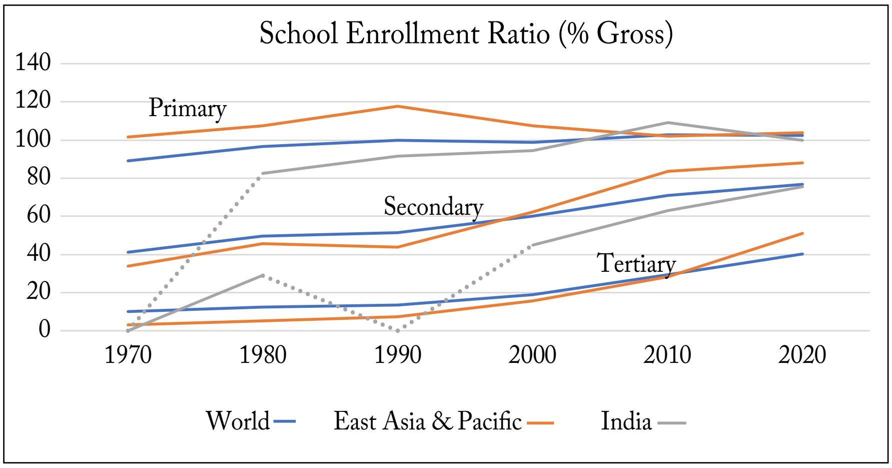
Source: World Bank (n.d.)

The progress on health outcomes has been complemented by progress in terms of the health workforce and hospital beds. Between 1990 and 2017, the health workforce underwent an increase of 82% in the South Asian region versus a 35% increase across the world. The number of hospital beds across the world decreased by 19% in this period but increased by 96% in the region. In fact, the region had 36% less beds than the world average in 1990 but moved to having 55% more beds in 2017.

This data suggests a focus on primary care since the 1970s, which moved to secondary and tertiary care following 2000, and a focus on healthcare since the 1970s. An analysis of the economic status of the region highlights that while per capita gross domestic product (GDP) for the region was below the world average until 2010, it exceeded the world average in 2020. The increase in per capita GDP between 1990 and 2020 was 68% for the world but 242% for the region. This indicates that improvements in health and education preceded progress in GDP.

The focus on health systems and consequent progress in health indicators finds resonance in the education sector as well (Graph 1). Primary care enrolment in the South Asian region was well ahead of the world average as far back as 1970, although it became comparable to the latter after 2000. Enrolment at the secondary level started to exceed the world average in 2000 and at the tertiary level after 2010. Secondary-level enrolment increased by 59% between 1970 and 2020, while tertiary enrolment grew by 1600%.

Graph 1: Progress in Education



Source: World Bank, (n.d.)

Note: The dotted line signifies a lack of data.

The shifts in health resources and outcomes, though variable across countries, have been coupled with policy shifts and healthcare reforms in the region.

Policy Approaches Across Countries

The economic status, as well as the demographic and disease burden has led to the adoption of different health systems in the region, including at least three different models: universal social health insurance,[3] two-tiered systems,[4] and fragmented systems.[5] High-income countries with ageing populations, including Japan, Taiwan, and South Korea, have a single payer, single benefit package system. Although they experience a hospital and curative focused system that was over utilised, these countries have achieved universal coverage with equity and access. Countries that have adopted social health insurance without a single payer system include China, Thailand, Vietnam, Indonesia, and the Philippines. Thailand has focused on tax revenues to extend coverage to those not formally employed and has been successful in ensuring access to care and financial risk protection. Indonesia, Vietnam, and the Philippines work with a contributory system, where the government provides cover for the poor and vulnerable, and others contribute to enrol.

2 Cambodia, China, Indonesia, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, Vietnam, the Pacific Islands, and Papua New Guinea.

3 A system that pools multiple sources of funding—government subsidies and contributions from employers, employees, and households—to cover the entire population of a nation.

4 A public system financed by general tax revenue and a private system financed primarily by out-of-pocket (OOP) payments and limited private insurance.

5 Low government investments in health and a fragmented financing architecture.

This policy has led to challenges in covering informal workers. Countries with two-tiered systems, such as Malaysia and Hong Kong, include both tax revenues and out-of-pocket (OOP) expenditure, directed at the public and private systems, respectively. However, such a policy approach has contributed to inequity in access and quality. Countries with fragmented systems, such as India and Cambodia, have high OOP expenses and low government funding, leading to concerns about inequitable access and low financial risk protection (Yip, 2019). The region has established social health insurance as the main policy intervention, covering everyone in the country with an identical benefits package, leading to equity in the system.

Some Lessons From Across Countries

The economic context of a country has often been a key determinant of its health system, as fiscal status determines the quantum of resources available for financing health, and the level of informality determines the feasibility of contributions from citizens. Consequently, countries in the region with a large share of informal sector workers (such as Vietnam, the Philippines, and Indonesia) have found it difficult to provide universal health coverage through the social health insurance pathway. Countries such as Thailand and China have prioritised healthcare politically, and consequently invested tax resources to provide universal coverage.

Reforms in the form of the devolution of healthcare services to local governments have impacted performance and equity; financing innovations, such as compulsory medical savings and social insurance for long-term care, along with laws to establish national health insurance systems, have contributed to wider coverage and protection against financial risk.

Infrastructure and workforce constraints are well acknowledged in most countries in the region, with the WHO estimating a global shortage of 9 million nurses with the most affected countries being in Asia (Baur et al., 2021). While investments in infrastructure and the health workforce continue, the question increasingly being asked is whether, with ongoing shortages in the workforce, countries will be able to respond to workforce needs through traditional mechanisms. And it is in this context that a focus on digital health has increasingly risen.

Citizen expectations have been increasing and the combination of shifting demographic profiles, citizen expectations, and technological advancements have made transitions in the health systems inevitable. A key aspect of such transitions has been the use of digital technology for healthcare, with innovations spanning disease prevention, screening and diagnostics, and healthcare delivery. Innovations in healthcare delivery have been visible in the form of remote consultations through telemedicine and digital pharmacies. Indeed, many such models are gaining traction in Indonesia, China, and India. The acceleration of digital innovations and their adoption has been enabled by the pandemic, with the use of telemedicine doubling (Kapur et al., 2022). The spread of digital technologies has been spurred by workforce shortages, supply challenges in remote areas, and the need for supply efficiency, to name a few. Asia's leadership in digital innovations across multiple sectors, positions it well for innovations in digital health, in turn driven by the increased awareness and expectations of citizens.

The South Asian region has witnessed significant demographic changes, with implications for health status and resource requirements for addressing them. Growth in the 65+ age group has been disproportionately higher in the East Asia region,[6] from 4% to 12% of the total population between 1960 to 2020, compared with an increase from 5% to 9% in the world average (World Bank, n.d.). While inter-country variations are vast (Table 2), the implications of an ageing population point to an increasing dependency ratio, a higher demand for health services, and the need for greater health spending by the state (WHO, 2021).

Table 2: Share of the Population Aged 65+ (2000–2025)

Country	2000	2010	2020	2025
India	4.5	5.1	6.7	7.6
Cambodia	3.1	3.6	5.3	6.8
China	6.9	8.6	12.6	14.9
Indonesia	5.0	5.9	6.7	7.5
Japan	17.8	23.6	29.6	30.4
DPR Korea	6.4	9.5	11.1	13.0
Malaysia	5.0	5.9	6.7	7.5
Philippines	3.8	4.3	5.2	6.0
Singapore	6.3	7.2	13.2	18.1
Thailand	6.1	8.8	13.9	17.5
Vietnam	6.2	6.5	8.4	10.4

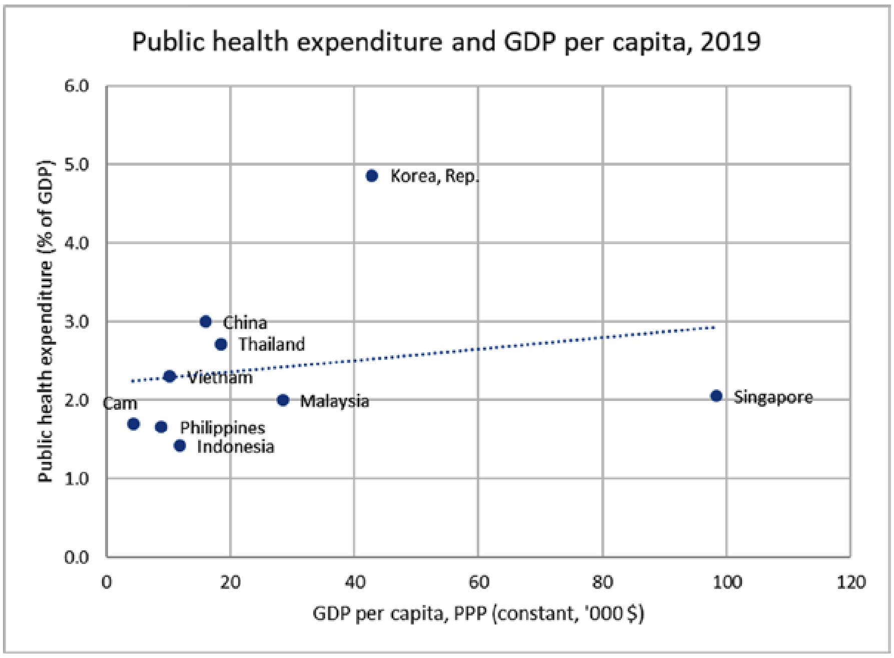
Source: (OECD & WHO, 2022)

Despite the relatively better progress in health indicators as well as the health workforce and infrastructure, public spending on health is among the lowest in the region. The average government spend on healthcare is around 4.5% of the GDP, compared with the Organisation for Economic Co-operation and Development (OECD) average of about 8% (WHO, 2021; World Bank, n.d.). This has led to one of the highest OOP expenditure rates. Still, the progress on several health fronts, despite low levels of funding, suggests that the design of systems and allocation efficiency have received attention within health policy.

What is interesting to note is that the government spend on healthcare is not necessarily related to a country's economic level. Countries such as Thailand, China, and Vietnam, despite having lower GDPs, have prioritised spending on healthcare (Graph 2). OECD data have reported that the growth rates in per capita health spending in many countries were higher than the GDP in several countries in the region between 2010 and 2019 (OECD & WHO, 2022). This points to the priority accorded to health.

6 Cambodia, China, Indonesia, Korea, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Thailand, Timor-Leste, Vietnam, the Pacific Islands, and Papua New Guinea.

Graph 2: Public Health Expenditure and GDP for Select Countries



Source: World Health Organization Global Health Expenditure Database, The World Bank

Most countries in the region have an employment status of 50% or more, with some countries such as Thailand and Indonesia reflecting higher employment rates, at more than 65%. A large part, however, are informally employed, with countries like Bangladesh having 94.7% in the informal sector (WHO, 2021). Although poverty levels have decreased, the region continues to reflect one of the highest poverty rates in the world (WHO, 2021). Various financial crises have led to a focus on social protection measures and pro-poor financing schemes in several countries in the region, such as the 30-baht Scheme in Thailand, Health Care Fund for the Poor in Vietnam, and health equity funds in Cambodia and Laos (Lancet, 2022).[7]

Financial crises, which have inhibited increases in public expenditures on healthcare, on the one hand, coupled with an expanding middle class leading the push for high-quality care, on the other, have led to an increasingly private healthcare industry. These changes have also included public–private innovations, such as the corporatisation of public hospitals in Singapore (from as early as 1985) and the self-financing hospitals in Indonesia.[8] Such shifts have contributed to distortions in the distribution of the health workforce across and within countries.

The Need for Regional Cooperation

A combination of demographic transitions that will require increased healthcare with reduced ability to pay; continuing shortages and imbalance in the distribution of doctors; the rising financial burden with low spend by dominant government payers; rising expectations from citizens on quality, affordable healthcare; and rising technological innovations all point to the inevitability of reforms in healthcare delivery and management in the South Asian region. The paths travelled by countries have varied, with some adopting more innovations, and some reflecting greater progress, than others. This points to the potential value of the exchange of learning and insights within the region. Sharing of data and experience can help deepen insights on the social, economic, political, and cultural drivers of health challenges generally and, more specifically, during pandemics. Environmental factors and the effect of climate change threaten to increase the risk to health for the population in the region, such as through the increase of vector-borne diseases. Health and broader public policy need to account for these factors in the most vulnerable countries. Regional cooperation on climate change issues, and on the surveillance of disease outbreaks is an important factor to keep in mind (Yip, 2019).[9]

7 https://www.thelancet.com/journals/lansea/article/PIIS2772-3682(22)00020-8/fulltext
8 The restructuring or corporatisation of public hospitals in Singapore from as early as 1985 and the later swadana (self-financing) hospitals in Indonesia.
9 https://oxfordre.com/economics/display/10.1093/acrefore/9780190625979.001.0001/acrefore-9780190625979-e-245

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PAPER 1

Hard Cash for Soft Sectors: Human Development in National Development and Growth Plans

Emmanuel Jimenez

People – more specifically, the services of their labour – account for about 70-75% of the output[1] of most economies. The effect of people is so strong that the age structure of the population alone can affect economic growth. The share of those working relative to those who are not working (because they are children or are retired) has been estimated to explain about one-third of the growth of the so-called "East Asian Miracle" countries between 1965-1990; This has been termed the demographic dividend.[2]

The demographic dividend is not automatic. Sound macroeconomic and open trade policies helped the "Miracle" countries. But almost 50 years ago, T.W. Schultz, who won the Nobel Prize in Economics for introducing the world to the notion of "human capital", said that

The contribution of brute labor-to production is small and it is diminishing. Thus, a head count of laborers that fails to reckon the value of skills is a very imperfect measure because it does not take account of the difference in the skills of laborers.[3]

So, countries also need to be concerned with developing human capital through better education and safeguarding it through better health. Otherwise, they run the risk of having the window of demographic opportunity shut on them as they become old before they become rich.[4]

These ideas are now so widely accepted that human development has become more of a feature in countries' economic

development plans over the past 30 years or so. Encouraged by international organisations like the UNDP, countries dutifully prepare Human Development Plans. National development plans and strategies often have detailed chapters on education, health, nutrition, population, and other issues. These so-called "soft sectors," long seen as a tax that needed to be paid solely for the social interest, are now seen as deserving of hard cash with real economic returns.

Despite the compelling conceptual arguments, human development sectors such as health and education must compete fiercely for scarce national resources with other economic sectors such as energy and infrastructure, not to mention national defence and general administration. It is difficult to make a strong case simply by comparing sectors' contribution to economic growth. There is no doubt that there is a strong positive empirical correlation between human development outcomes and economic growth. When one compares data across countries over time, a one-year improvement in a population's life expectancy, for example, is associated with 4% more in terms of output (Bloom et al. 2018). A systematic review of dozens of studies shows that an increase of a unit of education (typically measured in average years of schooling) is associated with an increase of growth varying between 0.4% and 24%.[5]

However, the literature has not reached a consensus on whether these trends can show a causal link from human development outcomes to economic growth or other country-wide aggregates. There is a veritable cottage industry of academic articles arguing if the causality goes from human development to growth or the other way around.

Moreover, there is also competition within the human development sectors. What types of education and health spending should be the priority, given emerging needs? Should countries continue expanding basic education or should they focus on tertiary education, given the changing nature of work? Should protection against communicable diseases, including new ones that emerge, be ranked above improving the poor state of hospitals?

The precise answers to these vexing questions necessarily vary across countries. But the human development plans[6] for both India and emerging East Asia generally identify six policy priorities that fall into two categories: the unfinished agenda to address equity and quality for basic services and the relatively newer agenda to prepare for people the rapidly changing world of work, the health environment and demographics.

1 Average across all countries, from Guerriero (2019), p. 7

2 East Asia included the economies of China, Hong Kong SAR, China; Singapore; South Korea and Taipei, China in Bloom and Williamson (1998).

3 Schultz (1971), p. 1.

4 Arguably some Latin American countries like Argentina failed to avail of these opportunities while their demographic window was still open (Yusuf 2023). A recent article posits that at least some Indian states have already fallen into the same trap (Hasan 2021).

5 https://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/Education%20skills%20growth%202012Hawkes%20report.pdf?ver=2012-07-20-103351-947

6 See for example, UNDP 2019. Human Development Report. https://www.undp.org/asia-pacific/press-releases/human-development-asia-pacific-region-advances-dramatically-unevenly

Addressing the unfinished agenda for basic services

By some measures, Asia's human development has improved substantially just in the past 50 years. Primary school enrollment rates are now approaching 100%; in East Asia and the Pacific secondary school enrolment rates have risen from only 35% (24% in India) in 1970 to 88% (74% in India) in 2019.[7] Average life expectancy in Asia has risen from about 54 years in 1970 (below the world average) to almost 74 years (above the world average) in 2020.[8]

Despite these dramatic gains, Asian countries still confront substantial challenges. These are well reflected in the World Bank's human capital index (HCI) which *measures the human capital that a child born today can expect to attain by age 18, given the risks to poor health and poor education that prevail in the country where he/she lives.*[9] The main components are: a) Survival (under 5-mortality), b) Education: Quantity (number of years of schooling expected by age 18), Quality-adjusted (Harmonized Learning Outcomes) and c) Health: Adult survival rate ASR (Share of 15 yr olds surviving to age 60); Healthy growth under 5 (stunting rates).

The HCI summarises how productive children born today will be as members of the future workforce, given the risks to education and health. It follows the trajectory from birth to adulthood of a child born today. In the poorest countries or regions, a child may not survive until his or her fifth birthday. Even upon reaching school age, the child may never enrol or may do so and drop out before completing the full cycle of 14 years from preschool to grade 12 which is the norm in high-income countries. The time spent in school may not lead to the amount of learning expected, depending on the quality of teachers and schools (measuring the relative quality of schools across countries compares scores on comparable tests that measure learning outcomes). Finally, the productivity of an 18-year-old will be affected by poor health and nutrition in childhood which limit physical and cognitive abilities as an adult.

The HCI is measured in units of productivity relative to a benchmark corresponding to complete education and full health. A perfect score of 1.0 would be the score for a country with full survival, no stunting, 14 years of schooling and a test score average of 625. A perfect 1.0 would of course be impossible to achieve if only because not all children and adults survive to age 60. How do countries relate to one another when measured by this index? This is shown in Table 2 which shows the results for East Asian, South Asian countries, the United States, as well as the top and bottom of 157 ranked countries. Singapore ranks first, followed closely by 3 other East Asian countries. The USA ranks around the middle of the pack among OECD countries. Chad ranks last.

Table 1: HCI Rankings of Some Economies (of 157)

Rank	Country	Score
1	Singapore	.88
2	Korea	.84
3	Japan	.84
4	Hong Kong, China	.82
24	USA	.76
25	Macao SAR, China	.76
46	China	.68
48	Vietnam	.68
55	Malaysia	.62
74	Sri Lanka	.58
84	Philippines	.55
87	Indonesia	.53
106	Bangladesh	.49
111	Lao PDR	.45
114	Zimbabwe	.44
115	India	.44
116	Ghana	.44
134	Pakistan	.39
157	Chad	.29

Source: World Bank 2018a

Among emerging Southeast Asian countries, Vietnam ranks best, with a score similar to China which is considerably richer. India ranks in the bottom third of all countries, with scores similar to Zimbabwe and Ghana which have much smaller economies.

The HCI scores point to a considerable unfinished agenda for all emerging economies in Asia which have aspirations to break out of middle-income status. The low rankings of the largest South Asian countries are particularly alarming. The components of HCI also provide hints as to what could be targets for national development plans and public policies if they are to improve these scores. When one also considers the typical criteria for public intervention – to correct for market failures and to achieve greater equity – the following three unfinished agenda items are particularly noteworthy.

Public Policy Priority 1: Lowering child mortality through nutrition and access to clean water and sanitation

Under 5 mortality (U5M), defined as the probability that a child born in a given year will die before reaching his or her 5th birthday, expressed per 1,000 live births, has gone down dramatically in the past 20 years around the world, but especially in Asia and the Pacific. But in 2018, some 5.3 million children still died before reaching age 5 and almost 2 million of these were in Asia. And progress has varied substantially across countries and income groups, as seen in Figure 1 below, which ranks countries left to right from those with the highest national rates to the lowest rates. India in 2018 had a U5M of 33.7, about the same as Nepal but higher than Southeast Asian countries like the Philippines, and Cambodia.

Nutrition-related factors contribute to about 45% of deaths among children under 5. Undernutrition, as measured by stunting, is also associated with learning loss, another important factor in the HCI. Vitamin supplementation and behavioural interventions to change feeding practices, as well as early and exclusive breastfeeding, are among the most important post-natal interventions. Ensuring neo-natal survival is also key through appropriate care at that stage.[10]

7 https://data.worldbank.org/indicator/SE.SEC.ENRR?locations=Z4
8 https://ourworldindata.org/life-expectancy
9 World Bank (2018a) has the exact formula for how this has been calculated.
10 https://www.oecd-ilibrary.org/sites/e

Figure 1: Under 5 Mortality (U5M)

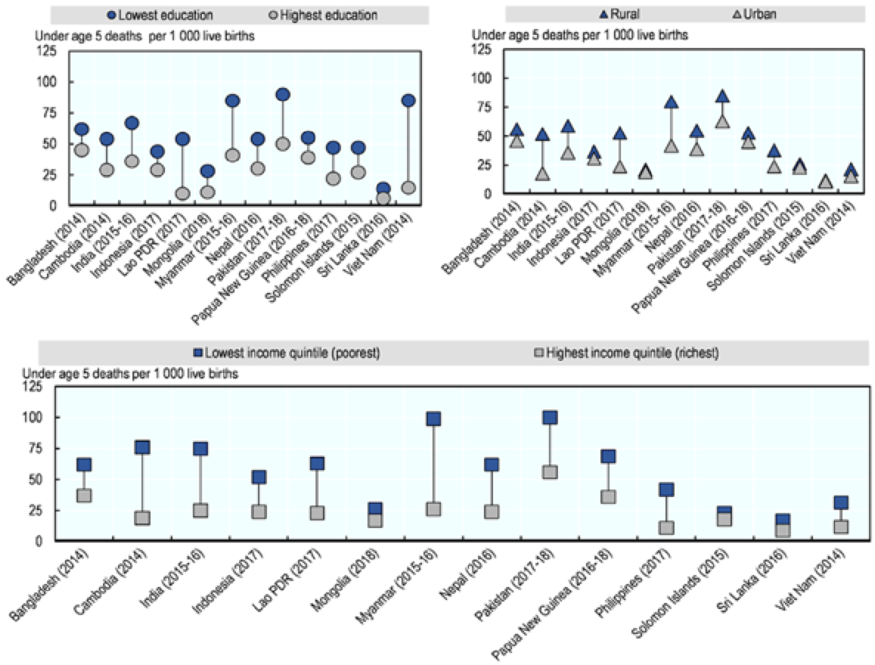
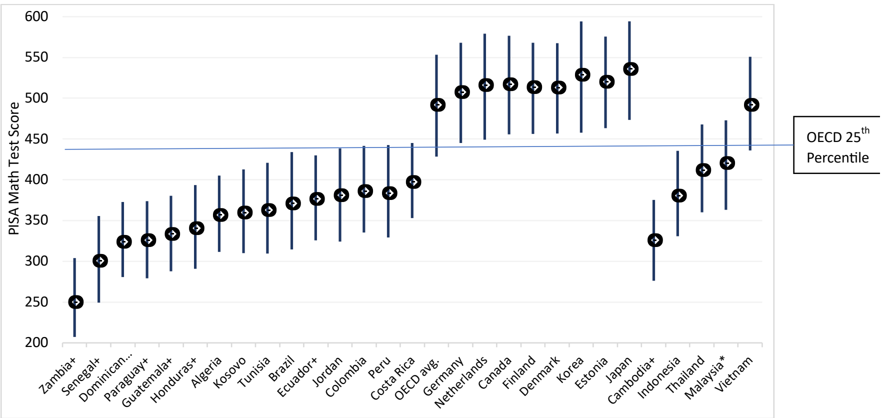


Figure 2: PISA Math Scores Across Countries



*Source: OECD (2016). PISA is a test of 15-year-olds in secondary school. *Malaysia data for 2012 (OECD 2014). + PISA-D data for 2016. Dots and lines refer to the median score and range.*

Figure 3a Global Disease Burden

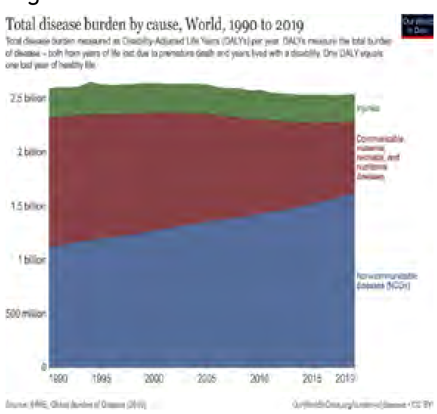
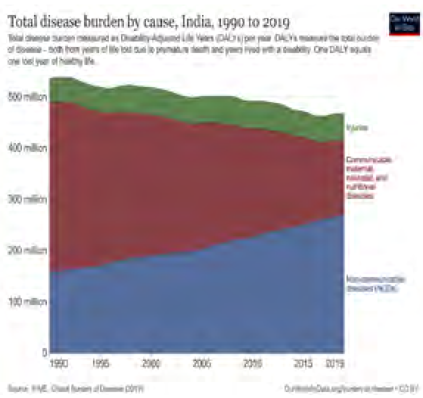


Figure 3b India's Disease Burden



Policy priority 2: Reduce the number of children out of school, who are mostly poor and disadvantaged

Despite the rise in enrollment rates, there are still 244 million children who are out of school; almost half are in Asia.[11] Most drop out after starting; some in remote areas never start. Because many of them are among the poorest and disadvantaged groups in society, addressing their needs will contribute to societal goals of reducing poverty and inequity.

This policy priority is a challenge because the marginal cost of reaching these children may be higher, since the disadvantaged may be in remote areas. Also, the traditional supply-side interventions to enhance access such as school-building may need to be supplemented by demand-side interventions for resource-poor families. Fortunately, there is now ample evidence that cash transfers, conditional on school attendance, are successful in getting children to school and keeping them there (Snilstveit et al, 2016).

Public policy priority 3: Improve the quality of basic education

Despite the dramatic improvements in the quantity of education, quality has lagged. While quality has been difficult to compare across countries in the past (as opposed to quantity, long measured by enrolment rates), it is now easier because of standardised tests, such as the OECD's Programme for International Student Assessment, or PISA.12

PISA measures 15-year-olds' ability to use their reading, mathematics and science knowledge and skills to meet real-life challenges. Figure 1 shows the results in math. In many developing countries that have participated in PISA shown in Figure 2, the 75th percentile on PISA Math performs below the 25th percentile in the OECD average. Only Vietnam compares with OECD countries; in fact, its average score in science was 525 in 2015, which placed it 8th among

11 UNESCO 2022 GEM https://education-estimates.org/out-of-school/
12 Website is https://www.oecd.org/pisa/

all countries, and considerably higher than the UK, which placed 15th.[13]

There are other measures for countries not in the PISA database which point to disappointing results. In rural India, nearly three-quarters of students in grade 3 could not solve a two-digit subtraction such as "46 – 17 = 29," and by grade 5, half could still not do so. Almost 40% of grade 2 students in parts of Nepal could not read a single word of a short text; in rural India, the percentage is over 80% (World Bank 2018b). Figures such as these do not bode well for the ability of children to acquire the skills needed if countries are to realise the high returns to education posited by human capital theory. Improving the quality of education is a vexing problem. According to the World Bank's flagship World Development Report (WDR) in 2018, learners first need to be prepared and motivated, including through interventions in early ages through early childhood education and stimulative classroom interactions. According to Nobel Laureate James Heckman:

The highest rate of return in early childhood development comes from investing as early as possible, from birth through age five, in disadvantaged families. Efforts should focus on the first years for the greatest efficiency and effectiveness. The best investment is in quality early childhood development from birth to five years for disadvantaged children and their families.14

Another focus of policy should be the performance of teachers. According to WD2018: "equipped and motivated teachers are the most fundamental ingredient of learning" and also account for the largest budget item. Yet, many education systems have teachers who have little mastery of the subjects that they are supposed to teach. Teachers who are adequately trained and motivated, and who are provided with appropriate curricula and materials are among the essential ingredients (World Bank 2018a).

Addressing Emerging Human Development Issues in Emerging Asia

Aside from addressing the unfinished agenda outlined in the previous section, changes in technology, health and demography require India and East Asia to evolve their strategies for human development even further.

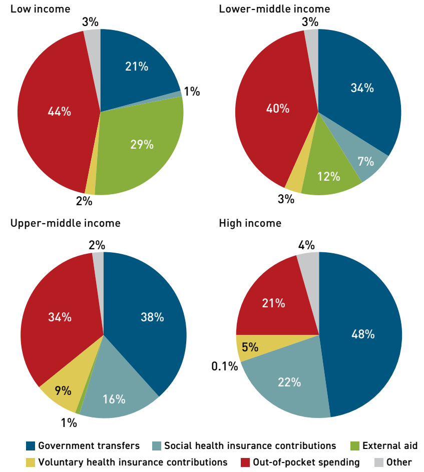
Public Policy Priority 4: Providing access to services that will address non-communicable diseases

The future health needs in Asia, critical to the productivity of the labour force, will depend on the diseases that burden the world, in terms of life-years lost. Death is, alas, inevitable. But it can be premature, which is why one important health metric is the years of life lost, or the number of deaths times life expectancy at the time of death. Moreover, there are years of life lost due to disability, which depends on the incidence of a disease and its severity and duration. Health experts use the sum of these two to calculate "disease-adjusted life-years" (DALYs) for every disease.

By this well-used metric, the nature of the global disease burden is changing in the world as a whole and in India, as shown in Figures 3a and 3b, respectively. There is a marked shift from communicable, maternal and nutritional diseases to non-communicable diseases, such as cardiovascular disease, cancers and mental or substance use disorders. These diseases are very costly, not only because they are debilitating, but also because they require costly testing and treatment, including long and expensive stays in hospitals and other tertiary care facilities.

The policy challenge is to reduce this burden and its obvious effects on the labour force. Part of it is mounting effective prevention campaigns to reduce the incidence of disease. Behavioural change can be induced through disseminating information about health risks to reduce tobacco use or to improve diets, for example. These efforts can only be mounted through collective action supported by governments (Fritz and Frommel 2022).

Figure 4 Low and middle income countries relied heavily on out-of-pocket spending



Note: Other sources are compulsory prepayments to private insurance, domestic nongovernmental organization contributions and health services operated by enterprises for their employees. The Netherlands and Switzerland organize health financing mainly through compulsory insurance but with funding based on mandatory fixed premiums or a combination of payroll tax and fixed premiums. For these countries, all mandatory contributions are included in estimates of social health insurance contributions.
Data source: WHO Global Health Expenditure Database, 2021.

Source: https://files.aho.afro.who.int/afahobckpcontainer/production/files/2_Global_expenditure_on_health_Public_spending_on_the_rise.pdf

Another role of government is to make it more affordable for people to seek and obtain the necessary care. This is an enormous challenge in developing countries. Figure 4 shows that 43-46% of all health spending (including voluntary health insurance contributions) comes from households in low and middle-income countries, compared to 21-26% in high-income countries. These numbers reflect the budget constraints of governments, which are only partially offset by donor assistance, significant though they may be for low-income countries (where 27% of health spending comes from external aid).

Governments need to intervene because governments private markets for health insurance are inherently inefficient. Incomplete information leads to problems of moral hazard and adverse selection.15 Some high-income countries mandate insurance through a

13 The reasons for Vietnam's spectacular success remain elusive to scholars. Some have said that Vietnam's lower enrollment rates in secondary schools may mean that only the most able were tested (Jerrim 2017). But the achievement effects persist even after accounting for selectivity. Yet, "household- and school-level variables explain little of Vietnam's exceptional performance." (Glewwe et al. 2020). Other work also discounts schooling characteristics and concludes that the success may be due to unexplained cultural differences (Asadullah et al 2020).

14 https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/

15 Moral hazard occurs because if insurers pay consumers may use more of the service or take less care of themselves, leading to higher costs for all. Adverse selection occurs because individuals face different risks – those who know themselves to be higher risk are motivated to buy and use more insurance, leading to insurers trying to freeze them out or charge them higher prices.

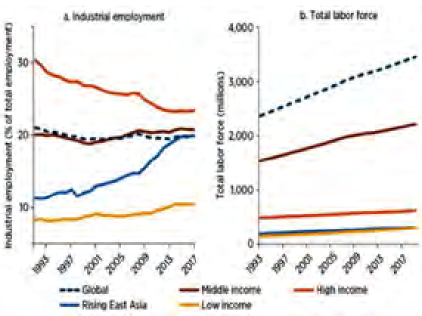
single-payer (or national health) system. Others require private individuals to purchase health insurance but subsidise the burden for the poor.

Public Policy Priority 5: Developing skills for the changing nature of work

During the COVID-19 pandemic, many of us experienced first-hand how the nature of work can rapidly evolve. But the changes in the working environment were changing even before December 2019. Technology and innovation are driving prosperity and opening new opportunities. Many sought-after jobs today (e.g., web designer) might as well have been science fiction 20 years ago. But these changes are also causing anxiety and stress as they require workers to adapt.[16] Are emerging East Asia and India ready?

There is no evidence that technological change and automation are taking jobs away from everybody yet. In fact, Figure 5 shows that even though the share of industrial jobs has indeed fallen in high-income economies, it has increased rapidly in the "Rising East Asian" economies which include Cambodia, Indonesia, the Lao People's Democratic Republic, Mongolia, Myanmar, the Philippines, Thailand, and Vietnam. These trends are due to increasing connectivity that makes it easier and cheaper to export industrial goods, as well as increasing demands from emerging countries themselves. Overall, the total labour force is increasing.

Figure 5



Source: World Bank 2019

But there is still a cause for concern because technology is changing the skills needed for work:

The demand for less advanced skills that can be replaced by technology is declining. At the same time, the demand for advanced cognitive skills, socio-behavioural skills, and skill combinations associated with greater adaptability is rising. (World Bank 2019, p. 6)

This means that the aspiration to get stable lifetime employment in unskilled or semi-skilled jobs and earn a decent living in the formal sector may be more difficult to meet.

What are these skills that will make human capital more adaptable? These include - problem solving skills that are not learned when curricula stress rote memorisation of facts. Also, the socio-behavioural (also called 'noncognitive') characteristics needed for the new working world include motivation, attitudes, self-beliefs, affect, values, learning strategies, etc. which give young people what they need to apply their agency responsibly and effectively.[17] In a recent study, these noncognitive skills were drivers of cognitive performance in PISA tests (Lee 2020).

In addition, access to expensive upper-technical and higher education needs to improve. Budget constraints mean that this access generally cannot be through free places for all who apply. Such a policy would not only be unaffordable; it would also be inequitable because more such subsidies are large and would accrue to those who finish secondary school and who are from better-off families. Yet, the private returns to education remain very high (Montenegro and Patrinos 2021). The problem is that they are realised only after leaving school and starting a job. This means the priority is to develop the market for student loans, combined with targeted scholarships to smart and promising students from poor backgrounds who would not be able to provide the collateral for such loans.[18]

Public Policy Priority 6: Preparing for an ageing population

For some countries in emerging Asia, such as China, the demographic window of opportunity due to low dependency rates, is closing rapidly. For others, including India and most of the emerging Southeast Asian countries, that window is still open. But even for them, the time that they have to adjust to an ageing society is much less than developed countries had. For example, it took France over a century before the proportion of its population aged 65 + went from 7% to 14%; in the US and Sweden, it took 86 and 69 years, respectively. That is the time they had to develop robust institutions to cope with greater numbers of elderly. Estimates indicate that for China, it will take 26 years for such changes in proportion; Sri Lanka, Thailand and Singapore have even less time – 19-22 years.[19]

Aside from the direct economic impact of having fewer workers who earn wages, pay taxes and save significant amounts, an ageing population also has ramifications on the costs of health systems. As populations age, the already growing burden of non-communicable diseases discussed above will become heavier. Governments will have to double down on their measures to ensure that all will be able to develop health systems that make health care accessible for all.

An ageing population will also put pressure on pension systems, which will have more claimants while there are fewer contributors.[20] In all developing countries, smaller families and changing social practices mean that retired people can no longer rely only on private transfers from relatives to sustain themselves after they stop working. They need institutions to insure them in case they live longer than they had saved for.

Pension coverage varies greatly across the world. Table 2 below shows that pension coverage in the Asia and Pacific region as a whole is around the world average. However, for South Asia, less

16 World Bank 2019.
17 See Jimenez and King (2013).
18 Jimenez et al. (2013).
19 These figures are from National Institute on Aging, National Institutes of Health, USA (2007). https://www.nia.nih.gov/sites/default/files/2017-06/WPAM.pdf
20 OECD (2022), Pensions at a Glance Asia/Pacific 2022, OECD Publishing, Paris, https://doi.org/10.1787/2c555ff8-en.

than 40% of the population of statutory retirement age receive a pension. Alarmingly, only 13% of those age 15+ and only a quarter of the population are part of any pension scheme. This points to the large share of informality in South Asia.

Table 2: Pension Coverage Around the World

	% of population of statutory retirement age receiving a pension	% of population age 15+ covered by a pension scheme	% of labor force age 15+ covered by a pension scheme
World	77.5	32.5	53.7
Asia and Pacific	73.5	32.9	54.7
South Asia only	39.2	13.3	26.2

Source: ILO World Social Protection Report. 2020-22. https://www.ilo.org/wcmsp5/groups/public/@ed_protect/@soc_sec/documents/publication/wcms_817572.pdf

Aside from coverage, public policy needs to consider the adequacy of pensions and how they will be financed.

In sum, the emerging economies of East Asia and India have improved their human development indicators dramatically in the past 50 years. Average life expectancy has risen by a third and primary school enrollment rates are now approaching 100%. Yet, there is a substantial unfinished agenda for these countries, especially in the moral obligation to lower child mortality and address the need of over a hundred million children out of school in the region and the appalling quality of education in many countries, including India. At the same time, these countries must address new issues, such as the rising global burden of non-communicable diseases, preparing the labour force for a new world of work, and preparing for inevitable population ageing.

These policies are general characterisations rather than recommended actions in any one country; those must be tailored to the specific context. Moreover, they must be complemented to address cross-border issues that need regional or global action, such as responding to a pandemic or managing the migration of human capital.

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Discussant Comments

Thang Vo

Summary

- The author argues for the rationale/justification/reasoning of investment in education and health.
- Health and education compete fiercely for scarce national resources.
- Association between health/education and economic growth: no causal relationship.
- Competition within the human development sectors (actually, neo-classical perspectives choose them based on the rates of returns and the diminishing return rule).
- Six policy priorities: Addressing the unfinished agenda for basic services (HCI), and Addressing Emerging Human Development Issues in Emerging Asia.

Policy priority 1: Reduce the number of children out of school, who are mostly poor and disadvantaged.

Public policy priority 2: Improve the quality of basic education

Public Policy Priority 3: Lowering child mortality through nutrition and access to clean water and sanitation

Public Policy Priority 4: Developing skills for the changing nature of work

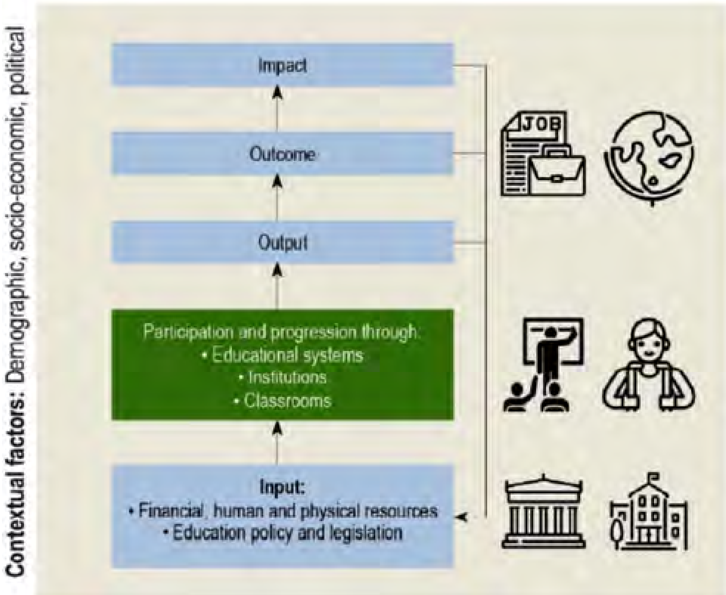
Public Policy Priority 5: Providing access to services that will address non-communicable diseases.

Public Policy Priority 6: Preparing for an ageing population

Possibility of improvement

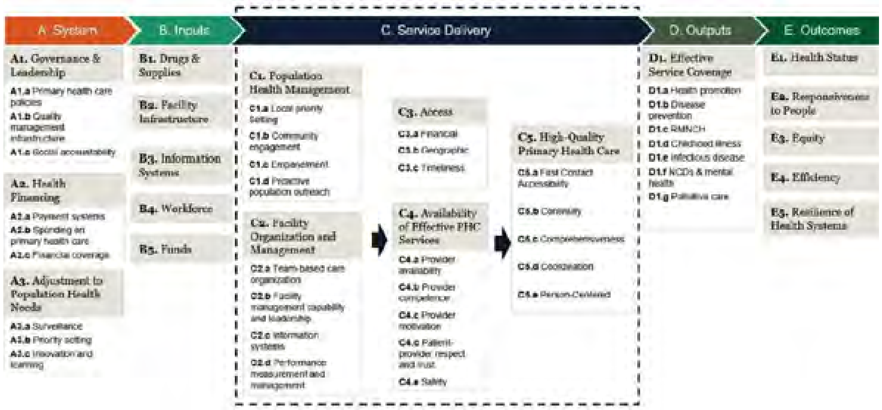
- Better to providea clear analytical framework, especially for the last three policy priorities (The Human Capital Index from WB 2018) provides a bird's-eye view of each country's level of human capital: 6 groups of HCI, India (5; 0.44), Vietnam (3; 0.65). The framework is similar to every country in Asia but policymakers can see the differences through the analysis of their own data. Also, with the framework, we can monitor the development progress over time in the whole of Asia and in a particular country.

Education



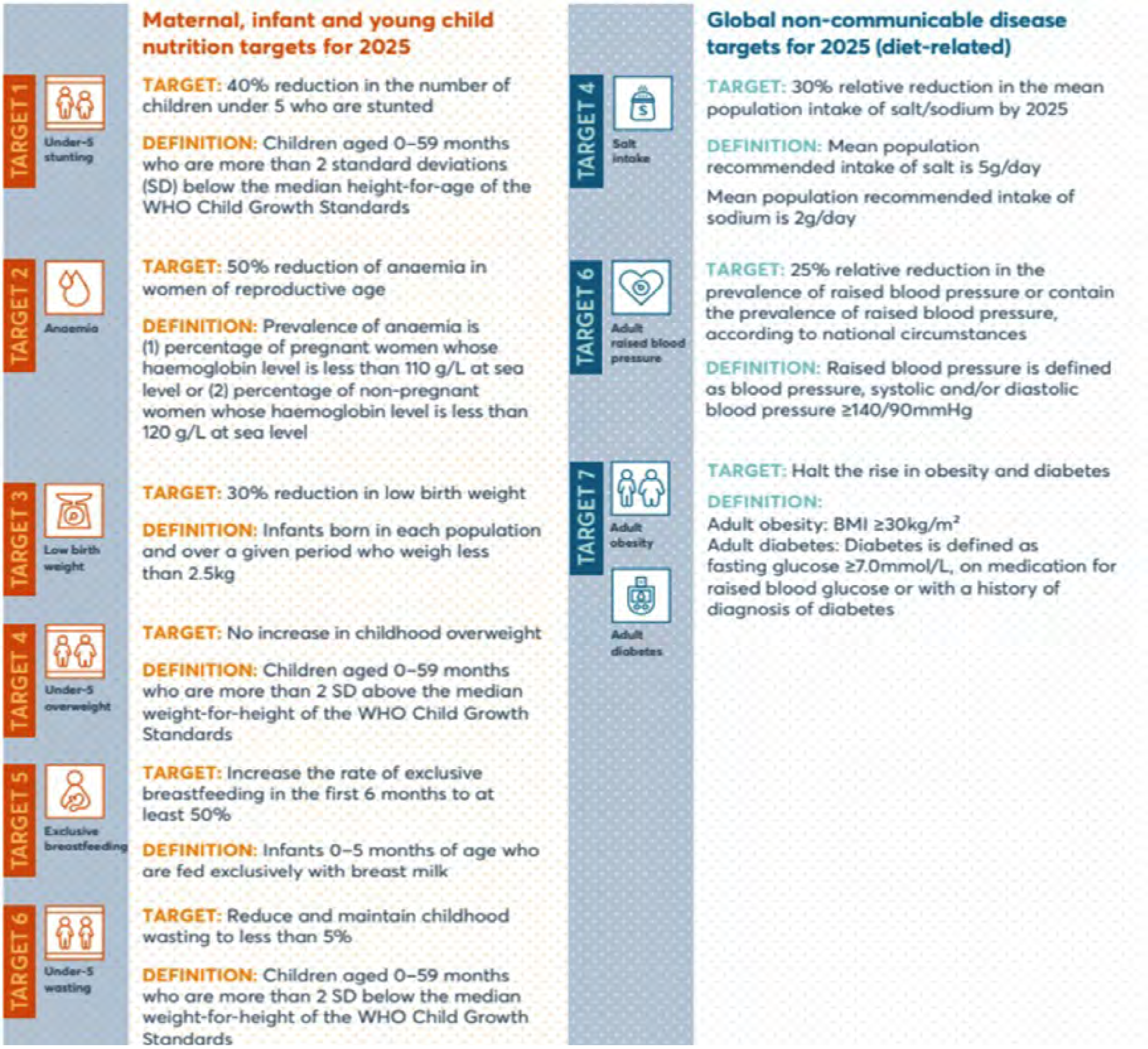
Source: Organising framework of indicators in Education at a Glance (OECD, 2022)

Health



Source: Conceptual Framework of Primary Health Care Performance Initiative (WHO)

Nutrition



Source: Mariachiara, D. C., Shibani, G., Saskia, O., & Dariush, M. (2021). Global Nutrition Report

- Then the report should compare human development in Asia to choose the best and worse cases in the region. Discussions about these cases would provide practical lessons for policymakers.
- For example: The author discussed why Vietnam succeeded in education in the footnote.
- Transformation due to climate change adaptation can affect human capital development.

Minor

- If we focus on development (instead of economic growth), then investment in human capital is crucial not only because it is input for economic growth, but also because it is the outcome of development.
- Our citizens' welfare or human development is always the reasoning behind any development progress, so why do we compare the returns of human investment in health and education with those of other economic sectors? Besides, the spillover effects of human investment are large and we can't capture them with our monetary measures.
- Public Policy Priority 5 should be moved up to the fourth priority because survival is most important than anything.
- Policy priorities may be the same for the whole of Asia in some aspects. But we can discuss some particular countries within each general policy priority.
- If data is available, then the report can estimate the cost-effectiveness of a proposed policy. That would help policymakers efficiently choose policy priorities with limited resources (even within the human development sectors).

Discussant Comments

Nachiket Mor

Perspectives on Health and Growth

The question of the *value* of health is an old one. There is good evidence that if the question of *value* is seen in a narrow way through the lens of its impact on national or state-level GDP growth, the links are weak and have been hard to establish (Acemoglu & Johnson, 2007; Bloom et al., 2018; Ridhwan et al., 2022; Weil, 2014). The principal challenge seems to be the reality in most developing countries that the sheer availability of labour is not a "binding constraint" (Rodrik, 2010) and therefore the marginal impact of an additional unit of labour on the GDP growth rate is zero.

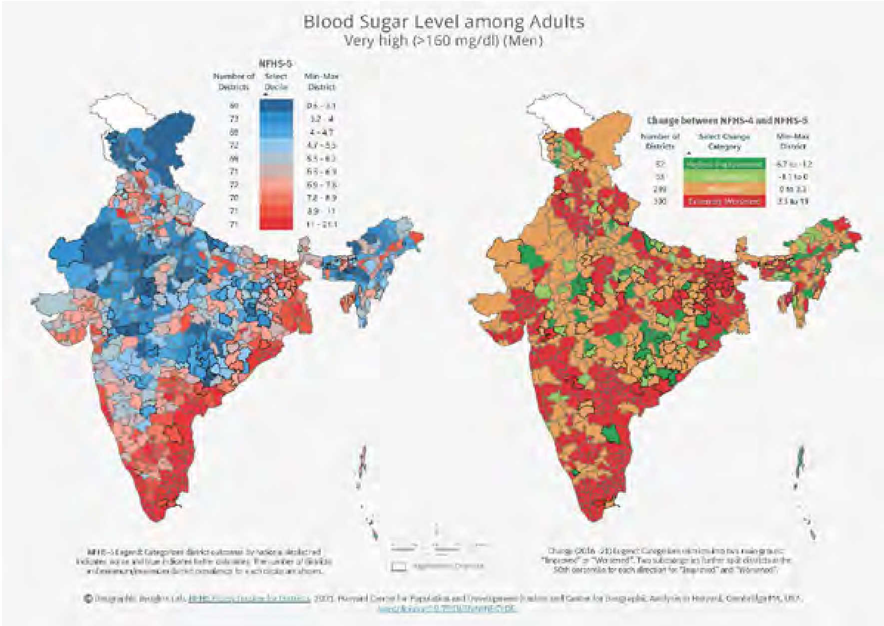
Investments in health indeed have *value* and a compelling case can be made using four very different perspectives:

Growth is Insufficient: Growth in the context of a high and rising GINI coefficient leaves out a large proportion of the population and disproportionately benefits the richest 100 million Indians (Mor et al., 2018). They end up enjoying standards of living comparable to the Scandinavian countries (per capita incomes of close to PPP$ 60,000) while the rest of the 1,200 million live in penury at average per capita incomes close to a $3.5 a day (without the PPP benefit since it is their own labour that drives it) which is just above the poverty line but well below the $10 a day middle-class line. And, unless we're able to find a way to grow at double the rate that we are today, the "trickle-down" effect is unlikely to be sufficient to lift the per-capita incomes of this population sufficiently to guarantee them a reasonable standard of living. Instead, we will need to find ways, even at the cost of growth, to ensure that they can live better lives even at low incomes and pursue more growth-with-equity as a national strategy. For this, goal-free and universal availability of high-quality healthcare (and associated social determinants) becomes an important aspect to focus on.

Government Investments are Hurting Growth: As Sandhya and Mor (Mor & Venkateswaran, 2022) have suggested, the second argument would be that, if indeed the focus of government policy needs to be on enhancing growth, through its continued interference and tax-led investments in well-functioning markets, it is adversely impacting the growth potential of the economy. The continued belief in the power of the Keynesian multiplier is misplaced (de Rugy & Salmon, 2020), and our years of failures with the planned economy and the success over the last three decades with the free market has shown us that markets, where they work well, are much better able to allocate scarce resources than the government is (Mohan, 2018). In many of these sectors, continued policy uncertainty (Mor & Sehrawat, 2015), the government's desire to protect the hegemony of the public sector, and its highly distorting investment strategies, are hurting the development of the market, which is otherwise, unlike in 1947, well positioned to take on these challenges. Expenditures in sectors such as defence are often seen as competing with development expenditures. With more than 70% of the defence expenditure going towards salaries, in a volunteer army, these investments could very well be seen as well-targeted cash transfers with, potentially, many of the same benefits as NREGS. The investments government is making in infrastructure, agriculture, and other sectors, on the other hand, distort markets and hurt growth. If the government were to stop making these investments and focus instead on issues such as the elimination of policy uncertainty and the development of its own underlying financial management capabilities (such as for municipalities and village panchayats) it could allow markets to step in, in a much more robust manner.

Women's Health Impacts Growth in a Causal Way: Bloom and colleagues find that the link between investments in health and economic growth is the strongest for investments in women and child health because "health improvements for these populations spur increased investment in human capital, increased female labour force participation, and reduced fertility" (Bloom et al., 2018). These are important arguments but do not speak sufficiently persuasively to the issue of the availability of labour not being a "binding constraint" (Rodrik, 2010). A different argument which focuses on the myriad ways in which women support the household through their unpaid work could be more persuasive. The problem with paid work as a source of value is that since, on an economy-wide basis, labour is a surplus factor, even if a portion of the women (or men, for that matter) were to withdraw from it on account of health, the impact on the economy could be negligible. However, if something similar would happen to women's in-home labour, the effect could be quite significant because of its sheer quantum, the critical dependence of the entire household on it, and due to its specialised (and non-market) nature, it is hard to replace. Bazile and colleagues discuss the various ways in which maternal mortality impacts the household (Bazile et al., 2015). Kirigia and colleagues find that a 10% decrease in the Maternal Mortality Rate (MMR) has the potential to raise the annual GDP growth rate by 1% (Kirigia et al., 2008) suggesting that if Bihar's MMR (currently at 100 per 100,000 live births) were to fall by 80% to the levels currently enjoyed by Kerala (currently at 20 per 100,000 live births) its GDP growth could, potentially, increase by 8%.

NCDs are Reaching Epidemic Scales: As can be seen from the figure (GIL, 2021) NCDs such as diabetes are reaching epidemic scales. In the highly productive districts of Thiruvananthapuram and Pathanamthitta of Kerala, over 20% of the population has blood sugar levels in excess of 160 mg/dl amongst men, the proportion having risen by more than 15% over the last five years. This is a new and serious problem which has the potential, at current rates of growth in the disease burden, to severely impact the growth potential of the entire country. The only way to address it is through investing in and building a strong proactive (Starfield, 1998) health system. In such a system it is not merely the availability of medicines (which is already quite high) but ensuring adherence that matters. Dr Julian Tudor Hart showed this over 50 years ago in his GP practice in Wales (Hart et al., 1991), and countries like Iran which have built high-quality, low-cost health systems have demonstrated this at scale (Farzadfar et al., 2012).



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P.S. RAGHAVAN
THARMAN SHAN

PAPER 2

The Role of Technology and Other Innovations in Healthcare

Soonman Kwon

Context

The health sector has experienced rapid changes, which have been prominent in the recent pandemic of COVID-19. Lockdown, social distancing, reduced transportation, closure of outpatient clinics and fear of infection have resulted in disruptions in access to essential services. The use of teleconsultation has increased substantially to mitigate the disruption in the healthcare supply and improve access to healthcare. Digital technologies were also used for surveillance, rapid case identification, contact tracing, and public communication (Mahmood, et al., 2020; Kwon, et al., 2020).

Vaccines were developed swiftly and became a game changer and a major health policy tool to mitigate the devastating effect of COVID-19. Technological innovation contributed to the rapid development and production of vaccines, including the new platform, such as mRNA-based ones. Rapid development and production of test kits also played a key role in the early detection of cases and resultant isolation of cases to prevent further infection.

Although technological innovation in the health sector was pivotal in the response to COVID-19, it also posed challenges. Limited access to vaccines in low- and middle-income countries (LMICs) was a big concern for global development and equity. Aggressive contact tracing and public disclosure of information based on digital technology was a concern from a potential trade-off between human rights, privacy and public health purpose. The rapid expansion of telehealth is not based on due assurance of quality, safety, and privacy, and the digital divide can result in inequity in healthcare utilisation and health status. This short paper aims to examine the role of health sector innovations in service delivery, products, and policy, with more focus on digital innovations.

Digital Innovations in the Health Sector

Telehealth

Telehealth means the "delivery of health care services, where patients and providers are separated by distance. Telehealth uses information communication technology for the exchange of information for the diagnosis and treatment of diseases and injuries, research and evaluation, and for the continuing education of health professionals" (WHO, 2016). (Telemedicine has been used mainly for medical services, whereas telehealth covers broader areas, including tele-education.)

Telehealth was initially used, in particular, to improve access to health care for the disadvantaged, e.g., older people, residents in rural or remote areas. Telehealth tends to complement rather than replace face-to-face consultation although some people may prefer virtual consultation, e.g., mental health. The role of telehealth has expanded rapidly during COVID-19. Existing restrictions on telehealth have been lifted during the pandemic, e.g., allowing virtual consultation from the first encounter of a provider, allowing phone consultation in addition to visual consultation, extending telehealth from provider-to-provider to patient-to-provider consultations, etc.

Telehealth is an important policy tool to enhance overall efficiency and equity of service delivery as well as improve healthcare access for UHC (Hashiguchi, 2020). For example, it can strengthen primary health care, reduce unnecessary utilisation of specialist and hospital care, enhance patient referrals among different levels of care, and improve the continuum of care. It can be used for education and capacity building of providers and patients. The use of technology and more data available through telehealth can further expedite innovations in the health sector.

Mobile health (m-Health), which is health care delivery via mobile devices, is also expanding to improve access to care and health outcomes. It has been used for the management of chronic conditions through smartphone applications, mobile phones connected to a monitoring device, and short message services (SMS). It can facilitate self-monitoring and medication compliance, provide social support and hence improve health outcomes. Mobile health has been used for non-communicable disease (NCD) management, such as hypertension and cardiovascular diseases (e.g., India), SMS for behavioural change and communication (Sri Lanka), and tuberculosis treatment adherence (Thailand). When clinics were closed during COVID-19 in Indonesia, WhatsApp was used to provide patients with counselling on sexual and reproductive health, such as adolescent health and sexually transmitted infections.

When telehealth is widely adopted, a potential legal issue can emerge regarding quality and safety of patient care across national borders. We will need global or regional coordination and harmonisation of policy, standard setting or regulation on telehealth. Stakeholder positions can also affect the role of telehealth. For example, Korean Medical Association (KMA) was against (physician-to-patient) telehealth, which was only temporarily allowed during COVID-19. KMA is worried that big general hospitals may aggressively use telehealth and further expand their market share, threatening the role of small-scale physician clinics.

Data

Data become more and more important, which is especially the case for the health sector. Rapid development in digital technology and telehealth makes possible the collection and analysis of large-scale health data. EMR (Electronic Medical Record) for a given medical institution has been expanded to EHR (Electronic Health Record) across medical institutions. Now the role of PHR (Personal Health Record), which is an electronic, universally available, lifelong resource of health information, (AHIMA, https://library.ahima.org/doc?oid=59377#.Y7DlhtXP2Uk), becomes crucial. Individuals can manage PHR and make health decisions rationally based on it.

PHR can collect data from various sources, e.g., vaccination and public health services data from the government, health care utilisation data from providers, individual personal data on genetics and life log data (e.g., from wearables). Standardisation of data or interoperability will help data be linked, shared or used more easily. Big data and large-scale PHR systems can be used to develop medicines, treatment methods, and devices more effectively, e.g., precision medicine. However, privacy and safety in the link, sharing and use of data are crucial, which calls for policy support or intervention by the government. So there is a potential trade-off between regulation and innovation in the collection, analysis and use of data.

Smart Care

Digital technology and big data can be effectively used for smart care: provision of health care or elderly care in a more effective way. For example, two-way real-time communication between a physician and a patient, checking and monitoring patients more efficiently with digital technology, and big improvements in patient discharges and inventory systems can recalibrate service procedures and workflows in hospitals and care facilities. Some intensive care units (ICUs) of a secondary-care hospital, which faced a shortage of specialised personnel, were operated through remote monitoring and communication by a tertiary-care hospital during COVID-19 in Korea.

Digital technology and smart care for older people can support ageing in place, i.e., staying home rather than staying in nursing homes or long-term care facilities. Safety or emergency care can improve, thanks to early detection of danger signals; activity monitoring that sends an alarm when no physical activity is detected for a given time interval; regular checking of biometrics, e.g., breathing, heart rate, sleep quality; environment control for temperature, humidity, door opening, etc. Digital technology can enable older people to stay home by providing continuous management and monitoring of health, emotional support (with tele-conversation), physical exercise (with tele-coaching), and message/alarms for taking medicines (National Science and Technology Council, 2019). Societal investment in physical infrastructure is required to provide smart care for older people.

Medicines and Devices

Big data and AI-based data collection and analysis can expedite the process of the development of medicines and vaccines. It is also a key facilitating factor for the development of targeted (precision) medicine. However, targeted medicines (e.g., anti-cancer medicines) are very expensive, causing serious concerns about access to medicines and the financial sustainability of health financing.

Big data and digital technology have led to the use of artificial intelligence (AI) for early detection and diagnosis, for example, using voice for the diagnosis of Alzheimer's and depression, AI-based diagnosis and treatment guidelines for breast cancer, and digital medical devices for individualised rehabilitation. Digital therapeutics are also emerging, which is a change in paradigm from treatment after diagnosis to simultaneous prevention, treatment and management. It has been used for depression, quality of sleep, coaching for NCD management, chronic pain management, smoking cessation, etc. We will need to produce concrete evidence for the cost-effectiveness of these innovations in AI-based diagnosis and digital therapeutics. It can be also controversial whether prescriptions by medical professionals are required for access to digital therapeutics.

Digital Technology for Health Financing

Digital technology (DT) can contribute to the performance of the health financing system. DT can improve the efficiency of claims processing significantly (e.g., decreased duration from claim submission and payment to providers) as well as enhance the detection and prevention of false claims. Digital technology plays a key role in strategic purchasing in health financing, through e-claims, claim review and assessment, and programs for quality of care. In India, Ayushman Bharat Digital Health Mission (ABDM) was launched in September 2021, which streamlines health claims processing and establishes an interoperable network that connects the various end-user applications and health service provider applications (https://abdm.gov.in/).

Digital technology can contribute to evidence-based health financing policy. Claims data can be effectively used for benefits design, payment system design, costing, fee scheduling, quality assurance, etc. In Korea, all the information on national health insurance (NHI) is disseminated to academics for rigorous research as well as used as a key input for evidence-based policy design, implementation, and evaluation. Digital tools are used to detect changes in insurance eligibility in a timely manner and collect up-to-date information on the capacity to pay and income, which helps assess NHI contributions accurately. Increased accountability and trust can enhance the compliance and collection rate of contribution for the self-employed.

However, DT-driven efficiency in the micro-level management of health financing systems does not necessarily lead to macro-level efficiency, such as long-term financial sustainability, unless it is accompanied by key system-wide policy levers, e.g., a payment system for providers (Kwon, 2018). Macro-level performance of the health financing system requests sound financing policy in the first place, which then needs to be adequately supported and implemented by means of effective digital technology.

In building the DT-based health financing system, each country needs to take into account its own context. If a country can avoid the burden of monitoring eligibility and collecting contributions, in other words, if a country has a non-contributory entitlement-based system for the informal sector, such as in India and Thailand, digital technology for health financing can be designed in a much less sophisticated way than Korea. Instead, it can focus more on purchasing functions, identification of vulnerable people, and ensuring quality of care. Effective identification of the poor and vulnerable or user fee exemptions was supported by digital technology in Rwanda, Cambodia, India (WHO, 2022).

Challenges

Technology and innovations are not the ends but the means to achieve health policy goals. Health sector technology and innovation need to contribute to the vision of universal health coverage (UHC) with a connected continuum of care, i.e., ensuring access to cost-effective services, technology, pharmaceuticals, and devices, without financial/physical barriers. Digital technology can be effectively used to connect services provided by medical care facilities, (elderly) care facilities, home-based care, and community care to improve person-centeredness, and individuals can choose among different types of care without disruptions based on the individual's health condition and preference. When all services are connected for the benefit of a patient at the centre (i.e., with minimum travelling around providers), the continuum of care from prevention, treatment, rehabilitation, and long-term care is achieved, which facilitates, for example, ageing in place for older people.

Equity becomes even more important in an era of rapid innovations in the health sector. With an expanded role of technology, inequity in access to technological innovation can result in inequity in health outcomes. Development in digital health should consider the digital divide, digital literacy, and the special need of people who face difficulty in accessing digital devices or telehealth platforms, e.g., people with physical or psychosocial disabilities. Rapid technological innovation can also result in increased concentration in health service provision as well as the pharmaceutical/device industry. We need a policy framework to minimise the potential social cost of increased concentration or reduced competition in the health sector.

Rapid innovation, e.g., big data and AI, can also cause concerns about privacy, safety, and human ethics. Therefore, health policy needs communication with citizens and citizen participation in policy design and priority setting. In the COVID-19 pandemic, we have observed global inequity in access to vaccines and medicines. Research and development of vaccines and medicines for neglected tropical diseases and emerging infectious diseases is still insufficient. Technology and innovation have some aspect of regional/global public good, and regional/global efforts to improve access to innovations in low- and middle-income countries (LMICs) and to increase coordination in human resource training, sharing data, or regulatory policy are called for.

Medical professionals and healthcare providers play a key role in the adoption and dissemination of technology and innovation. As medical professionals often are conservative to adopt new technology, we need education and re-training of providers, reorganisation of tasks, and financial incentives to them. The health sector has traditionally had a strong orientation as a human service rather than driven by technology. Dissemination of technological innovation in the health sector may request a change in the culture of medicine. At the same time, the medical profession is a key interest group that has a strong impact on the government policy on telehealth, PHR, digital therapeutics, and health financing.

In the health sector, there is a potential conflict between health policy and industrial policy goals and perspectives, which causes a conflict between the Ministry of Health and the Ministry of Economy/Industry. Technology and innovation can enhance the efficiency of service delivery (e.g., reduce unnecessary care, improve coordination among different types/levels of care, increase knowledge of patients) and improve health outcomes. But technology causes concerns about safety, ethics, profit-seeking and inequity if the benefits of innovations are concentrated only on some privileged population groups. Development of technology and innovation in the health sector requests multi-sectoral collaborations: among ministries of health, science/technology, and economy/industry; among public and private sectors; and among technology industry and health services sectors. Collaboration between the public and private sectors is critical as the private sector plays a key role in innovation and service delivery in the health sector.

Role of Government

Health innovation and industry are unique and differentiated from other industries as they affect health and life, which is often irreversible. That is one of the strong rationales for the role of government in the regulatory framework for the health sector and innovations. There needs to be a balance between regulation and innovation or a balance between the availability and safety of innovations. Sometimes, too tight regulation can be a barrier to innovation, but well-designed regulation can encourage the rapid diffusion of innovation. For example, government regulation and policy for ensuring safety and quality, e.g., the role of the FDA (Food and Drug Administration), is essential for the adoption of innovative products/services when it can increase public support and trust. Too slow an approval by the government can delay the availability and dissemination of technology, but too swift an approval can harm safety and have negative effects on the health of the population.

Research and development (R&D) is crucial in health sector innovation, and government funding and policy for R&D have a huge impact, in addition to public investment in the physical infrastructure for technology and innovations. The government's role and investment are important especially in the early stage of innovation, such as basic and applied research and development, because it faces higher uncertainty. Business and industry can be more efficient at the stage of product development and commercialisation. In the government support for R&D, priority setting for the amount and mix of fund allocation matters, i.e., priority among medicines, digital health, devices; among different diseases/needs, such as cancer, communicable disease, elderly care, etc.

The government needs to build and support an environment for innovations in the health sector. The government can provide rewards for innovations, in which case, the optimal amount of compensation for valuable innovations as well as intellectual property rights is a key. Dissemination of innovations also relies on coverage/reimbursement by health financing mechanisms, especially the public funding system. Coverage decisions need to be based on evidence of cost-effectiveness through the institutionalisation of HTA (Health Technology Assessment). Industry requests higher prices as an essential incentive for innovation, but too high price for products/services can harm access to care/medicines and the financial sustainability of public funding for health care. One needs a balance between the goals of health policy and industrial policy.

The government's role is important in standard setting for data and digital health, for example, policies to support interoperability, privacy, and data security. Government can invest in building an innovation-friendly eco-system. An effective eco-system for health sector innovation depends on collaboration among universities/research institutes, hospitals, and industry, for example, collaboration among open laboratories in hospitals, bio-ventures (e.g., digital health APP, devices), and researchers with clinical experience (MD/PhD).

Health sector innovation needs regional/global coordination. Countries can learn from each other through policy learning about which policy works, which does not, and why. Cooperation can be fruitful in the sharing of data in clinical trials, collaboration for human resource capacity building (for R&D, manufacturing, regulation, policy, etc.), and regulatory harmonisation for digital health, pharmaceuticals and devices. Regional/global coordination in the surveillance and monitoring of communicable diseases is also called for.

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Discussant Comments

Indrani Gupta

Digital technologies are now integral to daily life, and the world's population has never been more interconnected. Innovation, particularly in the digital sphere, is happening at an unprecedented scale. There is immense scope for the use of digital health solutions to improve the health and well-being of populations globally.

We have seen the usefulness of digital solutions during COVID. The three areas that Prof Soonman mentioned – telehealth, smart care and medicines and devices – we witnessed during the pandemic months. We did see the usefulness of telehealth, smart care and efficient technology-based vaccine drive. In fact, to me the vaccine drive scores higher than the services available through technology because the platform created was simple and easy to use and did manage to extend the vaccination drive to a large section of the population. Messages of prevention were sent in different languages to mobiles. For example, the WHO launched an easy-to-use messaging service to get information about COVID directly into the hands of the people that need it. However, according to Indian data on vaccination, while 88% of the eligible population are fully vaccinated, only 21% received the booster dose, indicating that mere digital solutions may not always suffice — outreach activities should continually match the need for a particular intervention, especially if a majority of the population is not naturally inclined to digital solutions.

As for data, as Professor Soonman indicated, there are numerous initiatives globally that use digital technology for the collection, collation and analysis of large-scale health data. Electronic Medical Records, Electronic Health Records, Personal Health Records – there is an overwhelming repository of information now – a dynamic field that is continuously evolving and innovating to connect parallel streams of data that would allow one-stop access for users. For a world that strives to reach Universal Health Coverage, connecting individuals to their health care needs, processing claims data and running a system that offers a continuum of care through digital platforms, it is a challenging task but one that is happening very quickly.

I agree with Professor Soonman that there is potential for widespread transformation through digital health solutions, including in the routine tasks associated with health prevention, promotion and continuity of care for diseases, communicable as well as non-communicable diseases, as well as for data management and use of data to improve the speed of response for UHC.

But I want to inject a note of caution. As Professor Soonman also pointed out, solutions must consider country specifics and contexts. Also, if digital health is pushed onto a system with existing deep inequalities in access and availability, it can end up accentuating the inequities in the system.

India currently has a health system which depends mostly on private financing – household out-of-pocket spending (OOPS) in particular. That is because of the various serious challenges that plague the public health care system in the country: there are serious gaps in the availability, accessibility and quality of public health services, as a quick look through the government's own Rural Health Statistics would reveal. Given this state of government health infrastructure, people go to the mostly unregulated private care and end up spending out-of-pocket. Also, there are serious quality concerns – it is a continuum from low quality to high-end superior quality care. The private providers range from neighbourhood unqualified providers to highly trained providers in corporate facilities. Where then should one inject the system with digital care? What does it even mean to have unique identifiers to track individuals?

If we are talking of only the Prime Minister's Jan Arogya Yojana (PMJAY) then of course it makes sense. But health care in India is much more than PMJAY, which is essentially tertiary care. We need primary, secondary and tertiary care strengthened for an effective continuum of care. A big gap in India is the referral system. Bypassing primary care has happened because of the dysfunctionality of primary care facilities; of course, there are differences across states. But it will not be too wrong to say that the primary care agenda is still unfinished in India. If we have to use digital solutions to increase accessibility, we first need to set right the health system and on that revamped system we can start digital solutions. Continuity of care is one area where digital health tools can really help, but for that, there has to be some homework done to rectify the defective parts of the health system.

During COVID we also learnt the perils of depending on technological solutions in countries like India, where the digital divide is not imaginary but is real and present. We saw it in the case of education and we are most probably experiencing it in the health sector even as we speak. Similar to the education sector, the health sector caters to a vast population that is vulnerable and without access to basic amenities and lacks education and awareness. One has to think how this majority can be brought under the digital umbrella to improve their health status and health-seeking behaviour. Inclusive digital health is not easy to achieve when a majority of the population is not digitally literate or lacks digital access. With the expansion of digital health, we also require legal frameworks that can protect human rights, regulatory frameworks that can protect privacy and confidentiality and a whole different approach to digital health.

In the current scenario, I am, therefore, less optimistic about technological solutions for delivering preventive, promotive and tertiary care to people, especially those that need the services the most. One can harness the power of digital technologies and health innovation only when all the essential pieces of the health system are fully functional.

India has launched the Ayushman Bharat Digital Mission ("ABDM") with the objective of digitising the Indian healthcare ecosystem. It advocates for the development of a 'Digital Health Technology Ecosystem' where digital health tools will be built and deployed across the continuum of care. The policy recognises the importance of digital technologies in the delivery of healthcare and highlights the need for "delivery of better health outcomes in terms of access, quality, affordability, lowering of disease burden and efficient monitoring of health entitlements to citizens". However, what remains is whether to make ABDM fully functional, a parallel effort to reform the health system will also take place, by plugging in the missing infrastructure and personnel gaps, streamlining delivery systems and putting in place regulations to harness and properly direct the dynamism of the private health sector. This can only happen if India makes a quantum jump in its public health spending from a mere 1.3% of GDP to at least 2.5-3% of GDP.

Finally, in the context of digital health, there is tremendous scope for evidence-based research. One community that can benefit from using digital databases and generate evidence for policymakers is academia and researchers. Technology and digital health have thrown up a huge volume of researchable data – both from the private and the public sector. There needs to be openness and appropriate policies around data sharing and exchange. There is a lot of scope for answering critical health sector questions, but we still have not seen much data sharing, and academia-industry or academia-government partnerships where data is exchanged openly remain few and far between.

Discussant Comments

Hasbullah Thabrany

Introduction

Health is a fundamental human right.[1] People's health is both a requirement and the goal of people's welfare. A healthy body and healthy mind are necessary to produce goods and services for adults and basic requirements for students to maximise their production of high academic scores. A healthy body and mind are key to enjoying old age for the elderly or senior citizens. Throughout their pre-historic lives, human beings continued to quest for maximum healthy conditions in line with their development states. The old Greek motto of "man sana in corporate sano" still applies in the modern lives of the 21st century. Although medical sciences, technological sciences, and information technologies have reached a very high state of development, many diseases and the secret of long, healthy lives are still a mystery. States and corporations across the globe continue to quest for advanced technologies in diagnostics, treatments, and health information revolution to ensure everyone on this planet gets the healthcare they need.

Therefore, in 2015 world leaders signed a global consensus, called Sustainable Development Goals (SDGs) to ensure no one was left behind in global welfare. Among others, the Goal of 3.8 calls for Universal Health Coverage (UHC) in which everyone should get healthcare, to achieve the optimum healthy body and healthy mind, without financial hardship. The World Health Organization and the World Bank monitor the progress of achieving UHC every five years. The key indicators measured for the states of the UHC achievement are the proportion of people of any country that are free from catastrophic health spending and the proportion of people who are impoverished in accessing healthcare.

The needs and the right to healthcare

With the universal consensus that health is a fundamental human right, the United Nation declaration of Human Rights of 1948 includes the right to health and to healthcare for everyone. Many countries, explicitly and implicitly, strive to provide comprehensive health services for all citizens. Differences in incomes, country developments, and political and other cultural conditions contribute to inequities in health financing, consuming health services, and health states across the world. Low- and middle-income countries in general have higher inequities across income groups in their respective countries.

The inequity in financing and consuming health services roots to the variations of healthcare needs of the people in each country. There are three main characteristics of healthcare needs that mother nature provides.[2] The first is the uncertainty of healthcare needs. One cannot accurately predict when, where, and how severely s/he will need healthcare. The rational response to this uncertainty is to enable insurance mechanisms, broad or narrow means. The broad definition of insurance is any agency or country that bears the financial consequences and provides relatively free access to all kinds of healthcare. The narrow definition of insurance is a financial risk transfer from an individual to an insurer, both commercial or social health insurance agency. The implementation of this insurance mechanism is to solve the uncertain nature of healthcare needs that vary by politics, democratisation, income level, and historical development of the country. The second unique characteristic of healthcare is the very high information asymmetries. This characteristic creates market failure in healthcare, as the fair fully competitive market mechanism requires information symmetry.[3] Consumers (patients) are generally unable to exercise their healthcare needs and the required services or medical procedures nor the relevant prices or costs to fulfil the needs. They need consultants (medical doctors) to seek accurate information about their diseases (diagnostic procedures) and appropriate drugs or medical procedures to cover their needs. The healthcare provision is the most complex service - almost all patients are unable to have adequate information to decide which services and how much services they demand (purchase). On the other hand, the "consultants or doctors" are the ones who sell the required procedures or services. This "double role of agents" facilitates moral hazard and fraud in healthcare, making the management of healthcare both in public and private schemes difficult and costly. Even with the current information revolution, the asymmetry of information in healthcare is still huge. Information technologies, however, have successfully narrowed the gap in information to a certain degree. There are more derivative characteristics of healthcare derived from this high information asymmetry such as patient ignorance, supply-induced demand, moral hazards, etc.

The third unique characteristic is the externality of healthcare. COVID-19 has just demonstrated how high this externality is. The world has suffered an economic contraction of 3.4% of GDP or about 2 Trillion US dollars of loss by 2020.[4] In a short duration, communicable diseases clearly demonstrate negative externalities that eventually require public sector interventions of regulation, financing, and provision of healthcare. In the long-term duration, habits such as consuming cigarettes, create a high burden of non-communicable diseases (NCDs) that deteriorate, especially, public financing schemes. Much of the incidence and prevalence of NCDs correlate to people's behaviour of consuming healthy foods, healthy behaviour, and keeping healthy environments.

Cutting edge technologies

Professor Soonman Kwon briefly and comprehensively presented the A-Z innovations and digital health.[5] Little could contradict what Dr Kwon presented about the game changer in the health sector - huge developments in medical, pharmaceutical, diagnostic, and management of health services accelerated by the cutting-edge technologies of computers and information. Although traditionally the health sector has been slow in adopting mass production of services and people observe deviations in the correlation of the supply and demand in the health sector. World data demonstrates an unusual correlation between a higher doctor population and hospital bed ratio with higher healthcare per capita. One of the theories behind this is that there is very high information asymmetry leading to supply-induced demand phenomena. This is a phenomenon that is often discussed, but it is difficult to demonstrate the evidence of moral hazard or fraudulence. In this phenomenon, the development of digital technology may narrow the asymmetry, leading to better effectiveness, efficiency, and equity of healthcare for everyone.[6]

Diagnostics

The development of medical diagnostics has been going very deep after the Genome project successfully mapped out the human genome. Current new bio-discipline sciences such as genetics and bioinformatics bring many more options to prevent or cure formerly unknown diseases. Early cancer detections are now available via blood tests that were previously thought impossible.[7] Traditional physics and electronic-based diagnostic procedures still continue to develop with the help of digital technology. Currently, the development of non-invasive diagnostic imaging is claimed to be able to detect signs of depression.[8] Medical experts will continue to pursue new and complex technologies to increase human health as the intermediate goal of human welfare for all. However, the trade-off is that the costs of detecting previously unknown or undetected diseases are high. Many public sector and healthcare providers in LMICs could not procure such cutting-edge technologies. This condition concerns world leaders on the threat of equity across income countries. The use of new m-RNA technologies in developing COVID-19 vaccines is one of the breakthroughs in vaccine production. However, overall access to COVID-19 vaccination demonstrates inequity among LMICs compared to high-income countries.[9] We solve one problem, but then another problem emerges.

Treatments

The discovery of diseases and their causes continues to expand human lives and the World Health Organization revises the codes every three years. The new International Classification of Diseases version 11 (ICD-11) comprises more than 100,000 index terms, including rare diseases.[10] How can a doctor understand everything, even by just memorising the disease codes? For each disease code, there are various steps of diagnostics, medical procedures, electronic medical records of a combination of diseases and billing charges by hospitals. Not all of those diseases have been understood fully by current medical science. The search for a causal relationship between various cancers and drugs is in progress. The advance in cancer prevention and treatments have reached a high-tech treatment of targeted therapy in which the drug smartly could find cancer cells and kill them while preserving live normal cells. The average accumulated costs of the third year of breast cancer treatment using targeted therapy could reach $769,573 in the US.[11] It is more than 10 times the per capita income of 2022. Certainly, without insurance, people are going to go bankrupt to pay such medical bills.

Management

The complexity of coding diseases and their combination for various studies and management requires a special discipline of medical records. Information technology is needed to ensure proper hospital and health system management. Manual works are no more effective and efficient to handle sizable hospitals. Supply chain management ensures that a hospital provides medical equipment, diagnostic reagents, specialists, and other management support even for only several cases a year. The economic principle of scale leads to lower unit costs that are badly suited to hospital services. Networking hospitals to allow rare cases could be referred properly and adequate funding is available for patients with Guillian Bare disease, for example, pushing a health care system adopting digital technology for proper response. So, there are many cases in which digital technologies allow complex healthcare systems in achieving the high welfare state of a population in advanced countries. Yet, many governments and managers in LMICs are struggling to provide basic healthcare for all people.

The most critical and important issue of the health system is to ensure everyone gets the healthcare s/he needs, regardless of his/her income, social status, economic status, religious and political affiliation. Digital technology could facilitate people living in remote areas to receive at least consultation, as the first contact or primary care, to further follow up with more advanced medical care as they need. The terms of need (not the demand) is the key indicator that a government should measure to ensure no one is left behind in the development of the health sector as the key path to a prosperous community. Integrating all aspects of data and information under a single information system, such as Satu Sehat or a single national health database being developed in Indonesia, becomes one of the challenges of LMICs.

Challenges to Universal Health Coverage

As mentioned earlier, SDG 3.8 stipulates UHC by 2030 and all LMIC leaders shall strive to achieve this common goal for a prosperous world. COVID-19 can be seen as the impetus to increase commitment for UHC. Although the EU warned that healthcare spending may fall in 2023 given high inflation and slower economic growth, a difficult decision must be taken. Evidence shows that digitalisation provided new opportunities in the US, Europe, and China, though with stricter regulation. New business mechanisms to deal with the volume and prices of drugs and medical supplies are happening in India and elsewhere.[12] Yet, the following three main gaps must be anticipated to disrupt social cohesion due to high gaps between communities within a country.

High information asymmetry

The high gap between producers, providers, or suppliers of healthcare with the population intended to be served will continue to occur as more advanced technologies are adopted in LMICs. Less educated people have a higher probability of having serious or rare diseases and are unable to understand the opportunity of curing or controlling the diseases they are suffering from. Although fancy and more sophisticated gadgets could provide better, easier, and faster access to overwhelming health information, the capacity of those people may not be good to absorb the benefit of the information provided on the cloud. They may be objects of fabricated information, for example, fake or ineffective drugs sold at high prices. Cross-country trade of seemingly miracle drugs or medical interventions could easily make victims of less informed persons.

A high gap in financing

As discussed above, innovative technology may produce spectacular and magical products but with very high costs, particularly for rare, severe, or life-threatening diseases. Desperate patients may blindly purchase any costly drugs or procedures offered with good but unproven effectiveness, especially in LMICs with a lack of public funding that inadequately covers comprehensive benefits. Even among subnational regions within a country, variations of the equitable health financing schemes

Figure 1: Disparities in perceived and actual health spending as % GDP across selected countries, 2016.

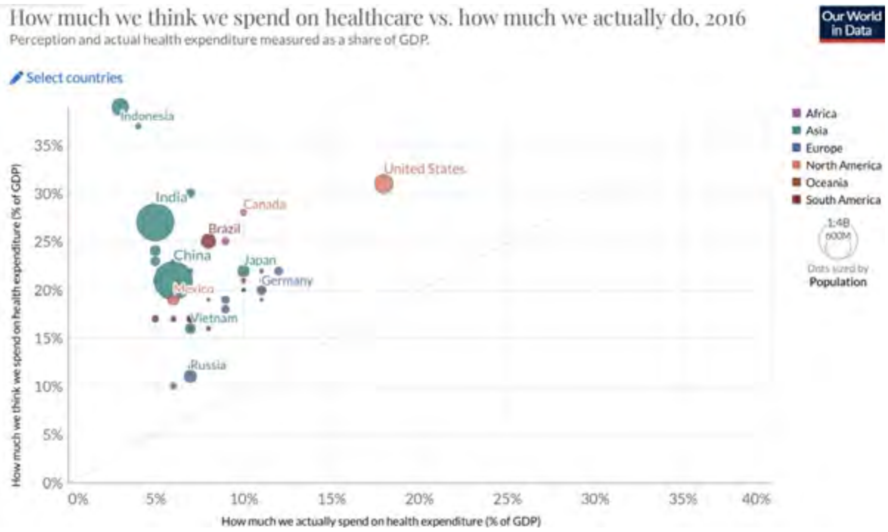


Figure 2: Disparities in per capita health expenditures and healthy life expectancy across selected countries, 2015-2019.

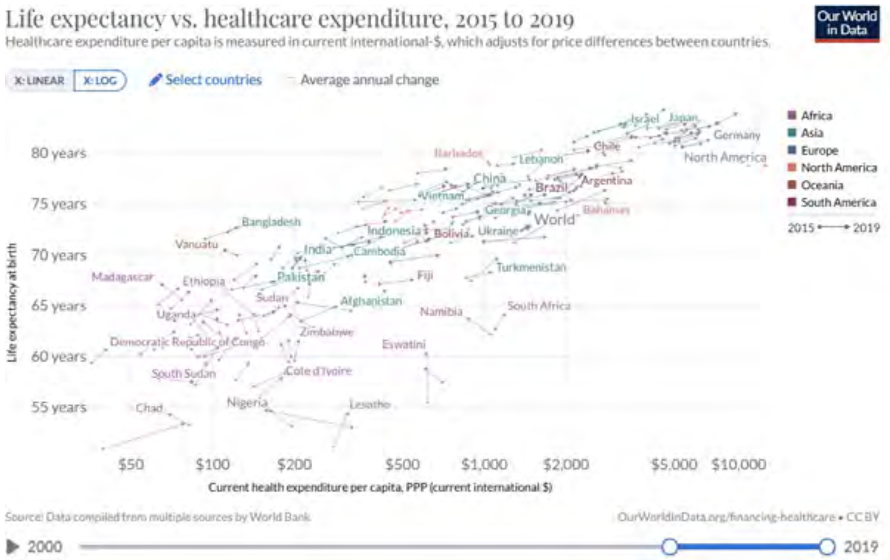
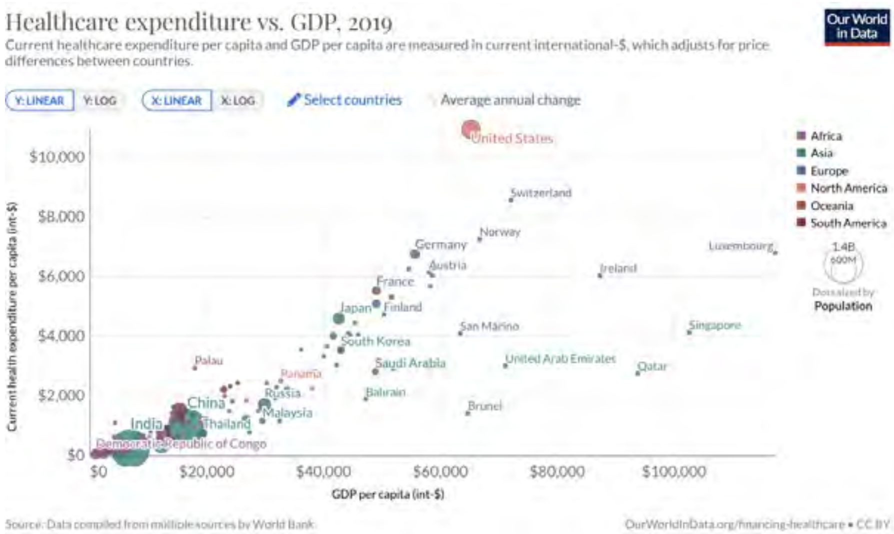


Figure 3: Disparities in per capita health expenditures and per capita GDP in Int$ across selected countries, 2019.



may create a higher gap in financing essential healthcare. Evidence of the world indicates huge gaps in health expenditures perceived by people and actually spent in some countries (Figure 1).[13] This misperception of health spending can be an indication that people's perception of their burden to pay for healthcare was high, above the actual spending. The actual health spending as a percentage of the country's GDP demonstrates, among others, variation in the perceived importance of healthcare in people's lives.

Figure 2 demonstrates that the gap in health financing across the selected countries in 2016[14] varied significantly due to affordability, the use of innovative technologies, public financing mechanisms, and other behavioural impacts of the people and healthcare professionals. The outcomes of health spending can be measured among others with healthy life expectancies showing diminishing marginal benefits. Above Int$ 2,000 per capita per year health spending, the marginal impact of health spending on healthy life expectancy is close to zero. This figure demonstrates how gaps in health spending resulted in gaps in healthy life expectancies across studied countries.[15] For further analysis, using an artificial intelligence analysis we could provide valuable lessons from some countries to other countries to accelerate equitable and healthy lives across LIMCs.

In Figure 3, since the last several decades, gaps in health financing across low- and middle-income countries continue to rise. Most LMICs are struggling to increase health spending per capita, to achieve higher welfare and higher healthy life expectancy; but until recently countries with GDP per capita under Int$ 2,000 hardly spent more than Int$ 2,000 per capita per year. In contrast, the US is mostly criticised as the country with the least inefficient health system and yet continues to spend more than Int$ 10,000 per capita per year. This cross-country comparison of various health technologies, health data, and health spending is increasingly available at a quick rate, allowing LMICs to learn lessons from more advanced countries.

A high gap in access

Everywhere in the world, access to essential modern healthcare is generally unequal to people with different incomes, education, place of residence and some cultural barriers. Some people intentionally do not want to choose modern medicines because of various reasons. Some people cannot afford modern healthcare in countries where public health insurance or national health service is not provided by the government. Other people may have the legal right to essential healthcare but they have financial difficulties in getting access to healthcare providers because they live far away from the nearest provider and no transport allowance is provided by the government. Generally, the UHC concept is striving to ensure that everyone on earth should get the healthcare s/he needs, as determined by the medical knowledge, without financial hardship in consuming such needs. Developed countries generally already have a system in place that minimises catastrophic health spending. The recent joint monitoring of WHO and the World Bank on financial protection estimated that in 2017, between 1.4 to 1.9 billion people in the world were identified as having impoverishing health spending.[16] This is a big financial burden for about a quarter of the world's population, most of whom are in LMICs, suffering from the double burden of poverty and a lack of access to essential healthcare that may put more burden on the low-income people.

The Roles of the Public Sector

Since generally there is market failure in healthcare, all governments in LMICs should not overestimate the growing market of healthcare, drugs and medical supplies. As pointed out by Professor Kwon, the government must take an active role in protecting the people's right to healthcare. The advancement of innovation in medical and pharmaceutical technologies should be properly managed to ensure access for everyone to essential healthcare. Lessons from the COVID-19 pandemic in which all world leaders were working hand-in-hand with proper coordination by the WHO proved that all countries benefitted from the concerted efforts. Now, the COVID-19 pandemic practically has ended. Countries, especially LMICs, may turn back to business as usual or may be trapped in market mechanisms to meet healthcare needs for all. The public investment health sector, both the financing side and delivery side, in LMICs, should be strengthened. More advanced countries should assist with the capacity of human resources and the production of essential drugs, medical supplies, and other health consumables for all.

Mix Financing as an Innovation for UHC

Although in general, market mechanisms fail to achieve the goals of a health system, which are effectiveness, equity, efficiency, and sustainability; it does not mean that trading health products are prohibited. Thousands of diseases require tens of thousands of supplies and services which have never been wholly fulfilled by the public financing mechanism. In addition, some higher-income groups in any country have the right to choose their own preferences with or without supplemental insurance. They may opt out of their right to public financing and pay out of their pockets or purchase private supplemental health insurance. For some low-cost drugs or supplies, they may purchase out of their pocket without any harm to the household economy. Some other private channels such as within and cross-country charities or corporate social responsibility funds could be properly harmonised.

In the end, all of us should be committed to equitable access to essential healthcare, regardless of how advanced the technologies and high-cost individual care are. Digital technology must be properly used to narrow the gaps in information asymmetry, healthcare finance, and access to quality healthcare. Let's keep our fingers crossed.

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THARMAN SHANMUGARATNAM
VIKRAM S. MEHTA


YOON-JE CHO
BILAHARI KAUSIKAN


SAMARAJIVA
SHYAM SARAN
DANNY QUAH
P.S. RAGHAVAN
MUHAMAD CHATIB BASRI


CSEP
INDIA IN ASIA

SESSION 3

Trade Integration and Global Value Chains in the Asia Pacific Region

SESSION NOTE

Rajesh Chadha

Current Scenario

COVID-19 impacted world economic growth, driving it to a low of 3.1% in 2020. The growth recovered in 2021 to 6.1% and was projected at 4.4% in 2022. However, the Russia–Ukraine war has dampened the global momentum to a likely 3.6% growth in 2022 (IMF, 2022a).

Asia and the Pacific economies had a strong growth rebound at 6.3% in 2021, with continued momentum in the first half of 2022. However, the region is expected to decelerate and post growth of 4.0% in 2022 before jumping back to 4.3% in 2023 (IMF, 2022b). The region faces three major headwinds. First, major central banks are implementing measures of financial tightening to control inflation. Second, the continuing Russia–Ukraine war is leading to a significant slowdown in European markets, resulting in lower import demand from Asia and the Pacific. Third, China's COVID-19 lockdowns will likely lead to its second-lowest growth since 1977.

Trade has been an engine of growth for Asia-Pacific and the rest of the world. However, the US–China trade war, COVID-19, and Russia–Ukraine war have led to the deceleration of the growth-boosting trade engine. Strategic competition and national security issues have taken precedence over the growth efficiencies induced by free global trade.

Rising trade restrictions will likely lead to trade fragmentation across separate trading blocs, resulting in the inefficient allocation of productive resources and adverse macroeconomic outcomes.

Asia's Economic Transformation

The Asia-Pacific region was very poor in the mid-1960s. However, since then, there has been a major economic transformation, differing across countries, and the Asia-Pacific has become a dynamic growth engine for the world economy. There have been remarkable developments incorporating significant improvements in economic growth, poverty reduction, health, education, and structural transformation. A primarily rural and low-income region in the 1960s has been transformed into a global manufacturing centre with expanding exports, urban growth, a burgeoning middle class, and a skilled labour force. As a result, developing Asia's per capita gross domestic product (GDP) growth accelerated from 2.2% per annum in the 1960s to 5.9% in 2000–2019 (ADB, 2020).

Trade liberalisation augments overall economic productivity since more efficient firms can endure freer market competition (Melitz, 2003). Many Asian economies have benefited from trade liberalisation, first through inter-industry and then intra-industry trade, and from inflows of foreign direct investment (FDI)–infused knowledge of new technologies and management into the domestic production sectors. Many countries have undertaken deep domestic structural reforms to accelerate market competition and product innovation. While many Asian countries have adopted targeted industrial policies to support their industrialisation, others have established outward-oriented policies, emphasising an exports push to earn the foreign exchange needed to support imports of raw materials and finished goods, including capital goods.

Asian economies have experienced three types of external trade policy regimes. First, many started with import substitution policies to conserve foreign exchange. Later, some countries became outward-oriented and started exporting. Gradually, integration with external trade deepened for countries engaging in global value chains (GVCs), primarily through regional trade agreements. However, the speed of evolution and specific external trade policies have varied across countries.

The newly industrialised economies (NIEs)—Hong Kong, Singapore, South Korea, and Taiwan—experimented with import substitution strategies in the 1960s but without much success. Later, these countries moved to export promotion strategies, starting in the mid to late 1960s. Then, China adopted the special economic zones (SEZ) route to promote its exports after opening its economy in 1978.

Starting in the 2000s, the configuration of global trade underwent a major transformation. China joined the World Trade Organization (WTO) in 2001, import tariffs declined in many countries, and free trade agreements proliferated worldwide. Export-oriented trade reforms increased competition and FDI inflows in many Asian countries. In addition, many regional and multinational firms invested in outsourcing production to Asia, thus strengthening regional and global value chains.

Industrial Policy

Alexander Gerschenkron (1962) provides the intellectual underpinning of government intervention in latecomer Asian economies. There are two basic reasons: (i) poor countries can develop by adopting the production processes invented by developed countries, and (ii) government interventions can facilitate growth in poorer countries. The purpose of industrial policy targeting certain sectors was more than just to address market failures. The policy was used to induce short-term measures to realise long-term gains.

There has been intense debate around the merits of industrial policy in boosting exports. Many Asian countries have supported their industrialisation through targeted industrial policies, using the instruments of tariffs, preferential credits, subsidies, and tax incentives. However, the impact of these policies has differed across their types and countries. A targeted industrial approach, if used judiciously, may be useful in the early stages of development. However, in many cases, such policies tend to lead to unfair competition, inefficiencies, and rent-seeking. An industrial policy will likely succeed if it promotes competition and is transparent, with clearly defined policy targets and sunset clauses (ADB, 2020).

A central explanation of Asia's fast growth starting in the mid-20th century is that many Asian countries, the East Asian ones in particular, started transitioning from agriculture to manufacturing. Increasing returns to scale is a key feature of the manufacturing sector, which leads to higher factor productivity and economic growth. The countries found opportunities to export, thus entering the phases of export-led growth, enabling them to pay for their import requirements. Manufacturing and exports went hand-in-hand in explaining Asia's development (Felipe, 2018a). State initiatives played a fundamental role in the East Asian economies achieving their development objectives. Many countries followed prudent fiscal and monetary policies to ensure macroeconomic and financial stability. Other facilitating factors included high savings and investment rates, and openness to international trade, investments, and technology transfers. Simultaneously, these nations upgraded their export-facilitating structures, creating a competitive advantage through targeted industrial promotion and infrastructural development. Some Asian countries ensured that the export-led industrialisation strategy succeeded. While some governmental interventions were distortive, others were efficient. The goal of many East Asian countries was to catch up with the advanced countries (Felipe, 2018).

The debate on the efficacy of industrial policy in East Asia continues. While some regard the success of government interventionist policy as key to the East Asian success stories, others believe these economies used neutral incentive policies between domestic and foreign markets.

Global Value Chains

There has been remarkable growth in international trade and GVCs since the early 1990s. This has led to worldwide growth and development. GVCs have led to knowledge and technology transfer from developed nations to developing countries. Firms across developing countries specialise in different stages of value chains, thus enhancing their efficiency and productivity. The fragmentation of production across countries and inter-firm connections led to gains in productivity. Robust firm-to-firm relationships enabled technology and knowledge transfer. As a result, the poorer countries grew faster, catching up with richer countries. About half the world trade is now routed through GVCs. The growth-boosting benefits of GVCs can create better jobs and reduce poverty in developing countries, provided these countries undertake deeper domestic reforms and predictable trade policies (World Bank, 2020).

Indeed, Asia went through a major transformation from inter-industry to intra-industry trade. While termed as global, many GVCs are regional, with three main centres in North America, Europe, and East Asia. However, the East Asian GVCs have undergone the most rapid development in building up manufacturing capacity, and the region has been termed "Factory Asia" (UNIDO, 2018). Accordingly, most Asian economies entered the era of GVCs, the third evolutionary stage of Asia's international economic policy regime. GVCs were enabled by declining cross-border transportation costs and advances in trade facilitation and efficient logistics. Starting with the four NIEs, the ASEAN, and China, countries including Bangladesh and Vietnam benefited from integrating with GVCs through rising productivity and incomes.

The GVCs are centred around the role played by multinational enterprises (MNEs). MNEs adopt the role of buyers or producers. Buyer MNEs coordinate with many producers, providing the design and marketing functions of branding and retailing. For example, large wholesalers coordinate the supplies across retailers and distributors in the garments sector. Although the entry cost for garment manufacturing companies may be low, the wholesaler wields power and value creation. Meanwhile, producer MNEs control the GVCs by locating their manufacturing facilities worldwide and coordinating with various suppliers, who provide inputs for production. These MNEs face high entry costs and are characterised by significant economies of scale and technological sophistication of the output. MNEs wield their governing power through the controlling arm of FDI. Domestic investors and national policymakers need to know how to leverage investment flows better to encourage integration with GVCs within their geographies (Crescenzi & Harman, 2022).

Are there GVCs in the services sectors? There has been an ongoing discussion on the "de-industrialisation" or "servicification" of economies, distinguishing manufacturing from the service sector. Manufacturing and services are intertwined with GVCs. Goods are produced using services, and services are delivered using goods. There is no clear line between manufacturing and service activities. Hence it is not easy to disentangle manufacturing from service activities. The expert group at the Organisation for Economic Co-operation and Development (OECD) has been working on extended supply and use tables to add new dimensions to national accounts and disaggregate output data according to ownership, the size of firms, or a firm's export status. Initiatives such as the World Input-Output Database (WIOD; University of Groningen, n.d.) and the OECD-WTO Trade in Value-added (TiVA; OECD, n.d.) provide new tools for analysing GVCs through the creation of a global input-output matrix. However, disaggregated input-output statistics are not available for all countries worldwide (ADB, 2019).

Foreign Direct Investment

The Plaza Accord in 1985 resulted in a sharp appreciation of the Japanese yen and accelerated Japan's FDI to East Asia. As a result, Japanese multinational corporations drove regional economic integration by investing in the region. Such integration increased until it was disrupted by the 1997–1998 Asian financial crisis. After that, the inflows recovered rapidly until the 2008–2009 global financial crisis. The growth remained stable after that. Overall, inward FDI to Asia increased from 10% of the GDP in 1980 to 28% in 2017. Asia's share of global FDI inflows likewise increased from 14% to 35% (ADB, 2020).

Developing Asia became a natural destination for FDIs because of (i) relatively low labour costs (particularly during initial phases of industrial development), (ii) an improving business climate, and (iii) large market sizes. Furthermore, many Asian governments introduced policies on export promotion, current and capital account liberalisation, SEZs, and tax incentives, which all play important roles in attracting FDI to developing Asia. In addition, the development of GVCs and regional production networks, motivated by cost reductions in outsourcing and advances in information and communications technology, boosted rapid FDI growth.

Early FDI inflows focused on agriculture and mining, followed by labour-intensive light industries and heavy and high-technology manufacturing and services. However, as Asian incomes rose, its attractiveness as an FDI destination increasingly shifted toward the large and growing domestic consumption market. While the FDIs in the earlier years came in mainly from Japan, the US, and Europe, the last two decades have seen major shares being contributed by Hong Kong, China, and Singapore.

Preferential Trade Agreements

The Asia-Pacific region accounts for about half of the preferential trade agreements (PTAs) worldwide. As of November 2021, it has 195 operational PTAs and 19 signed and pending ratifications. Another 97 PTAs, with at least one participant from the Asia-Pacific region, are under negotiation (ESCAP, 2022).

The COVID-19 pandemic has been a major blocker of many under-negotiation PTAs, as many countries have struggled with economic contraction and shifted their attention to the health emergency. As a result, only 4 PTAs were signed in 2021 (till November), compared to 13 in 2019 and 11 in 2020.

The Regional Comprehensive Economic Partnership (RCEP) agreement, signed in November 2020, came into force in January 2022 (ADB, 2022). Seven of the RCEP member countries—Australia, Brunei Darussalam, Japan, Malaysia, New Zealand, Singapore, and Vietnam—are also members of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). China has also applied to join CPTPP.

Most agreements signed since 2020 are deeper and cover areas beyond goods trade, including e-commerce, services, and climate action, which lie at the top of the new agenda items for PTA negotiations. Some of the recent trade negotiations focus on digital trade regulations. Digital trade agreements (DTAs), signed in and after 2019, are the new generation of trade agreements. Five DTAs involving Asia-Pacific countries have been signed, with Singapore taking the lead. In addition, the ASEAN countries have begun discussing the issues of North-South DTAs. However, there is a need to avoid creating divergent bilateral rules lest they lead to a "digital noodle bowl". On average, about half of regional trade is facilitated through PTAs. The shares vary across countries based on diverse policy interests and negotiating capacities. The least developed countries are generally at the receiving end. These countries may face significant challenges in competing with their major PTA counterparts. There are lessons to be learnt from the COVID-19 pandemic–induced supply chain disruptions. Consequently, there is a need for deeper trade agreements to ensure that supply chains are resilient.

India in Asia

China emerged as the hub and leader of global supply chains during the 1990s and the early 2000s. However, the strength and intensity of this narrative were somewhat dampened after the 2008 North Atlantic Financial Crisis (NAFC). Further, more recently, the US–China trade war since 2018, the COVID-19 pandemic, and the Russia–Ukraine war have impacted the smooth sailing of GVCs. As a result, many countries worldwide are considering diversifying their dependence on China to "China Plus One". The candidate Asian countries include Thailand, Malaysia, India, Vietnam, Indonesia, the Philippines, and Bangladesh (Basu & Ray, 2021). Can India become the first-choice country among these? The Government of India is already seized on this matter (Rajya Sabha, 2022).

India needs to align its policies to create an accelerated policy evolution to become one of the major Asian GVC participants (Batra, 2022). It is eminently clear that the entire supply chain for all goods and services cannot be built domestically. Sectors with strong backward linkages provide labour-intensive employment and hence are the first to be considered. Therefore, SEZs must be reinvigorated. In addition, India must endeavour to enter deeper bilateral and regional goods and services trade agreements. Most importantly, unilateral liberalisation is one of the major vehicles of trade integration and efficient allocation of resources in the economy. In-depth studies are required to understand the nominal and effective protection granted to multiple production sectors.

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RAKESH MOHAN
MUHAMAD CHATIB BASRI
ROHAN SAMARAJIVA
SHYAM SARAN
DANNY QUAH

PAPER 1

Asia's Export Success: Industrial Growth Policy or Free Trade Led?

Kirida Bhaopichitr

Export-led manufacturing has been a major driver of economic growth in Asia since the 1980s, particularly in the East and Southeast Asian economies (Stiglitz & Yusuf, 2001). The evolution from import substitution to export promotion to global value chain integration has enabled these countries to increase their production and productivity, generate foreign exchange earnings, and create jobs, in addition to providing other benefits.

A judicious combination of industrial policy and export promotion is needed to respond to the challenges posed by the post-pandemic global macroeconomy, digital revolution, requirements for low carbon emissions, and changing geopolitical landscape. This paper will discuss the post-pandemic global landscape and the industrial development and export promotion policies that could enable Asia to continue its gains from trade while minimising the adverse impacts of global headwinds. They include the promotion of macroeconomic stability, resilient regional supply chains, low-carbon industries, and services trade through digitalisation.

Asia's Industrial Policy and Export Promotion Pre-COVID

Industrial policy and export promotion are two complementary approaches that have promoted export-led manufacturing in East Asia since the 1980s. The industrial policy involves government interventions in the economy to promote industrial development, innovation, and competitiveness. It can include measures such as subsidies, tax incentives, infrastructure development, streamlined regulations and red tape, skills development, and research and development support. Export promotion involves policies that aim to increase exports by improving access to foreign markets, reducing trade barriers, establishing a stable macroeconomic environment, and providing support to exporters. Both approaches have been used together to promote export-led manufacturing in Asia (Stiglitz & Yusuf, 2001).

In this scenario, one strategy has involved focussing on developing high-value-added manufacturing industries that have the potential to compete in global markets. This can involve targeted support for industries such as electronics, aerospace, biotechnology, and renewable energy. For example, the South Korean government invested heavily in developing its semiconductor industry and has now become a global leader in the industry. Their approach involved a combination of subsidies, tax incentives, and targeted research and development support. Similarly, the Chinese government has focussed on developing its renewable energy industry through subsidies, tax incentives, and infrastructure development and has become a major global player in solar and wind energy.

Another way of combining industrial policy and export promotion is to focus on upgrading the technological capabilities of domestic firms. This could be done by providing support for research and development, technology transfer, and training programmes. For example, the Taiwanese government has established a network of science parks that provide support for technology-intensive firms. This has helped to upgrade the technological capabilities of domestic firms and increase their competitiveness in global markets.

Furthermore, a judicious combination of industrial policy and export promotion would involve fostering cooperation between domestic firms and foreign firms. This can be done through joint ventures, technology transfer agreements, and supply chain integration. For example, the Japanese government has encouraged Japanese firms to form joint ventures with foreign firms to gain access to new markets and technologies. This has helped to increase the competitiveness of Japanese firms in global markets.

The Post-COVID World

The post-pandemic world is characterised by a new global economic cycle, a changing geopolitical landscape, a move towards low carbon emissions, and accelerated digitalisation, all of which require that new industrial and export promotion strategies are deployed.

The New Global Economic Cycle

Since 2022, the global economy has entered a new economic cycle with the COVID-19 pandemic subsiding and the Ukraine–Russia war breaking out. Inflation has risen, and prices are set to remain high as most commodity prices, including energy, will remain above their pre-COVID levels. As a result, interest rates have been raised by most countries to tame inflation and reduce capital outflows; the United States (US) aggressively hiked its policy rate by more than four percentage points in 2022. Interest rates are to remain higher than their pre-COVID level at least until next year. Currencies compared to the US dollar will also remain volatile as it strengthens with each episode of rate hikes and weakens when markets believe that rate hikes are slowing down. Moreover, large economies, particularly those of the US and the European Union (EU), will enter a recession this year while China re-opens to the global market after abandoning its Zero COVID Policy (International Monetary Fund, 2023).

The Changing Geopolitical Landscape

The ongoing geopolitical tensions between Ukraine and Russia and between the US and China present many risks and uncertainties, prompting the reconfiguration of many global markets as firms try to mitigate those risks. Such a reconfiguration arises in the case of the global energy market, particularly natural gas, and the global production supply chains as countries pursue more onshoring and friend-shoring. Technology rivalry between the US and China will also split global technology into two camps, which could lead to disruptions in the supply of related products such as semiconductors, roll-outs of two separate telecommunication systems (e.g., 6G), and opposing regulations on the use of technology and data between the EU and China (TDRI Economic Intelligence Service, 2022). These will pose additional costs and risks to the emerging economies of Asia that are the users of technology.

The Low-Carbon World

Although the recent sharp rise in energy prices has led to the re-adoption of fossil fuels, particularly coal, in some countries, the efforts to reduce carbon and other greenhouse gas emissions through the development of clean energy and the adoption of circular and bio-based economies are ongoing. Countries and firms, particularly from developed countries, are still committed to their net-zero carbon targets (United Nations, COP26, n.d.). As a result, their supply chains are also required to reduce their carbon footprints. Moreover, the EU's Carbon Border Adjustment Mechanism (CBAM), which takes effect in 2027, will levy high tariffs on imported goods whose carbon footprints are above allowed levels (World Economic Forum, 2022). These will affect supply chain integration as well as trade with the EU.

Accelerated Digitalisation

The COVID-19 pandemic has accelerated digitalisation efforts in Asia, with many businesses and individuals shifting to online platforms and digital services to adapt to the new normal (Dabla-Norris et al., 2023). Countries such as China, Japan, and South Korea have been making significant investments in technology and digital infrastructure, particularly in 5G networks and data centres. During the COVID-19 pandemic of 2020–2022, there was accelerated adoption of digital services in almost all sectors, including e-commerce, e-entertainment, remote work, online education, telemedicine, and remote socialisation.

Sustaining Asia's Export Success in the Post-COVID World

In the post-COVID world, industrial policy and export promotion would need to take into account the uncertainties and volatilities that arise from both the global macroeconomy and the reconfigurations of different markets as a result of the changing geopolitical landscape to ensure a resilient supply chain going forward. Nevertheless, they must also consider the opportunities and challenges that arise from the global move towards low-carbon production and from digitalisation, which promotes services trade. Below is a discussion of the four important elements to consider in designing industrial and export promotion policies post-COVID.

Maintaining Macroeconomic Stability

In the current volatile and uncertain macroeconomic environment, maintaining macroeconomic stability is essential for export promotion as it creates an enabling environment for exporters to compete effectively in the global market—it provides predictability, exchange rate stability, inflation control, and a conducive investment climate, which are all important factors for promoting exports.

Many countries are entering recession in the foreseeable future as prices have sharply risen since the Ukraine–Russia war last year and interest rates have been hiked to cope with inflation. Although commodity prices have peaked, they will remain higher than their pre-COVID levels, and the IMF has forecast that global inflation will be at around 7% this year (International Monetary Fund, 2023). Following the US Federal Reserve fund rate hikes since last year to tame inflation, interest rates around the world have also risen after being kept low for more than a decade. Additionally, with the continued strengthening of the US dollar value since last year, currencies in Asia have weakened against the US dollar (Consensus Economics Inc., 2023). While this is beneficial for exporters, it raises the prices of imports in local currency terms and raises inflation.

Exporters are sensitive to exchange rate fluctuations since they often price their goods in foreign currencies. Macroeconomic stability, particularly in the exchange rate, provides exporters with the assurance that the prices of their products will remain relatively stable over time, thus reducing their exchange rate risk.

Inflation control and gradual changes in loan rates are important for export competitiveness. High inflation rates and interest rates make exports more expensive, reducing their competitiveness in the global market. Inflation control also helps to maintain the purchasing power of the currency, making it more attractive for foreign buyers.

Macroeconomic stability also improves the overall investment climate, which in turn attracts foreign investors and creates opportunities for local exporters. A stable macroeconomic environment also reduces the risk of capital flight, which can destabilise the economy and undermine export promotion efforts.

Ensuring Resilient Regional Supply Chains Amidst Geopolitical Tensions

Since 2000, supply chain integration in Southeast Asia has progressed significantly. Intra-regional trade in the Association of Southeast Asian Nations

(ASEAN) rose fourfold from 2002 to 2021, reaching over US$700 billion (CEIC, 2023). These developments have created new opportunities for businesses to participate in regional supply chains and have helped to promote growth and development in the region. Integration was driven by factors such as increased trade liberalisation, advances in digital technology, infrastructure development, and changes in global manufacturing patterns.

The ASEAN launched the ASEAN Economic Community (AEC) in 2015, which aims to promote economic integration and regional cooperation among its member countries. The AEC has helped to reduce barriers to trade and investment within Southeast Asia, making it easier for businesses to operate across borders. Southeast Asian countries have signed several trade agreements in recent years, both with each other and with external partners. For example, the Regional Comprehensive Economic Partnership (RCEP), which entered into force in January 2022, is a free trade agreement (FTA) between ASEAN and its five trading partners: China, Japan, South Korea, Australia, and New Zealand. The RCEP aims to reduce tariffs and other barriers to trade, making it easier for businesses to operate across borders. Seven of the RCEP members are also members of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), of which four are ASEAN members—Brunei Darussalam, Malaysia, Singapore, and Vietnam.

Southeast Asian countries have invested heavily in infrastructure development, including the construction of new ports, airports, and highways. This has helped to improve connectivity within the region and reduce transportation costs, making it easier for businesses to move goods across borders (Association of Southeast Asian Nations, n.d.).

As geopolitical tensions escalate, manufacturing supply chains have been reconfigured, with an increase in the practices of onshoring and friend-shoring, including the relocation of production from China to other countries. Most of the relocation has been that of production for exports.

Southeast Asia has become an increasingly important hub for global supply chains. Countries such as Vietnam and Thailand have attracted significant foreign investment in recent years, with many multinational companies continuing to establish manufacturing operations in the region. Foreign direct investment inflows to ASEAN reached a record high of US$174 billion in 2021 (Biswas, 2022). This was made possible by the industrial and export promotion policies of these countries, which included investment incentives, friendly investment regulations, regional trade agreements, and infrastructure services that included clean energy and digital connectivity.

Nevertheless, Asian regional supply chains will also need to minimise the possible supply disruptions that could arise as a result of geopolitical tensions, especially those related to energy supply and high-technology products. The recent global semiconductor shortage is an illustration of supply disruptions arising from the technology war between the US and China in which China's semiconductor productions had to halt because the US banned the export of semiconductor parts to China.

Going forward, Asia must tactfully balance relationships on both sides of geopolitical tensions to ensure that its supply chain will not be disrupted. These include (1) forming more and deeper FTAs and collaborations with countries on both sides as well as strengthening the supply chains within Asia ex-China, especially for semiconductors and other technology products, and (2) accelerating the production of renewable energy in every country.

Moving Towards Green and Low Carbon Production and Trade

Green products with low carbon footprints are the new global trend. There is a higher demand for them worldwide, and they do not face barriers to trade, such as from the European carbon import tariff known as the CBAM, which will come into effect in 2027 (World Economic Forum, 2022). Moreover, an increasing number of multinational firms today have already set their carbon reduction targets (MSCI, 2022). Hence, their investment decisions are based on not only the operations cost of the destinations but also the availability of clean energy and facilities that support a circular economy, both for themselves and their suppliers.

Industrial and export promotion policies in several Southeast Asian countries are conducive to green industries. This includes incentives to promote the production and export of products with low carbon footprints such as electrical vehicles and bio-products, promotion of a circular economy, development of clean/renewable energy by both the public and private sectors, and encouraging listed companies to disclose their environmental, social, and corporate governance (ESG) practices and results. An example of a country that has adopted all these policies is Thailand.

Green industries must be promoted at all levels, from large companies to small- and medium-sized enterprises (SMEs). A low carbon footprint can only be achieved if the raw materials and intermediate goods used in production also have a low carbon footprint. SMEs are an integral part of the supply chain both domestically and regionally in Southeast Asia. Hence, raising awareness among SMEs and providing know-how and support to reduce their carbon footprint is important in the move towards greener production.

Reducing the carbon footprint in electricity generation is a priority as electricity is a large component not only in manufacturing but also for digital businesses such as data centres. Replacing fossil fuels having high carbon emissions (e.g., coal) with ones having lower carbon emissions (e.g., natural gas) is one option. However, transitioning towards clean energy, such as solar, wind, thermal, or biomass, can significantly reduce the carbon footprints of businesses.

Reduction of carbon footprints for businesses can also be achieved through the promotion of a circular economy that generates zero waste. Measures to accomplish this include water recycling facilities in industrial estates or the use of agricultural waste from agro-industries to generate biogas for electricity or heating. Thus, industrial policies that promote a circular economy would also support investments and exports.

Increasing Trade Through Digitalisation

Digital technology has transformed supply chain integration and trade in Southeast Asia, enabling businesses to track inventory, manage logistics, and collaborate with suppliers more efficiently. E-commerce platforms have also made it easier for businesses to sell their products and services across borders, creating new opportunities for SMEs to participate in regional supply chains (Dabla-Norris et al., 2023).

Digital technology has also promoted trade in services, enabling businesses to provide services remotely and allowing customers to access services from anywhere in the world. E-commerce platforms, data centres, cloud computing, telemedicine, and tele-education have enabled businesses to expand their services internationally and reach new customers. Knowledge-intensive services such as research and development, engineering, and consulting have become increasingly important in services trade. These services require high levels of expertise and are often traded between businesses in different countries. Moreover, the services trade has a much lower carbon footprint than manufacturing.

Services trade has become increasingly important in the global economy, with many countries focussing on expanding their service sectors and promoting international trade in services. The share of services trade in global trade has been steadily increasing, with services now accounting for more than one-third of global trade. Services trade has grown faster than the trade in goods in recent years, with cross-border trade in services increasing by an average of 6% per year between 2010 and 2019 (United Nations Conference on Trade and Development, 2023).

Services trade has become an important source of economic growth for many developing countries, particularly in Asia. Countries such as India and the Philippines have become major providers of services, such as information technology and business process outsourcing, creating new jobs and driving economic growth. Increased attention to services in trade agreements, digitalisation, and the growth of knowledge-intensive services have all contributed to the expansion of services trade (Asian Development Bank, 2021).

East Asia has focused attention on services in trade agreements, which seek to liberalise trade in services and reduce barriers to entry. The Digital Trade Agreements (DTAs), signed in and after 2019, are the new generation of trade agreements. Asia–Pacific countries have signed five DTAs, led by Singapore. In addition, the ASEAN countries have begun to discuss the issues of North–South DTAs.

However, raising services trade requires more than sufficient digital infrastructure. It requires a combination of policy measures that promote liberalisation, a non-dissimilatory regulatory framework, trade agreements, digitalisation, education and training, and support for SMEs.

Liberalise trade in services: Countries reduce barriers to trade in services by liberalising their service sectors and reducing restrictions on foreign service providers. This can include measures such as removing licensing requirements, reducing regulatory barriers, and allowing foreign firms to establish a presence in the country.

Improve regulatory frameworks: Countries improve their regulatory frameworks to ensure that they are transparent, predictable, and non-discriminatory. This can help to build trust with foreign service providers and encourage them to invest in the country.

Negotiate trade agreements: Countries negotiate trade agreements that include provisions for liberalising trade in services. These agreements can help to reduce barriers to trade and provide a framework for resolving disputes.

Promote digitalisation: Digital technologies have transformed services trade, enabling businesses to provide services remotely and reach new customers. Countries can promote the adoption of digital technologies by investing in digital infrastructure, supporting the development of e-commerce platforms, and facilitating the cross-border flow of data.

Invest in education and training: Services trade often involves knowledge-intensive services that require high levels of expertise. Countries can invest in education and training programmes to develop a skilled workforce that can provide these services and compete in the global market.

Support SMEs: SMEs are an important part of the service sector, but they may face challenges in accessing international markets. Countries can provide support to SMEs by offering training, financing, and other resources to help them expand their services internationally. By taking these steps, countries in Asia create a more open and competitive environment for services trade, which can drive economic growth and create new opportunities for businesses, including manufacturing.

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Discussant Comments

Dushni Weerkoon

1. Given that industrial policy is back in fashion, the paper is very timely in examining the role of policy interventions in promoting industrial exports and economic growth and raises some important policy questions. The observations are confined to three issues given the time constraints.

2. The first is whether the arguments for a modern industrial policy are based on qualitatively different criteria from the old-style industrial policy that typically covered a range of interventions to change the structure and raise the growth of exports. Whilst it is often the case that crises and related political and economic uncertainties are a reassessment of ideas that have lost favour – whether it is about the role of fiscal policy or industrial policy – today's reassessment of industrial policy is happening against the backdrop of heightened geopolitical rivalries and associated worries about supply-chain security. This is very clear if we consider the US Infrastructure and Investment Act, the CHIPS and Science Act, the Inflation Reduction Act, etc. All the policy interventions are intended to support supply-side investments to boost US economic capacity, both overall and in key strategic sectors such as semiconductors and renewable energy to safeguard its economic interests.

3. The second issue is whether this 'industrial policy nationalism' is a form of creeping protectionism or do we still consider the global economy to be on the path of free trade but with exceptions. The global economic environment in which this more aggressive form of intervention to secure supply chains etc. is being pursued is rather different from the heyday of industrial policy. Today, it is a world of complex global supply chains involving countries which are at the technological frontier. Industrial policy is never conducted in isolation, and given the degree of globalisation and supply chain integration, the ramifications for forces of freer trade and competition are considerable as states intervene to lure manufacturing back home through subsidies and tax credits or by banning exports of raw materials.

4. The third issue is that given the deeper problem with the way industrial policy tends to develop over time in different country contexts, whether governments are equipped to avoid past mistakes and justify state intervention is debatable. History does provide many reasons for optimism in deploying industrial policies for export expansion but also as many reasons for concern. The optimism derives in part from the success stories of the East and Southeast Asian experiences – governments that were able to successfully help industrialisation along towards extremely rapid manufactured export growth. Taxes, tariffs and subsidies were used to cultivate national champions, but state help for businesses was temporary and linked to performance in exports and innovation.

By contrast, the adoption of a range of such interventions elsewhere in the world, including South Asia, generated rather different results. Industrial policy was mainly deployed in the cause of import substitution, and all too often, it sheltered and favoured low-productivity firms from foreign competition that would have made them more efficient. The result was that, for many, industrial policy went out of fashion and government attempts to 'second-guess' the private sector or create winners were seen to have little relevance. Today too, the biggest challenge will be to incubate new higher-value industries without falling prey to rent-seeking and lobbying. Whether governments can provide the right balance of support and discipline and whether countries have the technical and institutional capacity to do so are debatable.

Discussant Comments

Yoon-Je Cho

May I begin by expressing my thanks to Rakesh and CSEP for the invitation to this timely and important conference at this magnificent place? I found Dr Bhaopichitr's paper on Asia's export success touches most of the important points in the rapidly changing global economic and geopolitical environment, makes well-balanced analyses, and provides very sensible suggestions. The author does an excellent job of explaining the changes in the economic environment after the pandemic and the revival of industrial policy in the post-COVID world that have been implemented in various countries. The report also highlights the role of macroeconomic stability in promoting economic growth and development. Furthermore, the author presents a comprehensive overview of regional supply chains and service trade.

As the author mentioned, this is a time of great transition being driven by factors including, but not exclusive of, climate change, digital transformation, reconfiguration of global/regional supply chains, and the expansion of service trade business. These are casting daunting challenges to the global community; but at the same time, providing a window of opportunity for the countries who would be prepared to take advantage of this changing environment. For instance, in the 1950s-60s, when manufactured goods trade started to dominate global trade owing to the consecutive tariff reductions through various General Agreement on Tariffs and Trade (GATT) rounds, some Asian countries, including South Korea, took advantage of this to emerge as newly industrialised economies. Since the establishment of the GATT in 1947, the average tariff rate had generally fallen worldwide from around 40% in 1947 to approximately 5% in 1993.

However, the global trade environment has now greatly changed. Protectionism has re-emerged and industrial policy is being pursued not only by developing economies to catch up, but industrial countries to maintain their strength in competitiveness.

Whether or not it would be a good idea for Asian countries to pursue industrial policies under the current global trade environment depends on various factors. I am not going to discuss this issue much here. But, let me say it is important for us to recall what we have learned from past industrialisation experiences in Asia and not repeat the same mistakes. Industrial policy comes with many inherent risks, but it is also true that without it, it is hard for latecomers to catch up.

To ensure the effectiveness of industrial policy, based on past experiences, I would recommend the following norms. First, the state should possess a strong administrative capacity to overcome bottlenecks in financing, infrastructure, and regulation. For example, the state acted as a troubleshooter, as was the case in Korea, through the Monthly Export Promotion Meeting between 1962 and 1979. Secondly, industrial policies may also create opportunities for corruption, particularly if the government has widespread discretion or if there is a lack of transparency in the allocation of resources. Creating rent is an integral part of industrial policy, but ensuring that this rent does not become a source of prevalent corruption is equally important. Thirdly, industrial policy and trade measures always nurture distributional effects—we should make sure that this distributional effect does not develop into a strong political force to backfire. Lastly, we should remember that any industrial policy should be evolutionary to the progress of market situations.

Let me also emphasise what we should avoid. Industrial policies may lead to market inefficiencies, particularly if they lead to the creation of industries that are not competitive in the long run, or if they reduce competition significantly in certain sectors. Thus, it is critical to avoid shielding domestic companies from market discipline and relying excessively on foreign ownership, as higher value-added activities tend to remain in foreign companies' home countries. Instead, combining incentives with market discipline and local ownership and mobilising private-sector participation from the outset to create viable markets is essential.

Overall, I believe that Dr Bhaopichitr's paper makes good suggestions for researchers to head up on this issue. At the same time, I would have liked to see more discussion on the role of institutions and governance in promoting industrial policies. I look forward to seeing more research on this topic in the future.

PAPER 2

Diversifying Global Value Chains in Asia

Vo Tri Thanh

Attracting FDI & Coping with GSCs' Evolution: The Case of Vietnam

The global supply chains (GSCs) in association with investment and trade play a crucial role in the development of the world, especially developing and emerging economies. As an economy very open in terms of trade and foreign direct investment (FDI) as well as deeply engaged in regional production networks and GSCs, Vietnam could be an interesting case study.

This paper is about how Vietnam is dealing with FDI and GSCs. It attempts to answer two questions: (i) why Vietnam can be a good destination for FDI; and (ii) how Vietnam has been coping with the evolution of GSCs. The "US-China trade war" and its impacts on the Vietnam economy are also illustrated. But before consideration of the Vietnam case, the paper briefly describes the major factors behind the formation and evolution of GSCs. This can be seen as a framework for looking at the case of Vietnam.

The formation and evolution of GSCs

Globalisation, comparative advantage and technological change have created different ways of selecting production stages, investing and allocating resources. The concept of "unbundling" the production stage appeared, related to the changing costs of moving goods, ideas and people, three barriers to production and consumption (Baldwin 2016). Until the early 1990s, shipping costs fell, and trade in final consumer goods increased ("1st unbundling") which allows the company to exchange final goods. The second wave of globalisation is associated with trade and investment liberalisation that has led to the segmentation of production stages ("2nd unbundling") which opens up a way to divide production by cross-border stages. Companies can specialise in more competitive stages, thereby forming GSCs (and global value chains or GVCs). This process has been strong for more than two decades, from 1990 to 2015. With digital transformation, the cost of connecting people face-to-face is very low and so each business task can be split and matched with easier connection ("3rd unbundling") (Kimura, 2018). The sharp drop in the service-link costs (B2B, B2C, C2C coupling) is the catalyst for the boom in e-commerce, outsourcing, etc. The GSCs can become much more optimised ("shortened supply chains").

However, in recent years with rising protectionism, trade conflicts (such as the "US-China trade war"), the pandemic COVID-19, and geopolitical tensions/conflicts (such as the Russia-Ukraine conflict), companies and investors have had to take into account several other factors such as political risks, "strategic trust", and the so-called "core technologies" as well as "strategic products" in their investment and trade decisions. All these have also led to the shift of GVCs, including "friend-shoring" with policy support. China is considered a "manufacturing and investment hub" in the regional production network and GSCs. For many years, there has been a shift of GSCs from China due to the restructuring of China's economy and labour cost increase in China. People have talked about China+1 investment strategy. In the new context of the "US-China trade war", the COVID-19 pandemic and political tension, the shift of GSCs from China has been somehow accelerated. But that is a long process. The big China market is very attractive and adjustment costs for firms could be high.

Vietnam: Attracting FDI and coping with GSCs' evolution

The formation and evolution of GSCs comprise several factors helping to answer two questions of why and how about Vietnam mentioned in the introduction. This is basically about those factors related to comparative advantages, macroeconomic stability, business environment and reforms process, and openness degree as well as the way of international integration of Vietnam (see also Vo Tri Thanh, 2019).

The first is the "traditional" advantages Vietnam can enjoy to grow and that foreign firms/investors are often interested in; they are:

- Strategic geographical location in a dynamic Asia-Pacific region
- Political stability
- Young population (the age of 60% of the population is less than 35 years old and rather competitive labour cost)

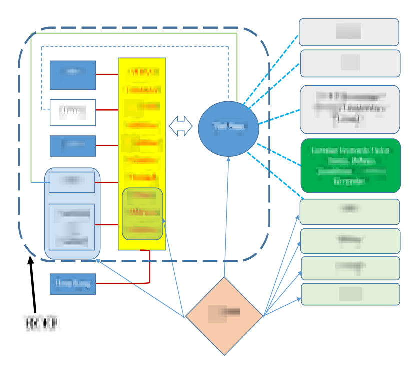
Moreover, Vietnam is a transitional and developing economy. In other words, Vietnam is a country of change with a lot of business and investment opportunities. From a poor, agriculture-based, closed, and central-planned economy, Vietnam became a low middle-income country (by 2010) with a 100 million population and a rising middle class, an industry and service-oriented, very open and market-oriented economy. Currently, the value of total trade is about 200% of GDP; the FDI sector contributes up to about 20% of GDP, 20% of total annual investment and 70% of merchandise export.

The second, which may be more important, is Vietnam's commitment to macroeconomic stability and further reforms. The nature of Doi Moi (Renovation) that started in 1986 is a continuous process of enlarging both sets of choices by people and the people's institutional capability. The "open door" policy and international integration, together with macroeconomic stabilisation and market reform, are all pillars of economic reform. And domestic reforms and international integration are two processes reinforced by each other.

The FDI sector plays an important role in promoting growth and became an integral part of Vietnam's economy. But the positive spillover effects from FDI are quite limited. Another problem is that the value added along the value chains created by Vietnam in general and local firms, in particular, is very low. That's why Vietnam approved a new FDI attraction strategy in 2019, shifting attracting FDI from maximising quantity to optimising quality of FDI in terms of backward and forward linkages, technology and innovative skill transfers, green growth and sustainable development. The goal of the new FDI attraction strategy is not only for improving domestic capability but also for coping with new trends of and new requirements by FDI, especially from developed economies.

The third is that Vietnam can be seen as a "hub" for investments and doing business in the world. Vietnam has joined 17 FTAs, including high-quality FTAs such as Trans-Pacific Partnership (TPP)/Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and EU–Vietnam Free Trade Agreement (EVFTA). The web of FTAs is a catalyst for promoting business activities and Vietnam's institutional reforms. It also helps Vietnam to diversify its markets (Table 1). Moreover, several members of the FTAs are strategic/comprehensive or strategic and comprehensive partners of Vietnam. This means that doing business in/with Vietnam is also with major markets and important investors in the world. It can be said that Vietnam has engaged in the global economy by "rules" (WTO; FTAs) and by "heart" (partnership).

Table 1: Vietnam: The FTA web and its impacts



The impacts of FTAs on Vietnam's economy

- Expansion of exports and other economic activities
- Expansion of investment (especially FDI)
- A pressure/catalyst for institutional reforms and improvement of the business environment (Esp. TPP/CPTPP; VN-EU FTA)
- Market diversification and risk minimisation

Last but not least, in a broader context, this is the way of Vietnam's comprehensive international integration. It is a strategy of a responsible member of the international community for purposes that are desired by all nations: Peace, stability, and development with the "win-win games". That strategy helps Vietnam to engage in the global economy more effectively as a hub for investment and business. That strategy also creates conditions for Vietnam to respond more flexibly to a volatile and unpredictable world (Table 2). International integration is inevitable with both opportunities and challenges. Vietnam does not choose sides but chooses the right. It is said that Vietnam's diplomacy is "bamboo diplomacy": steadfast, resilient and flexible.

Table 2: Vietnam's international integration

- It is a continuous process and becomes more comprehensive over time (ASEAN; APEC; VN-US BTA; WTO; FTAs...). Since 2013 its scope has covered all areas, (not just economic activities), and economic integration is at the centre.
- Vietnam has strived to balance relations with the powers/partners and to be a proactive and responsible member of international institutions for peace, stability and development.
  - To be a friend of all countries and territories.
  - To respect and support multilateral institutions and frameworks (UN, WTO, APEC, ASEAN: 3C – Community – Cooperation – Centrality; etc.).
  - To establish comprehensive/strategic/comprehensive strategic partnerships with several key partners in the world.
- Vietnam has built in a security policy based on the "four No's principles" (No military alliances; No aligning with one country against another; No foreign military bases on Vietnam's soil; and No using force or threatening to use force in international relations). Vietnam has also extended security cooperation with partners to improve its defence capacity and address common security issues.
- "Firm in Principles, Flexible in Response to the Multi-unexpected Changes" (dĩ bất biến, ứng vạn biến).

Source: Vo Tri Thanh and Nguyen Anh Duong (2022), and compiled by the author.

"US-China trade war" (2018-19) and impacts on the Vietnam economy

Vietnam is a very open economy. China is Vietnam's trading partner number one. The US is Vietnam's export market number one. Both US and China are important investors in Vietnam. Obviously the "US-China trade war" can have multi-dimensionally direct and indirect impacts on the Vietnam economy. Here we explore only the situation during 2018-19 when the "US-China trade war" escalated (Vo Tri Thanh and Nguyen Anh Duong 2022).

In general, Vietnam had managed to take advantage of the opportunities and manage the challenges stemming from the trade war. The economic growth rate was still relatively high, and the implemented FDI was increasing steadily. These positive developments likely occurred due to the tit-for-tat tariff barriers imposed by the US and China, increasing export opportunities for developing countries, including Vietnam. Increasing uncertainty surrounding the US-China trade war may also make major multinational companies consider shifting part or all of their existing manufacturing facilities in China to other countries like Vietnam. Some quantitative assessments have been restricted to the impact of tariff measures by the US and China, indicating benefits to Vietnam in the form of increasing national income, labour upgrading and so on.

Still, Vietnam has suffered negative impacts from the "US-China trade war". Vietnam's exports to China only grew by 0.1 per cent in 2019, significantly below the figure of 16.6 per cent in 2018. This was partly due to Vietnam's participation in China-focused value chains: foreign investors decreased production in China, leading to weaker demand for imports from Vietnam. The depreciation of the yuan during the trade war made Vietnam's goods less competitive in the Chinese market. Additionally, by the end of 2019, both the US and China had already carried out actions and implemented policies that negatively affected Vietnam's exports to these countries. China increased the standards and regulations applied to imported goods, including those from Vietnam. For instance, China has applied additional technical barriers to Vietnam's agricultural imports. This may have been in retaliation to Vietnam enforcing stricter control over products imported from China to prevent origin circumvention. As for the US, the most remarkable action was in May 2019, when it included Vietnam on the monitoring list for currency manipulation.

Various assessments undertaken in 2018–19 agreed on the possibility that Chinese goods would be exported to Vietnam before re-exporting to the US to circumvent American duties on Chinese exports. By June 2020, some circumvention probes were launched by the US. Import and export data may also raise concerns about the impact of trade diversion. Although export growth to China decelerated significantly in 2019, Vietnam saw its export growth to the US increase from 14.3 per cent in 2018 to 29.1 per cent in 2019. Conversely, Vietnam's imports from China increased by more than 15.2 per cent in 2019, faster than in 2018 (11.7 per cent).

Investment data also indicate significant FDI inflows from China into Vietnam. In 2019, the registered capital of FDI projects from China and Hong Kong amounted to US$2.4 billion and US$2.8 billion, respectively. China and Hong Kong were respectively the third and second largest sources of new FDI to Vietnam in 2019, only after South Korea. A potential concern is that investors just moved temporarily to Vietnam to shelter from the impacts of the trade war. Still, the implementation of the ASEAN-Hong Kong FTA in June 2019 may simply facilitate 'hot money' for capital contribution or purchasing shares from Hong Kong into Vietnam, in the absence of adequate measures and screening policies.

Vietnam's initial response to the trade war was closely aligned with its approach to economic integration – that is, working with all partners to improve trade management and facilitate trade without discrimination. Vietnam also provided regular justification and clarifications to the US on issues related to the bilateral trade deficit, product origins and the exchange rate. Vietnam engaged in frequent discussions with the US to address the issues related to the justification of Vietnam's share in value added in exports, and its intention to buy more agricultural products from the US. Vietnam also enhanced its cooperation with the US in investigating the origin of Vietnam's exports. Apart from the bilateral working group meeting in June 2018, there has been no similar meeting for Vietnam to justify its market economy to the US, and Vietnam does not seem to be in a rush for more meetings. Regarding currency manipulation, even from early 2018, Vietnam explicitly stated that it had not sought and would not seek to devalue the national currency to support exports. Vietnam has continued to justify this approach even after the US included Vietnam in the monitoring list of currency manipulation in May 2019.

At the same time, Vietnam continues to improve trade with China. Vietnam made efforts to build capacity for domestic companies to comply with the stricter standards of the Chinese market. In doing so, the explicit statement was that China had applied stricter standards for several years already – even before the trade war. Vietnam continued to work with China, ASEAN and other partners to conclude the negotiation of RCEP in 2019 (and signed the agreement in 2020 even after the withdrawal of India). Vietnam was one of the first ASEAN member states to ratify the ASEAN-Hong Kong FTA, enabling the agreement to enter into force in June 2019.

Vietnam has also attempted to increase the quality of its trade and investment relations. For instance, the Ministry of Industry and Trade requested tighter control by relevant authorities over certificates of origin to minimise trade fraud. Vietnam also improved the screening and selection of FDI projects via higher economic, social and environmental standards in 2019. However, the country made it clear that these regulatory changes would be applied on a horizontal basis for its own development objectives, rather than trying to discriminate against any partners. More broadly, Vietnam continued to work with ASEAN to express support for the multilateral trading system,[1] including in specific areas like e-commerce.

1 Demonstrated in leaders' statements in October 2018 and June 2019.

Concluding remarks

Vietnam now is at a decisive point of time for transforming the paradigm/pattern of development. Vietnam is a proactive and responsible member of the international community and strongly supports rule-based, open, and transparent international economic integration. Interaction between domestic reforms and international integration becomes much more profound.

Vietnam means also business. Vietnam can be seen as a "hub" for investments and doing business. Vietnam needs to develop local firms and attract quality foreign investments. The key is to realise Vietnam's advantages, people's potential, and institutional reforms.

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Discussant Comments

Amita Batra

1. Vietnam's GVC integration has had spectacular gains over the last decade.

    a. Benefits for Vietnam in terms of its exports, growth and employment.

2. Over the last decade, Vietnam registered an annual increase of 17.5% in the foreign value-added component (imported input content) of its exports as against around 5% for Asia and India.

    a. These gains were made over a decade when globalisation had slowed down.

    b. So, while commendable that Vietnam was able to register these GVC gains in a period characterised as slowbalisation, it also reflects the fact that gains from GVCs can accrue during a period when the pace of globalisation may be relatively slower.

3. Vietnam has been able to integrate with GVCs over the past decade through FTA participation.

    a. This has helped Vietnam undertake domestic reforms that have contributed to attracting large corporations to invest in the country.

    b. Vietnam is a member of the RCEP, CPTPP etc.

4. Vietnam's GVC integration trends are different from other ASEAN economies.

    a. For other ASEAN economies, while backward integration has declined, forward integration has shown some upward trend.

    b. This is not true of Vietnam in which case the BI has risen consistently.

5. Inability to create its own domestic technological sector/ upgradation.

    a. Not been able to make the transition from high content imported inputs in exports to increase in domestic value addition content in exports.

    b. The transition requires a country to evolve from the stage of technology transfer as enabled by backward integration into value chains to absorption of technology and ultimately to generate its own technology/ innovation.

    c. One of the reasons for this is Vietnam's lack of professional/ managerial.

Discussant Comments

Shujiro Urata

Good morning. Good afternoon. Good evening. I am very sorry that I am not able to join you at a very important conference, but I am pleased to send my comments on Dr Vo's presentation via a recorded video. Dr Vo provided a very good analysis of the evolution of the global supply chains (GSCs), based on the theory of unbundling by Richard Baldwin. He also provided a very good analysis of how Vietnam came to be involved in GSCs.

I have one comment and three short questions. Let me begin with the comment.

I would like to provide additional information on the attractiveness of Vietnam as a host country for Foreign Direct Investment (FDI). Japan Bank for International Cooperation (JBIC) conducts a survey of Japanese manufacturing companies with foreign operations annually. According to the most recent survey, which was conducted in the summer of 2022, Vietnam was ranked 4th, behind India, China and the United States, as a promising FDI destination in the next three years. Vietnam has been ranked very high in the survey for many years. The survey revealed a number of attractive features of Vietnam as a destination for Japanese FDI. They include:

i. High gross potential for local market
ii. Abundance of low-wage labour
iii. Stable political and social environment, and
iv. Good substitute for China in order to reduce various risks such as those arising from the US-China rivalry

The survey also pointed out the problems related to operations in Vietnam. They are:

i. Rising wages
ii. Lack of transparency in the legal system and legal practices
iii. Fierce competition, and
iv. Underdeveloped infrastructure

Vietnam needs to deal with these problems to attract more FDI.

Let me raise three short questions. First, on policy reform. Dr Vo pointed out that the Vietnam government's policy reform is one of the factors that contributed to attracting FDI and to participating in global supply chains. Many governments know that policy reform is key to attracting FDI and achieving economic growth, but they have difficulty implementing policy reform because of strong opposition. I would like to ask Dr Vo to explain how policy reform has been carried out in Vietnam by dealing with the opposition.

The second and third questions are on the human impact of inward FDI on the Vietnamese economy. One of the benefits the FDI host country expects from the inward FDI is technology transfer from foreign firms to local firms. Several studies on Vietnam found a lack of technology transfer and these studies argue that one of the reasons for the lack of technology transfer is the low absorptive capability of technology of Vietnamese workers. I'd like to know Dr Vo's assessment of this observation and argument, is this finding of the limited absorptive capability of Vietnamese workers justified? This point is closely related to an argument that Vietnam needs to engage in high-value-added activities in GSCs in order to overcome the middle-income gap. Indeed, in order to upgrade the position in GSCs, technological level needs to be improved by assimilating high-quality foreign technology.

The other question regarding the impact of inward FDI is its impact on income distribution. Many studies have found negative impacts of inward FDI on income distribution. In other words, inward FDI is found to worsen income distribution from reasons that foreign firms hire highly skilled workers with high salaries because foreign firms like to adopt their production and management systems practices at home in FDI host countries. This results in widening the wage gap between high-skilled labour and low-skilled labour. I'd like to ask Dr Vo if this observation is correct in the case of Vietnam. If so, what should the Vietnamese government do to achieve more equitable income distribution which is needed to achieve social stability and sustainable economic development?

This is the end of my comments. Thank you very much.

SESSION 4

The Geopolitical Effects of Economic Changes: Politics in Command

SESSION NOTE

Shivshankar Menon

This session will focus on how the changing global and Asian economy will affect the geopolitics of Asia, and, because of Asia's greater significance, the world as well. In what follows, this paper suggests some propositions about the geopolitical effects of economic changes in order to provoke a discussion on these issues.

It can be argued that we are now in a globalised world characterised by great power rivalry, unmediated by an established or generally accepted international order. The essential underlying material conditions of power are shifting, causing fundamental shifts in the balance of power and the international order. Two fundamental questions arise:

1. Is politics now in command of economics?
2. Is there an international order or are we in a world adrift, in between orders?

The answers to these questions could determine the probability of future scenarios and suggest ways forward.

At the global level, it would appear that the answer to both questions is a yes. Geopolitics is now driving decisions that were taken on economic grounds in the past. Markets are, once again, embedded in an international system of geopolitical power and social order, which itself is in transition. Consider the economic sanctions imposed on Russia by the West after Russia invaded Ukraine and their effect on food, energy, and financial markets. Europe and the Global South are paying an economic price for the Western political goal of isolating and punishing Russia. The pathetic international response to the COVID-19 pandemic, the lack of real action on transnational challenges like climate change, the energy and food crises, and the debt crisis in developing countries suggest that this is a world adrift. The long post-World War II era of economic growth was embedded in a social democratic project of cross-class institutions that emphasised protecting citizens from economic predation and fostering political solidarity within a wider collaborative international order (Polanyi, 1944). The promise of that social and political order is clearly no longer evident.

But in maritime Asia, the answer might be more nuanced and qualified. The dense network of institutional links and global value chains (GVCs) that Asia developed over decades before the global financial crisis in 2008 created economic interdependence that supported the primacy of economics over politics. That network has since eroded somewhat under the influence of anchoring, the pandemic, and the shortening of manufacturing GVCs for reasons of domestic and international politics. The heightened power rivalry and China-US contention increasingly tilt the balance towards geopolitics. But it is still not clear to what extent that balance has shifted in Asia.

For instance, the People's Republic of China's (PRC) decision to continue with "zero COVID-19" restrictions until the 20th National Congress of the Communist Party of China in October 2022 was clearly driven by a political rather than a scientific, medical, or economic calculus. Its abandonment, thereafter, was presumably caused by the need to revive the growth of the Chinese economy rather than political or public health considerations and was done despite likely political costs for the authorities. Similarly, maritime Asia has shown more resilience in dealing with the transnational crises of food and energy and in responses to the pandemic than some other parts of the world. But Asia is not immune to the global trend as it too is paying an economic price for the politically motivated sanctions on Russia and the consequent rises in food and energy prices.

Similarly, the reordering of the economic and trading order that is underway in Asia is now underpinned by new financial institutions and connectivity, some of it created by the Belt and Raid Initiative (BRI). Parts of the new architecture, including some BRI projects, have limited economic viability, suggesting that they are politically motivated rather than being economic responses to demand.

Also, the shortening of manufacturing value chains in Asia over the last five years (Baldwin, n.d.; Baldwin, 2012), restrictions on technology flows, the weaponisation of trade for political purposes, and the increasing contention in US-China relations suggest that the balance is shifting away from economics to politics. Where it rests on the spectrum between the two is hard to say. China tends to use her economic strengths, while the US relies on her advantages in politics, technology, and the military domain when choosing the stage for their contention. The question is whether the shift towards politics driving economic decisions will continue, and, if so, how will it affect Asia's geopolitics.

The world needs Asia's economies to provide sources of growth in the global economy. This becomes even more important at a time when the West is facing strong recessionary forces in 2023 and when the pandemic has diminished all polities and economies. Asian countries are undertaking internal economic readjustments to rediscover accelerated growth trajectories in difficult circumstances when world trade and growth are challenged. There is clearly no going back to the pre-pandemic situation in 2019 when Asia was the prime driver of the global economy and when India and China, between them, provided over half of the growth in the world economy. Does that mean, as seems possible, that their governments will rely more on nationalism for legitimacy, thus making their relations more fraught than they have already become?

The following paragraphs outline some of the profound ways in which economics and politics affect each other in maritime Asia, which might merit discussion at the conference.

Economics Changing Geopolitics

Over the next decade, the nominal GDP of maritime Asia (Association of Southeast Asian Nations [ASEAN], China, India, Korea, and Japan) could likely exceed that of Europe and the US combined. This will profoundly influence the geopolitics of the region and the world.

Economic inequality between and within states has already contributed to the rise of ultra-nationalist diplomacy and lessened room for compromise. The COVID-19 pandemic has diminished all Asian countries and affected their longer-term prospects, some less and some more than others, and will, by the time it is over, have caused shifts in the balance of power.

Inequality

Inequality within states, urbanisation, and the slowing world economy after the North Atlantic financial crisis of 2008 have led to the rise of new authoritarian and populist leaders in several countries through the politics of emotion. Policy responses in these Asian countries now emphasise self-reliance and display a higher level of economic protection and mercantilism.

Trade

Will shifts in comparative advantage continue to Asia's advantage? Several Asian economies, particularly China, are undergoing complex adjustments. China's "dual circulation" policy and India's "Make in India" and self-reliance/*atmanirbharta* reflect a shift towards more state-managed and state-directed trade and give play to domestic protectionist instincts. While it is too early to judge the effects of the pandemic on comparative advantages, technology is already reducing the advantages of cheap labour, and some restrictions on capital flows are also evident. At the same time, both China and the US, the world's greatest trading nations, have weaponised trade, using it as a political tool. Whether it is US sanctions on Iran, Russia, or China, or Chinese economic actions against South Korea, Canada, Australia, the Philippines, Norway, Lithuania, and others, these have little economic rationale and are designed more for political effect and signalling than creating political outcomes.

Energy

With maritime Asia's economies dependent on energy from West Asia, contention has grown around the sea lanes that carry Asia's energy and trade. This is not likely to change until technological advancements make a large-scale shift to new and renewable sources of energy possible. With the US's self-sufficiency in oil and gas, can Asia continue to rely on the US for the security of its energy supplies?

Finance

The expropriation of Russian dollar reserves and the denial of Swift service has had an effect on global payment systems as countries look for alternatives. Russia, China, and Iran are already attempting to settle cross-border payments in currencies other than the US dollar. There is still no alternative to the dollar as a store of value, and its role in international reserves seems unlikely to change in the short term or at least until one emerges. But what seems to be underway is the incremental introduction of national restrictions on cross-border capital flows. These decisions are politically driven and will also make for more fractious international politics, with disputes harder to settle as global financial interdependence, one of the main instruments of US power, diminishes.

Global Value Chains

While manufacturing GVCs have shortened over the last 3–5 years, services GVCs have lengthened (Baldwin, 2012; Baldwin & Freeman, 2021). This trend, accentuated during the pandemic, predates it and is not guided just by geopolitical rivalry and the drive to achieve self-reliance it has caused in the USA, China, and India – it is also governed by the effects of automation, AI, and other technological change. While this trend may offer opportunities for India, it also lessens the impulse to cooperate among countries, sharpening geopolitical contention.

Technology

Technology is already altering comparative advantages within Asia and between Asia and the world. Its future role is likely to be even more disruptive as AI, digital manufacturing, and the energy revolution transform it even further. More than the economic effects of technology, it is the social and political effects that are now becoming evident in the politics of emotion, the mass mobilisation opportunities created by social media, and the changes in the manner and nature of politics in most democracies. The increasing might of the state and its powers of surveillance, heightened by the use of big data, are rendering internal and external politics more volatile. Technology has opened new domains for geopolitical contention, namely cyberspace and outer space, in which the traditional rules of engagement and restraints no longer apply. An economic revolution has already had significant geopolitical effects, permitting emerging countries to leapfrog the developed in some respects. And the pace of this disruption is only likely to increase.

There are also some broader systemic issues associated with the geopolitical impact of the economic situation.

As Asia's global economic role has grown, it becomes more necessary to protect and secure its assets abroad. Over the last two decades, Asia has seen a steady increase in military budgets and transitions to offensive doctrines by the militaries of the major powers in maritime Asia. Economic growth has given Asian nation-states the means to pursue their military buildups. China has taken the lead in reforming and building up her military into an instrument of force projection beyond her borders and in constructing dual-use infrastructure such as ports. Defence and security treaties have been strengthened. There is now a belt of weapons of mass destruction from the Mediterranean to the Pacific with no real prospect of denuclearisation. Flashpoints and disputes across the region are live from the East China Sea to Taiwan to the South China Sea to the India-China border to Yemen, Iraq, Syria, and so on. These developments come on top of an arms acquisition spree by Asia's major powers over the last three decades, unprecedented in quantity and offensive quality. Together they make for the piling up of considerable geopolitical kindling.

Thus, it would seem that economic developments are making the geopolitics of Asia more contentious, that the capacity to negotiate and compromise is diminished by the rise of new authoritarian leaders, and that the harsher economic climate and weaker prospects are sharpening political differences and disputes among Asian countries.

This situation actually makes it all the more necessary for Asian countries, particularly India and other countries of southern Asia to work together, minimising the effect of politics on the common search for prosperity.

India's Links and Role

India is relatively untethered to the deep network of trading, investment, and financing institutions built up in Asia by the pattern of Asian globalisation in the last four decades. It is not a member of ASEAN, Regional Comprehensive Economic Partnership (RCEP), Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), AMRO (ASEAN+3 Macroeconomic Research Office), the Chiang Mai Initiative, or the South East Asian Central Banks Initiative (SEACEN), although it now has observer status in some of these institutions. India is a member of the Asian Infrastructure Investment Bank (AIIB), Beijing, New Development Bank (NDB), Shanghai, and of security forums such as the ASEAN Defence Ministers Forum and the Quad. India has preferred to work bilaterally with East and South-East Asian countries on defence and security issues and has defence agreements or arrangements with Japan, Korea, Indonesia, the Philippines, Singapore, and others. India is also not a significant participant in global and regional value chains. There is thus an anomaly between the political and security links that India has with maritime Asia and the lack of economic connections. This is despite the growing importance of Asia for India's economic and security interests.

The session could also analyse the direction that Asian geopolitics may take as a consequence of the changed economic outlook and consider what might be done by states, institutions, academia, think tanks, and scholars to further India's deeper engagement with Asia in this situation.

Conclusion

To summarise, the liberal assumption that dependencies and stakes created by trade and investment ameliorate or make inter-state conflict less likely is not very convincing or empirically evident today. Thus, there has to be some doubt about the liberal claims that states are not trapped in a world of anarchy, and that through trade, exchange, learning, and the exercise of political imagination, groups of states can establish durable zones of peace. Nor is the economist's assumption that man is a rational being borne out by recent politics in Europe and Asia. Political risk and uncertainty are higher than they have been in living memory, both within and between Asian states.

How should one assess the risk of great power conflict in this situation? The current global situation is reminiscent of the state of the world before World War I, when globalisation was at its peak and geopolitical power had begun to shift from Europe to the US. Today, we are again coming off another peak globalisation moment and geopolitical agency is shifting from the West to Asian countries.

Besides, powerful states do create an international order, but if that order is to last, it will need to be backed by restraints on the abuse of power and infused with a shared sense of social purpose, thus involving more than just Asia's greater powers in order building. The order has to involve more than just the great powers if we are to deal with the transnational challenges that the industrial revolution and a globalised world have created—climate change, pandemics, inequality, and the uneven and unstable balance of power. In any case, order is built not on a balance of power but on a structured asymmetry of power. In the current situation, it is still difficult to see Asia's economic spurt producing an asymmetry of power that would lead to a stable Asian order.

Regardless of what the answers to the questions raised in this paper are, Asia's geopolitical future will continue to be determined to a considerable extent by her economic trajectory. It is our hope that the session will examine and clarify the relationship between them in more detail and suggest how this might affect India.

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PAPER 1

The Rise of Asia: Economic Power and Geopolitical Implications

Jong-Wha Lee

Introduction

Over the past half-century, the world has witnessed the rise of Asia's economic power, and it has been a dominant trend. With the prominent growth of China, India, and others, Asia has emerged as the largest and most dynamic region in the world. This has changed the geopolitical landscape of Asia and the world.

One important question is whether Asia can continue to sustain its growth path and expand its economic power given the tremendous internal and external challenges. Another question that follows is how the regional and global geopolitical environments will transform, especially with regard to interdependence and rivalry among the major countries. This paper will address these questions, within a limited scope. It aims to project the long-term growth trajectory of major countries in Asia, including China, Japan, India, and Indonesia, as well as that of a dominant outsider, the United States, and then briefly discusses their impacts on the geopolitical landscape in the region.

Asia makes up 60% of the world's population. It is home to 5 of the world's 10 most populous countries (China, India, Indonesia, Pakistan, and Bangladesh; Figure 1).[1] The region has about 40% of the world's gross domestic product (GDP), measured in terms of purchasing power parity (PPP; Figure 2). It consists of major economic powers, including China, Japan, India, and South Korea—the second, the third, the fifth, and the tenth largest in the world in terms of GDP.

Based on the prominent growth performance in the region, there exists a growing sense of optimism about the Asian economy. Many expect positive prospects for the Asian economy, with projections of strong growth in the coming decades. The region will keep its status as an engine of global production, consumption, and innovation while increasing its influence in the global governance system (Tonby, Woetzel, Choi, Seong, & Wang, 2019). Some believe that the rise of Asia represents the beginning of the "Asian Century," a time when the region will emerge as the dominant global economic power, reshaping the world order (Mahbubani, 2022). The Asian Development Bank (ADB)'s publication, entitled "Asia 2050: Realizing the Asian Century," estimated that Asia would nearly double its share of global GDP to 52% by 2050, and thereby, it would recover the dominant economic position it held some 300 years ago, before the industrial revolution (Asian Development Bank, 2011; Figure 3).

However, the rise of Asia is not preordained. One of the major domestic challenges that would hinder the realisation of the growth potential in some East Asian economies, including China, Japan, and South Korea, is a shrinking population, along with the acceleration in the growth of the ageing population. The shrinking workforce in these economies would reverse the demographic dividends that had supported strong regional growth (Figure 4). Asian economies are also losing vitality due to a slowing rate of return to physical capital investment. Additionally, developing new technologies becomes more difficult, which slows down the pace of Asian economies catching up with the front runners. Rising inequality and environmental degradation are also formidable challenges to Asia's inclusive and sustainable development.

The region also encounters significant external challenges. As it is heavily dependent on the United States (US) and the European Union (EU) for exports, capital, and technology, the rise in global protectionism and deglobalisation is threatening the sustained prosperity of the Asian economies. In the new global environment, the outward-oriented strategies that the Asian economies used to adopt may no longer work effectively. The emerging economies of Japan, South Korea, China, and Southeast Asia joined the liberal international economic order and prospered through trade. They focused on certain industries with enhanced competitiveness in large

1 Please refer to the latest United National Population Division estimates (https://www.worldometers.info/world-population/population-by-country/).

markets, increased their output in an efficient manner, and adopted advanced technologies to raise their productivity. In the coming decades, international trade may not play a major role, and thus the Asian economies must move away from an overreliance on export-oriented development strategies. They must rebalance the two growth engines of a country: domestic demand and external demand.

The US-China conflict is a major threat to this region. The emergence of China as an economic and political power has led to more confrontations with the US. The trade and technology war between the US and China will have an impact on China's rise to global hegemonic power. It will also hurt all Asian economies by disrupting the global supply chain that they rely on.

If Asia can sustain strong growth in the coming decades despite significant challenges, this will have major geopolitical implications. With its growing economic and political powers, the region continues to emerge as a major player on the global stage, transforming the global landscape. New regional and global alliances are likely to emerge if countries in the region seek to strengthen their ties and pursue common goals. At the same time, as Asian countries increasingly assert themselves on the world stage, we may see more conflicts and confrontations emerge between major powers. An important question is if a new multipolar international order embracing the growing power of Asia can be developed through regional and global cooperation.

Economic Growth of Asia: Performance and Projections

Supported by the strong economic growth of major countries in the region, Asia was able to narrow its gap with the advanced economies in terms of per-capita income. The per-capita GDP of Japan, Singapore, and South Korea has risen fast, catching up with that of the US. China, India, and Indonesia followed (Figure 5).

China is rapidly catching up with the US in terms of per-capita GDP based on PPP, which increased from a mere 2.4% of that of the US in 1980 to 25.4% in 2019. India's per-capita GDP increased from 4.2% of that of the US to 10.7% over the same period.[2]

The standard neoclassical growth models suggest a "conditional convergence of income" (Barro & Sala-i-Martin, 2004), in which a country with a lower initial income relative to its long-run equilibrium level of income tends to grow faster. In low-income countries, the levels of physical and human capital are lower than their long-run equilibrium levels, so rates of return on investment for physical and human capital are higher, and thus, physical and human capital accumulation can be much faster. The model suggests that India, with its relatively low GDP per capita, is likely to grow faster than either China or the US but will grow more slowly as it approaches its long-run equilibrium level of per-capita GDP.

We have extended the standard neoclassical growth model by adding endogenous determination of technological progress. Countries create new technologies by investing in research and development (R&D) to innovate. Developing countries also carry out technology imitation. Additionally, developing countries undertake technology imitation from more technologically advanced economies to hasten improvements in productivity and thereby close the technology gap with advanced economies. In the endogenous neoclassical growth model, the size of the population or R&D personnel determines the rate of technological progress and plays an important role in long-term economic growth (Romer, 1990). We also consider two additional factors that drive technical progress. One factor is that maintaining the same exponential growth of ideas is getting more difficult, as argued by Bloom, Jones, Van Reenen, and Webb (2020). The other is technological progress in emerging economies catching up with the technological frontier also becomes increasingly difficult.

Based on the growth model, we will demonstrate how GDP and per-capita GDP growth rates for major Asian countries, including China, Japan, India, and Indonesia, and the US would evolve until 2060. Our framework is different from that of previous studies, such as the Organization for Economic Co-operation and Development (2021) and Daly and Gedminas (2022) studies, in that it explicitly follows an endogenous growth model.

According to the model, the potential GDP growth rate is determined by the growth of the labour force, human capital accumulation, physical capital accumulation, and technological progress. We assume that the labour force, measured by the working-age population (those aged 15–64), will grow based on the United Nations (2022) population projections, as displayed in Figure 4. Human capital is considered an important factor for economic growth because it enhances the quality of the workforce and contributes to technological development. Human capital is considered an important factor contributing to economic growth through the improvement of the quality of the labour force and the development of technology (Barro & Lee, 2015). Human capital growth is assumed to gradually decline, following the recent trend in individual countries. Physical capital accumulates over time responding to the change in returns to physical capital investment, country-specific investment rate, and depreciation rate.

In accordance with the parameter values of the growth model and the country-specific initial values of economic conditions, such as labour force and human capital growth, and technological growth (which is measured by total factor productivity [TFP] growth), we conduct simulations of the growth model to determine GDP and per-capita GDP up to 2060. We analyse the balanced growth path in the transition to the steady state. The details of the growth model, assumptions, and simulation techniques are described in Lee and Song (2023).

A summary of our baseline projections for the selected countries—China, India, Indonesia, Japan, and the US—which are based on the preliminary results of the projections in Lee and Song (2023), is given in Figures 5 and 6. Figure 5 reports how the per-capita GDP of the selected countries would evolve

2 According to the IMF estimates, China's per capita GDP, measured by purchasing power parity-adjusted current international dollars, increased from 307 dollars in 1980 to 16,563 dollars in 2019, while India's per capita GDP increased from 532 dollars to 6,971 dollars during the same period.

after the year 2022, whereas Figure 6 demonstrates the projection results in terms of GDP.

Our projections imply that China is undergoing a marked slowdown in potential growth, from 6.1% in 2010–2022 to 3.5% in 2022–2040 and 1.6% in 2041–2060.[3] Most of this slowdown is driven by the decline in labour force growth and slower physical capital accumulation, and it results in China's potential growth rate falling well below that of India and Indonesia.

Despite the slower pace of the catch-up, the Chinese economy continues to narrow its per-capita income gap compared to that of the US. By 2060, China is projected to reach about two-thirds of the US's per-capita income in the constant 2017 PPP price. However, in terms of GDP, it is projected to demonstrate continuous growth, exceeding the US throughout the next 40 years.

According to our projections, the Indian economy is forecast to have higher growth potential than other selected countries over the next 40 years. Its potential growth is forecast to decline from 6.6% in 2010–2022 to 5.3% in 2023–2040 and to 3.5% in 2041–2060. This is because both the rate of return to physical capital investment and the speed of technological catch-up are lower. With its higher potential growth rate, the Indian economy is likely to continue to narrow its per-capita income GDP gap compared to other Asian countries and the US. By 2060, India can surpass the US in terms of GDP.

Indonesia presents a similar pattern of growth trajectory to that of India. With its higher potential growth rate, it is expected to catch up with China, Japan, and the US. The GDP of Indonesia is likely to exceed that of Japan in the next decade (Figure 6).

Geoeconomic Fragmentation and Geopolitical Risks in Asia

With a continuous rise of Asia's economic power in the next 40 years according to our projection, the economic and geopolitical landscape is expected to change further. Asia will become the major global economic power and a major player in global institutions and governance systems. The region as a whole can increase its influence on international organisations, such as the International Monetary Fund, the United Nations, and the World Trade Organization. However, Asia's rise would also intensify geopolitical risks in the region as well as globally in the new era of deglobalisation and fragmentation.

In the latest decade, the world has witnessed a wave of deglobalisation and protectionism, disrupting the previous international economic order, which was led by the US since World War II. This was reversed under former President Donald Trump's "America First" slogan and trade protectionism. Under former President Donald Trump, the US imposed high tariffs on steel and aluminium imports on national security grounds and took a series of punitive actions. China was sanctioned for alleged unfair trade practices and intellectual property theft, and the current Biden administration maintains the trade and technology war with China. The supply chain disruptions due to the COVID pandemic add momentum to this trend. The US as well as other economies prefer to localise or regionalise their supply chains.

In addition, increasing geoeconomic fragmentation in the world has been observed over the past years. Geoeconomics refers to the use of economic tools to advance geopolitical objectives (Luttwak, 1990). Governments attempt to achieve their national goals through trade, investment policies, economic and financial sanctions, energy and raw materials trade, and overseas aid rather than through military means. China has been expanding its influence in underdeveloped countries in Asia and other continents through an infrastructure and development aid programme known as One Belt One Road. The US recently launched the Indo-Pacific Economic Framework for Prosperity (IPEF), which includes 13 Asian countries. It is not a traditional free trade agreement and is designed as a tool to strengthen US economic cooperation with Asian partners. Russia has been weaponising energy resources for its strategic gains by cutting off gas pipelines to Europe. The US excluded Russian institutions from the international settlement system as a punitive action for the Russian invasion of Ukraine.

The geopolitical risks can escalate and intensify with the shift to deglobalisation and geoeconomic fragmentation. The increased cross-border exchanges and economic integration through openings helped to sustain peace in the region to a certain extent. Given the high mutual trade dependence, countries might face bigger losses from a cessation of trade, leading them to avoid military conflicts. Empirical studies support this "liberal peace" view—traced back to Montesquieu, Kant, Angell, and Schumpeter (Lee & Pyun, 2016). Disintegration and fragmentation can make military and non-military conflicts between trade partners less costly, increasing the likelihood of clashes between them.

Historically, when an emerging power challenged the existing order, the result was often a war of hegemony, rather than peaceful negotiations, between the rising power and the ruling power (Allison, 2017). The rise of China is likely to bring about greater political and military influence and increased assertiveness in matters related to security and diplomacy. However, this would not necessarily lead to "Thucydides' Trap". Historical examples can be a useful reference, but other factors, such as economic interdependence, international institutions, and diplomatic efforts, can play an important role in preventing conflicts between China and the US. We foresee a quite complex bilateral relationship with the US that is specifically a mixture of tension and cooperation.

The major outsider, the US, will continue to play an important role in the region, with strong hard and soft power. Many Asian countries in the region will continue to be heavily dependent on the US not just for the economy, but for peace and security. Some countries, including Australia, Japan, the Philippines, and South Korea, are military allies of the US. The US is a major member of the Quadrilateral Security Dialogue (Quad) - "an informal strategic forum comprising four countries-the United States, Japan, India, and Australia" - that has strengthened ties to confront the expansion of China's influence in Asia.

3 Lee (2017) predicts that China's GDP growth rate will decline in the coming decades due to convergence effects and structural problems and suggests that China needs to substantially upgrade its institutions and policy factors and improve productivity, particularly in its services sector.

The rise of Asian countries as major powers can promote further active cross-border exchanges and deepen trade ties among these countries, where the growing middle class is expected to generate its own demand for production. This increased interdependence among Asian countries would create opportunities to enhance cooperation and collaboration. Yet the region lacks unified leadership and an effective regional institution to tackle economic and political conflicts and exert influence on the world economy. China is surely an economic and military superpower, but its authoritarian ways would not work in democratic countries. Other major players, including Japan, India, Indonesia, and South Korea, play important political and economic roles as well, but not in a collective manner. With the increasing influence of Asian countries themselves in regional and global arenas, we could see an increase in rivalries and tensions among the Asian powers.

Indeed, despite the establishment of regional institutions, including the Association of Southeast Asian Nations (ASEAN) and the East Asian Summit (EAS), the region is far from sharing a common vision for regional integration and cooperation. There still remain quite a number of obstacles and challenges to the future of Asia's cooperation. These include economic and political diversity, territorial disputes, and the absence of strong leadership. Geopolitical tensions are rising in places, including the East and South China Seas, the Korean peninsula, and the China–India border. Military conflicts remain a possible threat.

No one can easily predict the geopolitical landscape in Asia in the 21st century. The key question is whether the current international order can be reshaped to accommodate China's peaceful rise and strengthen cooperation among the world's powers as well as among the Asian countries themselves. It remains uncertain whether Asian countries and the US are willing to work together to pursue world peace and prosperity by going beyond their own national interests.

Concluding Remarks

The remarkable rise of Asia over the past half-century, particularly that of China, has challenged the hegemonic power of the US and signalled the beginning of a multipolar world economy. Nevertheless, the US is likely to maintain its dominance in many areas, such as politics, diplomacy, and the military, leaving the future balance of power uncertain. Our analysis, based on the endogenous growth model, demonstrates that Asia will continue to make significant economic progress in the coming decades. This progress is led by China and India. China has already exceeded the US, and India is also projected to surpass the US by 2060 in terms of GDP based on PPP. The convergence of emerging Asian economies to US levels in per-capita income is expected to continue, yet major Asian economies will not reach the US in terms of per-capita real GDP.

The rise of Asian countries as major economic powers will likely shift geopolitical landscapes, intensifying geopolitical tensions and conflicts. Hence, reshaping the world order is essential to resolve such tensions and conflicts as well as to promote economic prosperity and peace in the region and globally. This should be done through negotiation with sufficient consultations, and the success of this endeavour depends on global cooperation at all levels, especially in light of the growing economic interdependence among nations. In this sense, the 21st century is not only the century of Asia but the century of all. By working together to build a multipolar world order where all countries are included, we can ensure that this century is a century of shared prosperity and global progress.

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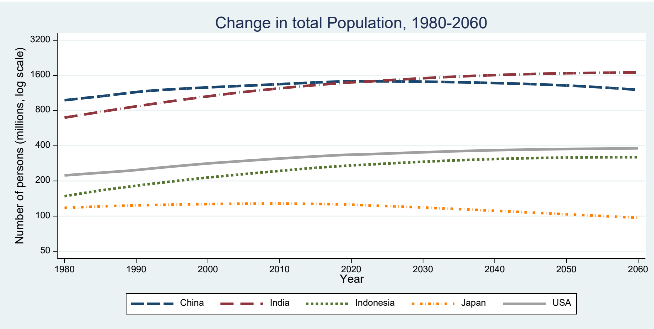
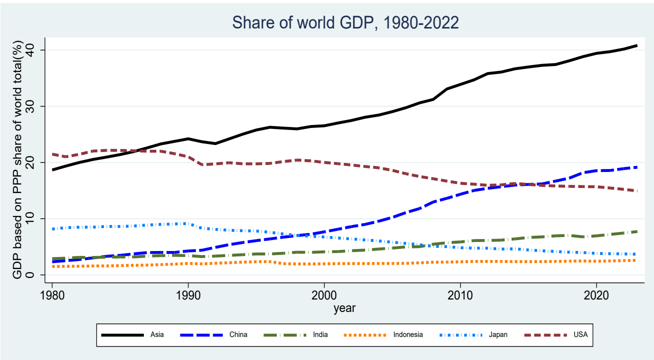
Figure 1. Change in total population, selected economies (log scale)



Source: United Nations (2022) (https://population.un.org/wpp/)

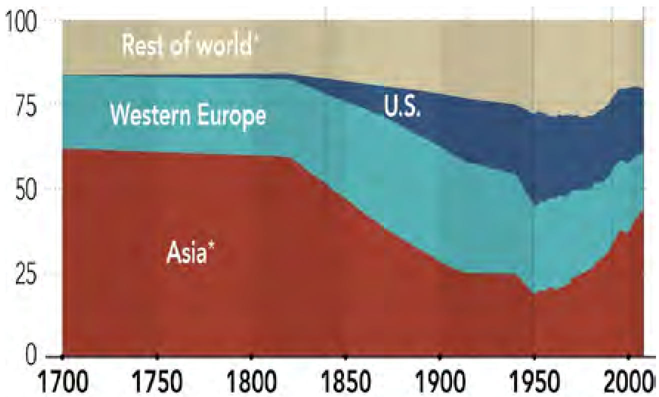
Figure 2. GDP share, Asia and selected economies (%)



Notes: Asia consists of countries in the group of "emerging and developing Asia" and six advanced economies, including Hong Kong SAR, Japan, South Korea, Macao SAR, Singapore, and Taiwan Province of China (https://www.imf.org/external/pubs/ft/weo/2022/02/weodata/groups.htm)

Source: IMF's World Economic Outlook Database: October 2022 (https://www.imf.org/en/Publications/WEO/weo-database/2022/October)

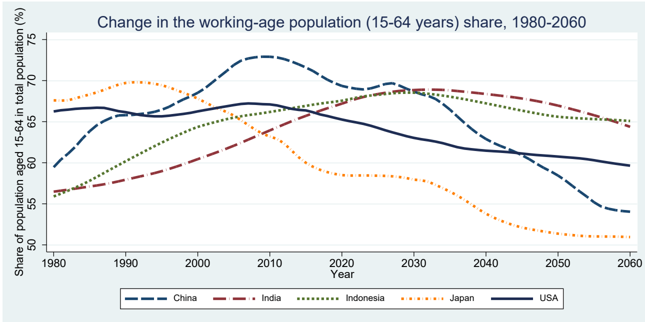
Figure 3. Share of world GDP (%)



Note: Asia includes 30 East Asian countries and 15 West Asian countries (45 countries)

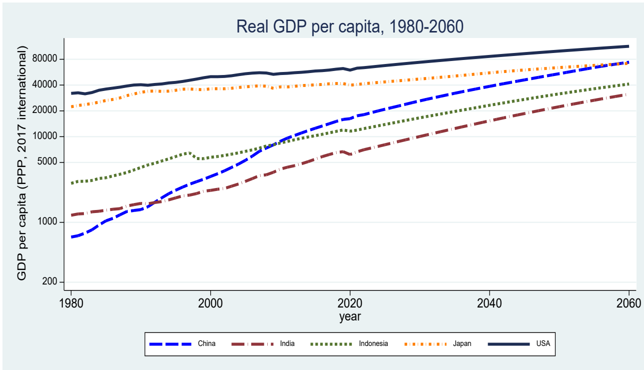
Source: Maddison (2007)

Figure 4. Change in 15- to 64-year-old population share



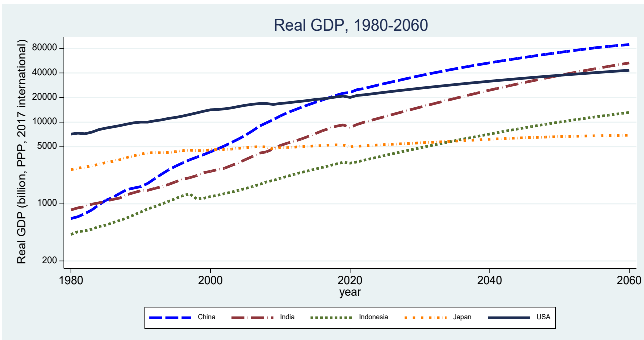
Source: United Nations (2022) (https://population.un.org/wpp/)

Figure 5. Per-capita real GDP, 1980–2060 (log scale)



Notes: Per-capita GDP is measured by purchasing power parity (PPP)-adjusted 2017 constant international price. The projections are based on the preliminary results from Lee and Song (2023)

Figure 6. Real GDP, 1980–2060 (log scale)



Notes: GDP is measured by purchasing power parity (PPP)-adjusted 2017 constant international price. The projections are based on the preliminary results from Lee and Song (2023)

Discussant Comments

C. Raja Mohan

Let me begin by fully endorsing the title of this session, which seeks to connect economic transformations underway in Asia to its evolving geopolitics. Let me also say that the paper by Professor Lee Jong-Wha offers many valuable insights as he maps the potential geopolitical effects of the unfolding economic trajectories of Asia and the US. These effects include the changing nature of Asia's relations with the US and the evolving internal geopolitical realignment within Asia itself. At the source of these consequential changes, of course, is the dramatic economic transformation of China over the last four decades, its consequences for Beijing's military salience, its impact on Beijing's worldview, major power relations, and the Asian regional order.

It is also important to underline an overlooked element—how the rise of Asia, and China in particular, has impacted the internal politics of the US and undermined the long-standing consensus in Washington in favour of economic globalisation. More broadly, it can be affirmed that domestic politics in major economies—especially the US and China—have become significant variables in defining the economic and geopolitical trajectory of Asia and the world. For far too long, we were comfortable in our complacent assumptions that history is over, and politics is passé in a world driven by expansive economic globalisation. The main question that animated us for the last few decades has been how to make the world safe for capital, to let it move across borders without hindrance, and to ensure its expansion without being constrained by the unreasonable passions of domestic politics.

Today, politics is back in command and redirecting economic relations within and between regions decisively. The return of politics and renewed domestic contestation of the premises of globalisation also means the return of the state, which was presumed until recently as becoming increasingly marginal in a world of ever deeper economic integration. The state has regained ground in the last few years, exercising greater sway in defining relations between capital and labour, between different sections of capital (domestic and foreign), and between capital and the environment.

The academic and policy communities have struggled to cope with the rapidity of simultaneous change in so many sectors. It has been difficult to question the assumptions that worked so well and generated peace and prosperity in Asia for at least five decades. However, we have no choice but to question them. Let me focus on four of them: the question of Asian unity, the idea of American retreat, the rise of Eurasia, and the Indian realignment with the US and the West.

Is Asia One?

Ever since the Japanese art historian Okakura Kakuzo pronounced that "Asia is one" back in 1901 when he came to Calcutta, the ideas of Asian unity and solidarity acquired massive ideological and political traction over the last century. It was never easy to sustain. During World War II, Asian leaders found it hard to be a united front as they fought different imperial powers. The post-colonial era began with a fresh effort to bring Asia together. New initiatives crashed on the rocks of competing nationalisms, border disputes, and competing economic and geopolitical strategies in the Cold War era. But as Asia's economic growth took off in a series of phases, there were quiet advances in economic integration within Asia and between it and the US.

ASEAN's successful promotion of a regional political and economic architecture generated new hopes for the emergence of a united, peaceful, and prosperous Asia in the post–Cold War era. It had a downside as well. The triumphalism on Asia's rise led to the celebration—prematurely—of the emergence of the Asian Century. Underlying this was the sense of Asian coherence that led to formulations of "Asia" versus "America" and the "West". These claims, however, ignored the growing gap in the economic weight of China. This alone need not have broken the trend towards regional integration in Asia. As the economic differential between Beijing and its neighbours translated inevitably into the military domain, the temptations in Beijing to redeem its historical territorial claims against its neighbours had become real. Even more consequentially, as China towered over Asia, the idea of building a Sino-Centric Asian order appeared within reach. As China became assertive and expansionist, it did not take long for pushback from the region. The second and third largest economies in Asia today—Japan and India—are now locked in a severe geoeconomic and geopolitical joust with China. It is possible to suggest that Asia is reverting to form away from illusions of unity/unipolarity to the multipolar region it always was.

America is Back

As elusive as the idea of Asian unity is the hope that Asia can do without America. The US retreat from Afghanistan in 2021 capped a period of chaos under President Donald Trump that the US was turning inward, protectionist, and isolationist. This reinforced the long-simmering ideas about America in decline—elegant or otherwise—and the prospects for an Asian Century. Much like Japan, which instrumentalised the ideas of "Asia for Asians" and an "Asian co-prosperity sphere" to push the European colonial powers out of the region in the 1940s, China has sought to mobilise Asian nationalism and regionalism as an instrument to limit US role in the region. Beijing's actions, however, have convinced at least some of its neighbours that China's rise may not be peaceful. It also reminded the region that a "distant hegemon" might be better than a local one who would severely circumscribe their room for manoeuvre.

Within a short span of two years, the Biden administration has successfully modernised its alliances with Japan and Australia, improved strategic ties with South Korea, begun to transform its military ties with India, and stepped up the engagement all across the Chinese periphery in Asia. The desire of Beijing's neighbours for greater balance in Asia coincides with the US strategy to retain its historic geopolitical primacy in the region. It is indeed worth recalling that Japan did succeed in giving the final blow to European colonialism. But Japan could not replace the West in Asia—it paved the way instead to American hegemony over Asia and a somewhat weak Soviet challenge to it. China's ambition to nudge America out of Asia has compelled Washington to recalibrate its Asian strategy.

Instead of repositioning itself as the dominant power in Asia, the US, under President Biden, has focussed on boosting the capabilities of its allies and partners. Encouraging Japan to rearm, transferring nuclear submarine technology to Australia, and supporting India's defence industrial modernisation, the US sets the stage for an *in situ* balance of power between China and its Asian neighbours supported, but not run, by the US. This makes it harder for Beijing to claim the problem is with the distant power. Having shown its hand at hegemonic intentions, China cannot sell the slogan "Asia for Asians" to all of its neighbours.

Rise of Eurasia

The Asian discourse on geopolitics focuses rightly on the region's relations with America. However, Europe is emerging as an unlikely but significant new factor since World War II even though Europe and Asia have been seen as separate theatres. Russia's aggression against Ukraine and the "partnership without limits" unveiled by Russian President Vladimir Putin in Beijing with Xi Jinping just before the invasion are beginning to integrate the two theatres. Putin and Xi have brought into public their shared interests in challenging not only the US and Western geopolitical primacy in the international system but also the global domination of Western "political values and cultural trends". Although much of Asia has seen Ukraine as a distant battlefield of no consequence for Asia, others in the region see Ukraine as the potential "future of Asia".

That a nuclear weapon state can attack a neighbour with impunity and annexe its territories concerns several countries that have border disputes with China. The prospect that China could discard its commitment to the peaceful reunification of Taiwan and seize it by force has become a matter of grave concern for many in Asia. Meanwhile, the US response to the Russian alliance with China has been to promote greater security cooperation between its allies in Asia and Europe. Leaders of four Asian countries—Australia, Japan, New Zealand, and South Korea—participated in the NATO summits at Madrid (2022) and Vilnius (2023). NATO, focussing on the North Atlantic region, is beginning to form a view on China and Asian geopolitics. South Korea, which has become a major weapons producer, is sending arms to Poland and Ukraine. Japan has promised significant support for Ukraine's reconstruction. Europe is turning to China to persuade Russia to end its war against Ukraine. Asia, then, is no longer a passive player in Europe and promises to contribute to its security.

India's Realignment

The shifting geopolitics of Asia includes a profound transformation of India's engagement with the region. Amidst its sharpening contradictions with China, marked by four military crises on the disputed frontier—in 2013, 2024, 2017, and 2020—Delhi has recast its policy towards Beijing and Washington. India's withdrawal from the Regional Comprehensive Economic Partnership in 2019 was justified in terms of Delhi's reluctance to be part of a China-dominated regional economic order. Delhi also discarded its long-standing reluctance to deepen military-strategic cooperation with the US and joined the revitalised Quad, the Quadrilateral forum that brings India together with Australia, Japan, and the United States. Since the end of the Cold War, India's focus has been on slow integration with the ASEAN-led regional institutions. It is now actively engaged with regional mini-laterals, such as the Quad, which some view as undermining ASEAN centrality. India is also working with the US and its allies to develop "resilient supply chains"—a euphemism for reducing dependence on China and developing a more diversified regional economic architecture.

China may have pushed India towards a geopolitical transition that was widely viewed as implausible. A "non-aligned India" with its enduring focus on "strategic autonomy", it was argued, will never join hands with the US in the security realm. That is the direction India is headed in as it seeks to secure itself against China's territorial expansionism and bridge the massive power differential with China. Since independence, befriending China and keeping the Western security alliances out of Asia have been two key objectives of Indian foreign policy. This broad framework did not disappear despite the 1962 border clashes between the Indian army and the People's Liberation Army (PLA). Delhi joined hands with China and Russia in the 1990s to promote a "multipolar world" that would constrain American hyperpower. Today, India is focused on building a "multipolar Asia" that is not vulnerable to Chinese hegemony. This is a very different India in a vastly transformed Asia.

Discussant Comments

Rohan Samarajiva

How Can Countries in Asia Rise? A Perspective from the Periphery

Asia is a term that lacks analytical value. There is little agreement even on its boundaries. Are Turkey and Russia part of Asia? Qualified, complicated answers will be required. When one says that Asia is the future or that this is Asia's century, that is a shorthand for talking about the prospects of specific countries, such as China and India, located in Asia. Their prospects are quite different from those of adjacent countries such as Taiwan, the Philippines, and Sri Lanka—all located in Asia but with weak actors on the global stage. When one talks about the centre of gravity of the global economy returning to Asia, one is talking about the economies of the modern states of China, East Asia, and India.[1]

Thucydides Trap

It is not wrong to say that China and India are rising powers and that Europe and the US are declining powers. It is also not wrong to speculate that a major war may erupt as a result of the "Thucydides Trap", popularised by Graham Allison in recent decades.[2] China is rising, and the US is declining, but the latter is not willing to go quietly into the night.

Are the problems of declining powers on the other side of the world our highest priorities? We have enough problems of our own, specifically the effects of Sino–Indian rivalry and the tinderboxes that are Afghanistan-Pakistan.

The North Atlantic perspective is not the same as that of South Asia. Scholars such as Allison see a bipolar relation, with the US as the current hegemon and China as the challenger. We, too, see the US as a declining major power, but the Asian end of the relationship is less clear from where we stand. We see the tensions between China, India, and Japan as having a greater potential impact on our fate. Students of history would be familiar with such cases, where jostling for the position of the challenger is more troublesome than the transition itself. The last time a hegemon was displaced, it was clear that Britain would be displaced by the US. Canada, Mexico, and Argentina were not in contention. Even though the US and Britain did not fight, third countries paid a heavy price.

No one need mourn the end of a unipolar world dominated by the US and or the irrelevance of the former balancing power, the Soviet Union (Russia). But we do need to concern ourselves with the instability caused by the absence of a hegemon in waiting. Stability is in the interest of the smaller countries of Asia. Some among us may not like stability underwritten by regional hegemons. But that may be the only realistic option.

Japan tried to establish itself as a regional hegemon. But the Greater East Asian Co-prosperity Sphere did not catch on. Now with its population in rapid decline and its politics sclerotic, Japan has to be ruled out as a sole contender. Indonesia has potential, but not likely to be realised in the near term. That leaves China and India.

China

The internal and external insecurities of the Chinese Communist Party (CCP)—the true decision maker in China—hobble its potential to become a true regional hegemon. A hegemon cannot rely solely on force. It must win the consent of the lesser powers. A hegemon is not driven by narrow self-interest. Its actions and words must encompass the interests of the weaker members of the system.

China has invaded Vietnam. Its bellicosity over Taiwan and the border with India is worrisome. It has rejected a judgement from the Permanent Court of Arbitration on its claims in the South China Sea. It prolonged bankrupt Sri Lanka's agony after having contributed to the crash of the Sri Lankan economy by pandering to its local clients. Despite the extraordinary achievements in economic growth and poverty alleviation under Deng Xiao Ping, China is not a magnet for migrants and young people wanting to build their careers.

Except for the Hun Sen–ruled Cambodia, and perhaps Laos, China has few loyal allies in its neighbourhood. Former President Duterte insulted the US and tried to make the Philippines one, but China mismanaged the relationship pushing the country back into the clutch of the US. Its Pacific Islands allies appear fickle.

1 Quah, D. (2011). The Global Economy's Shifting Centre of Gravity, Global Policy, 2(1): 3-9. https://doi.org/10.1111/j.1758-5899.2010.00066.x
2 Allison, G. (2017). Destined for War: Can America and China Escape Thucydides's Trap? New York: Houghton Mifflin Harcourt.

India

If one looks east of the Radcliffe Line dividing India and current Pakistan, India's performance as a regional hegemon contender is good. Bad patches—such as the Sri Lankan misadventure in the 1980s and the Nepal blockade—notwithstanding, the potential is there.

In 1965, India and Pakistan agreed to submit a border dispute to international arbitration. When the ruling was delivered in 1968, much of the more valuable, elevated land went to Pakistan. But India abided by the decision. Though not involving an international tribunal, in 1974–1976, India amicably resolved the maritime border dispute with Sri Lanka, including ceding sovereignty over the uninhabited island of Katchatheevu. More recently, India and Bangladesh resolved border tensions by exchanging enclaves in each other's territories. India, which was a net loser of land, approved a constitutional amendment to effect the changes.

The Gujral Doctrine, enunciated in 1996, exemplifies the stance a regional hegemon should take. The above examples show that India has accommodated the interests of the weaker neighbours in practice, at least with respect to land.

Kindleberger Trap

The Thucydides Trap carries with it an air of fatalism. The challenger must prepare for war, which will draw a reaction from the hegemon, which has to be responded to, and so on. The alternative is to desist from growth or at least keep your head down. The latter was what was recommended by Deng Xiao Ping: "Observe calmly; secure our position; cope with affairs calmly; hide our capacities and bide our time; be good at maintaining a low profile; and never claim leadership."

The other trap, propounded by Joseph Nye, is sunnier. It is centred on the provision of public goods by the hegemon.[3] If the hegemon under-provides, there is an opportunity for contenders to do so. The transition may occur peacefully or at least would give one hope of a peaceful outcome.

It is possible to illustrate how this could play out in Asia for the contenders.

China

Scholars writing about the ancient trading routes connecting China to Central and South Asia and beyond—named the Silk Road by Baron Richthofen in 1877—talk about the law and order maintained under the Han and Tang dynasties.[4]

Present-day Chinese strategy has been centred on hard infrastructure. Under the normal definition of public goods—non-rivalry and non-excludability—ports and highways are unlikely to qualify. The terms and conditions of the loans that finance these projects and the obvious benefits to the Chinese companies that undertake the work make it difficult to argue that China is providing global public goods.

India

The Ashokan rock and pillar edicts and related chronicles contain evidence of the supply of public goods in the form of dharma and ways of living by an Indian ruler.[5]

Present-day India appears to be on the cusp of a number of initiatives pointing to an awareness of the value of providing public goods. It has quickly mobilised response teams for disasters such as the 2004 Indian Ocean tsunami, where it helped with temporary Bailey bridges to restore road connectivity. Building on the mixed success of vaccine supply in the early days of COVID-19,[6] there is talk now of quick response teams to deal with public health emergencies and pandemics. Its offer to help neighbours replicate its successful Aadhaar-based India Stack leverages domestic success. Combining the strands of disaster assistance and digital competence, there is merit in considering a regional initiative to establish mutual assistance on cybersecurity.[7]

3 Nye, J.S. (2017). The Kindleberger trap, https://www.project-syndicate.org/commentary/trump-china-kindleberger-trap-by-joseph-s--nye-2017-01
4 Hansen, V. (2012). The silk road: A new history. Oxford: Oxford University Press.
5 Allen, C. (2012). Ashoka. London: Little Brown.
6 Pattanaik, S.S. (2021). COVID-19 Pandemic and India's Regional Diplomacy. South Asian Survey, 28 (1): 92-110. https://doi.org/10.1177/0971523121999293
7 Samarajiva, R. (2023). International in scope and interdisciplinary in approach. New Media & Society, 25(1), 12–20. https://doi.org/10.1177/14614448221143428

Discussant Comments

Madhav Das Nalapat

Dr Jong-Wha Lee has written a comprehensive paper on the prospects of growth in Asia. An intensive study has been made of past and present trends in order to arrive at conclusions about the future. Dr Lee has been careful to ensure that the conclusions expressed in the paper are neutral where the interplay of geopolitical tectonic plates is concerned. We are in an environment that is dynamic and fast-changing; there are shifts that, in many instances, are affecting and will continue to affect future outcomes. He has, however, sought to bring precision to his conclusions through an analysis of past trends. It is an inescapable conclusion that the onset of the COVID-19 pandemic during 2019–2022 and the Russia-Ukraine conflict that began last year have altered outcomes in a manner that could not have been foreseen even during the three months prior to the onset of such events. Given the increasing fragility of great power relationships—especially those involving China and Russia—such unforeseen but significant events are likely to continue. Looking at historical precedent, such unsettled times are more conducive to an "every country for itself" policy mode in practice, whatever the verbal and written declarations of intent.

There will, of course, be coalitions, but many of these will be opportunistic in that they will be formed as a response to specific situations and may be loosened once that situation alters. What is termed a "coalition of the willing" is likely, such that countries having roughly the same goals and priorities band together to pool and, thereby, complement their strengths. Such a coalition has been formed with regard to the objective of assisting Ukraine to get back territories that had been lost to the central government in Kyiv since the 2014 Maidan upheaval. Barring countries in East Asia that either host US military units for their protection or are in the process of becoming treaty allies of the US in the way that Japan, the Republic of Korea, and to a lesser extent, the Philippines are, countries in what is termed the Global South have avoided taking sides in this particular conflict.

The separate fault lines between the Global South and the two segments of the Global North have been accentuated by the COVID-19 pandemic in one segment of the Global North where the leading power is China and by the Russia-Ukraine conflict in the other segment of the Global North, where the US is the leading power. While much has been written about South Asia as the natural hinterland of India, given the sweep of its attention and interests, it may be more accurate to define what may be termed Southern Asia—stretching from West Asia to the Philippines—as the natural hinterland of India as a longstanding champion of the Global South. The paper reflects the reality of the separation of the Global North—which, for reasons of both geography and economic heft, includes China—into two segments. In a way, history is being repeated, but with some changes in the players involved. It is undeniable that the USSR was a part of the Global North during what may be termed Cold War 1.0, while Russia continues to be so as well. The world's largest country has been underestimated by those who look only at overall GDP or per capita GDP (in US$), but the reality is that in terms of what may be termed gross national resources (GNR), the Russian Federation can claim superpower status, together with the US and China. The other potential superpower is India, and Dr Lee's calculations reflect that possibility. What has understandably gone unmentioned is the factor of major upward swings in overall country performance as a consequence of scientific discoveries that may occur in specific countries. The historical record shows that in the centuries leading up to the 20th, the "breakout" of certain countries—such as the UK—to global superpower status was not an obvious possibility until such an event started to make itself visible. Once that breakout moment occurred, subsequent progress was rapid. Given India's resources of young minds, the possibility exists that the country may experience a breakout in the way that China did in the course of the 1980s.

There has been another "breakout" involving China during the period after the 1997 handover of Hong Kong, and this has become difficult to ignore since 2013–2015, by which time the new leadership of the Chinese Communist Party made explicit what had been implied earlier—that the PRC was set on a course, the intent of which was to displace the US as the leading power, which it has been for around a century. The consequence of such transparency in objectives, combined with measures designed to achieve that purpose, has created a dynamic that needs to be explored in greater detail with the same rigour that Dr Lee's paper displays elsewhere. Of course, there is mention of US–PRC tensions, something that he considers unfortunate but which some others may regard as inevitable.

In a fast-changing situation, the paper represents a noteworthy effort to look into the future through the lens of the past. Scholarship and rigour have gone into the analysis. The question is whether there is as a subtext, the underlying assumption that we are still in the era previous to what appears to be Cold War 2.0, which may have consequences as radical as those created by Cold War 1.0.

PAPER 2

Asia's Evolving Political Economy and India's Role in it

Bilahari Kausikan

In his Issues Note for Session 5, Shivshankar Menon posed two fundamental questions:

- Is politics now in command of economics? and
- Is there an international order or are we in a world adrift, between orders?

I will try to answer the theme assigned to me—Asia's evolving political economy and India's role in it—within the framework of these two questions.

The answer to the first question is, I think, obvious. Politics has always been in command everywhere, and this has always been so regardless of the specific type of politics or political system. Differences between various types of political systems reside in the modalities by which politics shape economics and the degree or extent to which they do so.

There has never been any such thing as a completely *laissez-faire* market system or a completely planned economy even, say, during the height of capitalism in 19th-century America or in the Soviet Union during the Stalinist period. Today, every economy is even more clearly a mixed economy, the differences residing only in the specific balance between planned (or regulated) and unregulated market elements. It has been a very long time since anyone could seriously hope or fear that communism could replace capitalism or vice versa.

Internationally, trade has always followed the flag, and political power—which ultimately rests on the use of force or the threat of force—has always been used to secure economic advantage. International orders have never been entirely consensual or self-organising. They rest on foundations created by a state or group of states with power and the will to use it to enforce their ideas. We politely call this "leadership," particularly when we regard their ideas as being in our own interests.

This brings me to the second question.

It is a mistake to conceive of international order in the singular. Historically, in any particular period, different conceptions of "order" contended or coexisted or contend and coexist simultaneously. The 20th century saw three immense struggles between different conceptions of order: World War I, World War II, and the Cold War were Western civil wars in which India and Singapore, and indeed, every other non-western country, were more often than not objects rather than actors. We were never totally without agency, even while under colonial rule, but we could generally only use whatever agency we possessed to advance our interests within frameworks defined by more powerful states.

This was true even of countries like India (and Singapore) which professed non-alignment. We could be non-aligned only with reference to the binary Cold War framework. Otherwise, the very term non-aligned was meaningless: non-aligned with reference to what? In practice, our interests often led us to de facto align ourselves one way or another.

The international order is thus more usually defined by the contention or competition between different conceptions of order. Of course, contention must occur within a broad framework of minimal consensus. During the Cold War, that minimal consensus was fundamentally the imperative of avoiding nuclear, mutually assured destruction and (even more minimally) participation in certain international institutions such as the United Nations (UN).

After the end of the Cold War, there was a very short and historically exceptional period of about 20 years—between 1989 when the Berlin Wall came down and circa 2008 when the global financial crisis discredited American-led globalisation (including among many Americans)—when the dominance of American power fostered the illusion that what came to be called the "liberal international order" (or more generally the "rules-based order" or American-led globalisation—there is a great deal of overlap between the three terms) was the only possible order. Of course, the illusion, being just that—illusionary—masked more complex attitudes and interests.

Some of you may know of the famous Japanese movie director, the late Akira Kurosawa. The theme of perhaps his most famous film, *"Rashomon,"* was how one event can appear very different from different perspectives. Even at the height of American power, the "liberal international order" or "rules-based order" or "globalisation" were all *Rashomon* terms. We may use the same words, but we should not assume we all always mean the same things by the same words or place the same emphasis on the same things.

Singapore has a very globalised economy and has very close defence and security relations with the United States (US) and other Western countries. But Singapore is much more committed to the economic rules and much more committed to rules governing international political behaviour than to those political rules that can impinge on our domestic affairs. In other words, our understanding of the rules-based order is premised on our own interests, and seeing some rules as being in our interests carries no obligation to accept all rules. This is true of all countries.

I doubt that China rejects every aspect of the "rules-based order." In economic terms, China was the biggest beneficiary of the "liberal international order," and I do not see why Beijing should have a strong interest in kicking over the table to seek radically new economic arrangements, even assuming it has the ability to do so, which is not to be taken for granted. China is certainly assertively revanchist in the East and South China Seas and the Himalayas, but to call it "revisionist" or a "systemic competitor" overstates its position. Chinese policies do not necessarily challenge the status quo equally across all domains. That does not make China any less of a challenge, but we should understand the challenge accurately.

India, like all other countries, will have its own priorities based on its own interests. The process of defining our interests is inescapably political. It follows that the conception of order that we regard as in our interests must be political. Politics, it has been said, is the art of the possible. That is true, but dealing with the possible—indeed identifying the possible—requires the exercise of agency. I don't want to push the point too far one way or the other: international order is not to be understood as some totally autonomous reality to which our volitions can only meekly submit; nor are we ever totally without agency to define our own interests even in the most complex or dire of circumstances.

The essence of realistic statecraft is navigating between these parameters to advance our interests. Thucydides' far too often quoted dictum—the strong do what they can and the weak suffer what they must—is only crude realism. As we try to navigate the more complex world, more than ever before, it is important to understand that crude realism is often not very realistic and can be dangerous.

Obviously, today, the US is no longer as dominant as it was in the immediate post–Cold War period. We are now in a more historically normal period of international relations in which conflict and competition—the war in Ukraine and the US-China rivalry—cast deep shadows over almost every aspect of every country's international relationships. But the paradox of our time is that despite the reality of major power competition and conflict, the current international system is still largely defined—at least in economic terms—by the system that evolved during the period of American dominance.

The US-China strategic rivalry is now a structural reality of international relations and will remain so for the foreseeable future. The war in Ukraine, dangerous though it undoubtedly is, is a second-order issue. China has tried to insulate, as far as possible, its competition with the US from its partnership with Russia. Beijing is in an awkward position but may be reaching an inflection point where it will have to make some difficult choices about the extent of its support for Moscow or face even greater difficulties.

But whatever Beijing may choose, it is intellectually lazy to describe the US-China rivalry as "a new Cold War" or to try to frame it (and the war in Ukraine) in simplistic ideological binaries, such as a contest between "democracy" and "authoritarianism." There is an ideological element in the US-China rivalry, but it is epiphenomenal and should not distract us from what is core.

The US and the Soviet Union led two entirely different types of economic systems, which were connected only tangentially at their margins. The US-Soviet competition was to determine which system would prevail. Their competition was essentially a binary game. By contrast, the US and China are both vital and irreplaceable components of one global economic system. The US and China compete within this single global system. They and other components of the global system are connected by a web of supply chains of a scope, density, and complexity never before seen in history. These supply chains are what distinguish 21st-century interdependence from earlier periods of interdependence.

Competition *within* a single system is fundamentally different from competition *between* systems. It is not binary. The global web of supply chains is unlikely to bifurcate across all sectors, although partial bifurcation has already occurred in some technology sectors with national security implications. More bifurcation in these sectors is likely. But complete across-the-board bifurcation is highly improbable.

The dynamics of competition within a single system are complicated. For example, high-end semiconductors have emerged as a serious vulnerability for China. All critical nodes in the semiconductor supply chain are held by the US and its allies and friends. But China constitutes about 40% of the global semiconductor market. You cannot cut off your own companies and those of your friends and allies from 40% of the market without doing them serious damage.

The US and China have benefitted from the system of which they are both vital parts. But neither is entirely comfortable with it because their interdependence creates and exposes mutual vulnerabilities. It is easier to talk about diversifying supply chains to avoid over-reliance on

China than to actually do so. Despite all the difficulties of operating in China, and regardless of strategic concerns, the Chinese market cannot be ignored by even the closest American ally.

China faces parallel difficulties. It is easier for Beijing to talk about "dual circulation," becoming more self-reliant in technology, and driving growth by boosting domestic household consumption than to actually do it. For the foreseeable future, Beijing must rely on external demand—in which the US, Japan, and other Western markets will remain important driving factors—and will need to import crucial technologies from the West to sustain the growth China needs to maintain social stability. In 2022, the total volume of US-China trade was US$690 billion. This does not suggest separation of any significant degree.

Therefore, like it or not, the US and China must accept the risks and vulnerabilities of remaining connected to each other. Competition within a single system is about achieving a position that will enable you to benefit from interdependence while mitigating your own vulnerabilities and exploiting your rival's vulnerabilities. It is not about one system displacing the other. The choices facing the two principals and third parties like India and Singapore are complex and no longer straightforward binary choices.

Crucial segments of the global web of supply chains reside in the Indo-Pacific, particularly in the northeast and southeast. India will play an increasingly important role in this web. None of us can do without stable and strong relationships with *both* the US and China. Each of us must manage and balance our relations with the US and China. In doing so, all of us are confronted with two harsh realities:

- a more assertive, if not downright aggressive, China and
- a more transactional America that will demand more of its allies, partners, and friends.

China's assertiveness is inherent in the ethno-nationalist narrative of "humiliation," "rejuvenation," and realising the "China Dream" by which the CCP legitimates its right to rule. This is an essentially revanchist narrative. Revanchism in its broad sense has to do with the recovery of what was lost. What was lost and is to be recovered is not just physical territory, but in China's case, more essentially and deeply, status and the sense of self that arises from the place that China believes it once occupied in the region and the world.

The underlying assumption of this narrative is that all that happened to China in the 19^{th} century and the first half of the 20^{th} century were aberrations from the normal order of things. Yan Xuetong of Tsinghua University has even described China's rise as "granted by nature."

It is this narrative that underpins China's extravagant claims in the East and South China Seas and the Himalayas. It follows that these are not claims that can be easily settled by diplomacy or legal adjudication because they are presented as the righting of historical injustices and the restoration of the natural order of things. Furthermore, Chinese history and political culture lead China to conceive of order as a hierarchy with China at the apex.

As China confronts a future of slower growth, it is likely to place even greater emphasis on this ethno-nationalist narrative. This does not mean that diplomacy is impossible. But it does mean that diplomacy must rest on a foundation of strong deterrence and a stable balance of power.

Herein lies the vital and irreplaceable role of the US. A stable balance of power is the necessary condition that enables us to maintain close relations with China without irrevocably compromising autonomy. But without the existential challenges of the Cold War, there is no longer any compelling reason for Americans to bear any burden or pay any price to uphold international order.

China is a "peer competitor" of the US, but it is not an existential threat of the kind that the Soviet Union posed to the US. Competition within a system cannot, by definition, be existential because the survival of the system is not at stake. China is undoubtedly revanchist. Beijing may want adjustments to certain aspects of the existing system or may even want to dominate it. But that is not the same thing as replacing it with an entirely new system. In any case, that is beyond its capabilities.

The priorities of all US administrations since the Clinton administration have been essentially domestic, with the second Bush administration an aberration forced on the US by 9/11. That aberration did not turn out well for America in the Middle East. The Obama, Trump, and Biden administrations have all tried to correct America's post-9/11 Middle Eastern misadventures in order to focus on domestic issues. In 2021, Biden ruthlessly cut the Gordian knot in Afghanistan.

This is often described as a "retreat" or neo-isolationism. But it is better understood as a recalibration of the terms of America's engagement with the world. More than 50 years ago, the US corrected the mistake it made in Vietnam by shifting from direct intervention to playing the role of offshore balancer. That was the meaning of Nixon's 1969 "Guam Doctrine," and regardless of whatever vicissitudes US foreign policy has since undergone, as East Asian offshore balance, the US has been remarkably consistent ever since. The Abraham Accords and the withdrawal from Afghanistan signal the beginning of a similar shift of posture in the Middle East. It will eventually occur in Europe as well, delayed but not diverted by the war in Ukraine. An offshore balancer expects more of its allies, partners, and friends to uphold order and maintain a stable balance of power.

With Obama, it took the form of a greater emphasis on multilateralism, which is another way of describing collective action and burden sharing; Trump made crude demands; Biden has emphasised consultation with allies and partners. The intent is much the same. If the Biden administration consults you, it is not for the pleasure of your company, but to determine what you are prepared to do with it. The Association of Southeast Asian Nations (ASEAN) has not yet sufficiently come to grips with this reality. Has India?

What are the implications of this analysis for the theme of this session? I think there are three points we should keep in mind as we ponder how to navigate the complexities:

- "Asia," however we may choose to define that elusive term, does not and will never form a closed economic system. The future Asian economic architecture is not going to be defined by the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) or Regional Comprehensive Economic Partnership (RCEP) or the various other bilateral or plurilateral free trade agreements (FTAs), institutions, or forums that exist or may come into being in this vast region. The value of these various agreements or groupings is precisely in the connections that they have or can create for their members with the broader global economy. Globalisation is certainly under stress but will not be reversed in its entirety. The politics—domestic and international—that drove globalisation have become more difficult, but the technologies that underpin globalisation will not be unlearnt, and hence the interests that those technologies have created will not disappear even if the politics makes the pursuit of those interests patchy and uneven.
- To deal with an assertive China and a transactional America, we will have to learn to deal with both simultaneously. Without the US there is no balance against China; without a relationship with China, the US will almost certainly come to take us for granted. Maintaining stable if not close relationships with both simultaneously will be very complex and challenging, but in complexity, there is at least the opportunity to exercise agency. Of course, whether we have the wit to recognise the opportunity and the courage and agility to seize the opportunities are different matters. We must ensure that our institutions and, more crucially, our politics, are fit to meet the challenges.
- The future Asian order is best conceived of not as a single structure but as a fluid and dynamic system of multiple overlapping coalitions or forums with different casts of states forming and re-forming around specific issues or concerns. Not every state will be a member of every coalition or forum; some will include China but exclude the US and vice versa. Such a system plays to the natural multipolarity of our diverse region. Again, we will have to ensure that our institutions and politics are fit for purpose.

Discussant Comments

PS Raghavan

The paper addresses two points. First, is politics in command? The answer, as he says, is an emphatic yes, particularly after the Ukraine war and soaring US-China tensions. When the NATO secretary general goes to the World Economic Forum in Davos and tells the assembled business leaders that, henceforth, freedom should have priority over free trade and values are more important than profits—the message is very clear. These political yardsticks are, of course, quite subjective.

The second point: is there an international order? The Chair (S. Menon) has often said and written that the world is now between orders. I agree with the comment that while we have clearly left the Cold War–order behind, there is no indication of when and what shape a new one will take. The post–Cold War emergence of many middle powers—flexing their economic muscles and using their regional clout to further their interests—has created fragmentations. The reactions of countries from Latin America to West, South, Southeast, and East Asia to Ukraine show that facile templates, such as democracy versus autocracy, do not correspond to current realities.

The paper argues that a future Asian order should be conceived; not as a single structure, but as a fluid system of overlapping coalitions based on shared interests, including the US or China. If this were possible, it would bring stability to Asia. It is difficult to see this happening in the present context of the US-China tensions.

The paper makes an interesting point that today Asia is caught between the US as an external balancer—but a transactional one that will demand more of its allies—and an aggressive China—revanchist not only in respect of territory but also status and influence. Asian countries have to recognise these attributes in working out their terms of engagement with both nations.

There is a self-evident geopolitical logic in the contention that without the US, there cannot be a viable balance against China, but at the same time, without an engagement of some sort with China, the US will simply take you for granted. However, many countries may find the operationalisation of this understanding complicated by domestic politics, historical experiences, or geographical circumstances. India is a case in point.

There are at least two other distorting factors. The escalating rhetoric attending great power rivalries often results in irrational decisions, which might cause economic damage to the protagonists and disproportionate collateral damage to others. For example, the bifurcation of supply chains, national security exceptions to trade, and the creation of technological divides.

Asian countries are conscious of the reality that in relations between major great power rivals—especially with such intertwined economic linkages, as in the case of the US and China—long-term strategic goals often get deflected by immediate economic compulsions, electoral considerations, or unanticipated crises. Therefore, they have to adjust to tactical shifts in great power relations.

Amidst these uncertainties, Asian countries need to find a way to establish and sustain dialogue to ward off potentially disruptive consequences of the escalating US-China tensions: supply chain disruptions, technology divides, and proxy confrontations.

Discussant Comments

Shyam Saran

We have two fine papers by Shivshankar Menon and Bilahari Kausikan, which have given us a lot to chew on. Here are my brief comments on the perspectives advanced in the papers.

One, does Asia's diversity translate into a natural tendency towards multipolarity, towards a multipolar order? Not necessarily. Multipolarity will be determined by the distribution of power. There is also an imbalance between military and economic power within countries. North Korea is an economic pygmy but has an outsized impact on regional security thanks to its military and nuclear assets. ASEAN may be an economic powerhouse but is, relatively speaking, a military pygmy despite recent trends towards rising military expenditures of its members. If they could coalesce towards collective defence, then that could contribute to multipolarity—and this is worth thinking about. Multipolarity then may be a preference, but it will not be a realistic prospect unless Asia works deliberately towards it, and there are good reasons to do so. And multipolarity in Asia cannot just be with reference to China, but also the US, which remains a formidable power in Asia.

Two, US hegemony—both military and economic—underpinned Asian security and prosperity, including, in later years, that of China. China has eclipsed the US in Asia in economic terms but still lags in military terms. The trend, however, is towards a comprehensively more powerful China, which has no patience with multipolarity. But Asia, in the new millennium, thought it had the best of both worlds—closer economic integration with China but outsourcing its security to, a still formidable if declining, US. That is no longer sustainable. Hedging is yielding diminishing returns. Let us look at this in two respects. Is Chinese hegemony a threat? If it is, then it needs to be balanced through countervailing action. Should the US be a part of this balancing action? Yes, but one should not rule out the possibility of a Sino–US dyarchy, in which the resident power

will always have an advantage over a distant one. Geography does count. We were close to such a dyarchy—the G-2—in the initial days of Obama's first administration.

If balancing against China has to have a reasonable chance of being credible and effective, then India will be a key player, both as a result of its steadily advancing economic and security capabilities and also because it is one power that has demonstrably rejected the Chinese drive towards hegemonic power and is ready to pay the price for it. It has developed a strong partnership with the US but has also avoided going the whole way into an alliance. Its engagement with East and Southeast Asia is constrained precisely because countries in the region continue to want it both ways. Balancing by stealth works only up to a point. Countries in the region do not wish to be caught in a crossfire between the US and China or India and China. But then do not be surprised if, at some point, you end up in the firing line.

The more immediate danger is US brinkmanship in Taiwan, which could lead to a disastrous war—much worse than Ukraine—and Asia would pay a high price in its aftermath. But East and Southeast Asia have little agency on this issue. Neither does India.

Three, are we between orders or in the midst of prolonged disorder? Are we seeing the beginnings of a new order? If the order is underpinned and sustained by a hegemonic power or a cluster of powers, then we are clearly witnessing a transition. There are phases in history when such transitions are accelerating; others in which they are slow and sticky. There are components of an order that change more quickly; other elements more slowly. For example, the whole body of international laws, norms, standards, and practices, sanctioned by long usage, are parts of the order that continues to be dominated by the West, even if there may be a relative decline in its economic and military dominance. The financial plumbing of the global economy still functions within a Western set of institutions and processes. The recent unplugging of Russia from international financial markets is an example. This "stickiness" is the legacy of a 500-year Western-dominated international order, during which power shifts occurred within the European cultural system and in a European idiom. The shifts from Portuguese to Spanish, from Dutch to English, and then finally to the US did not represent significant ideational breaks. Each added a fresh layer to a still familiar landscape. A shift to a Chinese-dominated order, with new rules of the game and a new cultural idiom, would constitute a major rupture of this continuity. This could be a good thing or a bad thing. Some may say it could be a transition to a more familiar Asian idiom. But is the Chinese idiom an Asian one? How persuasive is this argument? Does it not go against the proposition that Asia is a diverse cluster of countries sharing strong affinities but displaying significant particularities and, hence, should strive for a more loosely structured multipolar order? This requires deeper examination and should be on the agenda for a more focussed engagement between India and East and Southeast Asia. What is clear is that actively changing the balance of power in the region is indispensable to promoting Asian multipolarity.

Discussant Comments

Kuik Cheng-Chwee

Ambassador Bilahari Kausikan's paper, "Asia's Evolving Political Economy and India's Role in It", is insightful and thought-stimulating. He argues forcefully that (a) politics has always been in command of economics, (b) the international order has always been multifaceted and contested, (c) the ongoing US-China rivalry is more about "competition within a single system" than "competition between systems", and (d) the future Asian order is best conceived of not as a single structure but as "a fluid and dynamic system of multiple overlapping coalitions of forums with different casts of states forming and reforming around specific issues or concerns".

In this note, I echo some of Mr Kausikan's views by putting forward three interrelated themes to reflect on the emerging geopolitical trends in Asia.

Theme One: Geoeconomics is Geopolitics

In 21st-century Asia and beyond, geoeconomics is geopolitics. On the one hand, economic and geoeconomic means are used to pursue political and geopolitical ends. On the other, geopolitical activities are shaping, limiting, and complicating geoeconomic processes. As the US-China rivalry intensifies, geoeconomics and geopolitics are increasingly inseparable.

While the links between geoeconomics and geopolitics are not new, the widening big-power rivalries on both military and non-military chessboards are making them an increasingly salient trend across the globe, especially in the Asia Pacific. This trend involves not only the US and China but also the second-tier powers in and out of Asia. Its dynamics and consequences affect all "third states"—the small and secondary states caught between the two rivalling giants.

Such dynamics are perhaps most intense in Southeast Asia—a region where all the big powers have converged. Over the past decade, Southeast Asia has been the centre of big-power courtships and competition across the twin chessboards. All the big powers prioritise Southeast Asia for the exercise of military statecraft, especially those pertaining to two potential hotspots: the South China Sea territorial disputes and the Taiwan Strait. Southeast Asia is also a targeted area for the non-military chessboards, where big powers compete to win support and partnerships from regional countries not only over public health and other non-traditional areas of security cooperation, but also over infrastructure-building, 5G networks, semi-conductor supply chains, and other forms of economic collaboration. Infrastructure connectivity cooperation is a key theatre of geoeconomic competition. Since the 2013 launch of China's Belt and Road Initiative (BRI)—a multi-trillion-dollar infrastructure investment and lending programme connecting China with Asia, Africa, Europe, and Latin America—infrastructure cooperation among countries has been increasingly coloured by geopolitical dynamics. This trend has accelerated as other powers launched competing schemes. In 2015, Japan upgraded its longstanding connectivity-based external aid policy to the Partnership for Quality Infrastructure (PQI). This was followed by the European Union (EU) with the EU–Asia Connectivity Strategy, the US's BUILD Act, and the Quadrilateral Security Dialogue's (Quad) Blue Dot Network—all emerging one after another during 2018–2019. More recently, the Group of Seven (G7) announced its Build Back Better World (B3W) in 2021 and the Partnership for Global Infrastructure and Investment (PGII) in 2022, around the same time as the EU kicked off the Global Gateway. In May 2022, the US launched the Indo-Pacific Economic Framework (IPEF). While these schemes are global in scope by design, Southeast Asia is among their major targets. While China claims that the BRI helps meet regional countries' developmental needs, the US and its partners commit and pledge that their competing initiatives will serve as alternatives for countries in the Global South that seek to diversify their developmental links and reduce their dependency on China.

In the eyes of Southeast Asian states, the growing courtship and attention from the competing powers notwithstanding, there are gaps between the big power's proclaimed commitments and concrete outcomes. While some of the BRI-related projects have helped regional states meet their infrastructural needs, perceptual and political problems persist. At the same time, the US and other powers' economic initiatives have primarily remained as announced schemes rather than concrete alternatives. In addition, there are imbalanced or inadequate allocations of actual resources.

Take the Biden Administration's IPEF initiative. The initiative's announcements on clean energy infrastructure and other cooperative programmes are clear indicators of the administration's attention and investment in economic statecraft. Together with the G7's B3W, these are all welcome efforts at a time when Southeast Asian states wish to diversify their developmental and strategic linkages beyond China, beyond the BRI, and the existing pattern of geoeconomic architecture. However, there are gaps and imbalances in the US strategy across the military and non-military chessboards. For instance, the funding allocated for public health and education cooperation with ASEAN countries is insufficient. A major portion of the US$150 million worth of sectoral initiatives goes to such strategic-oriented sectors as maritime, security, and energy. Hence, while IPEF and Washington's overall catch-up efforts on the economic chessboard may not be too late, they appear to be too little, with an uncertain future beyond 2024. Moreover, while IPEF is credible, it is no substitute for the Trans-Pacific Partnership/Comprehensive and Progressive Agreement for Trans-Pacific Partnership (TPP/CPTPP). Washington's economic statecraft requires a more dynamic trade and investment agenda. It needs more concrete and convincing details. This leaves the impression that the US Indo-Pacific strategy is still missing an economic pillar. It deepens the perception that Washington cares more about its strategic interests than economic and developmental cooperation with Southeast Asia.

This is not a trivial issue because economic issues are political issues. This is especially so in Southeast Asia, where the ruling elite relies heavily on economic performance as a source of their domestic legitimacy and authority. These enduring gaps, alongside the growing uncertainty surrounding big power intentions and relations, are driving smaller states to hedge deeper. This brings me to the second theme.

Theme Two: Hedging and Small-State Agency

Hedging is neither passive nor indecisive behaviour, as (mis)understood by many in policy circles and academia. Rather, hedging is an active and instinctively pragmatic policy choice. I define hedging as insurance-maximising, survival-seeking behaviour aimed at mitigating risks and cultivating fall-back options under high-uncertainty, high-stakes conditions. As the US-China rivalry intensifies, Southeast Asian countries have deepened their hedging policies by actively underscoring their not-taking-sides stance, inclusively diversifying their strategic and development ties, as well as selectively cooperating and concurrently demonstrating deference and defiance vis-à-vis the competing powers to offset multiple risks. Each of these approaches indicates that small and secondary states in Southeast Asia are seeking to exercise their agency, amid uncertainties.

Southeast Asian hedging, and by extension, their small-state agency, are driven by their shared desire for neutrality and autonomy, sustained by ASEAN centrality, and subjected to the prospect of such structural conditions as the relative utility of the ASEAN-based institutional architecture in the Indo-Pacific era.

The Southeast Asian states' insistence on impartiality and autonomy is rooted in their historical experiences—being colonised or dominated by competing powers for centuries. It is also grounded in pragmatic calculations of the present and future scenarios. As power rivalries intensify and power uncertainties grow, the ASEAN states view neutral, inclusive pragmatism as the sine qua non for forging continuing cooperation with all powers and players, while preserving peace and reducing the risk of being entrapped into big-power conflict. For Southeast Asian states, foreign policy choices are not an either-or dichotomy. Inclusive diversification and active impartiality go hand-in-hand. The deepening uncertainties and complexities necessitate more effort to preserve dynamic coexistence and maintain sustainable stability. ASEAN leaders believe it is crucially important to preserve the space for every nation, big and small, to coexist and continue cooperating, despite and precisely because of differences that continue to persist.

Such space must be sustained and supported by ASEAN centrality. If and when ASEAN was no longer in the driver's seat in shaping regional agenda and providing principal platforms for ASEAN-plus three dialogue, then inclusive cooperation and active institution-building would not be possible.

An example is the 15-member Regional Comprehensive Economic Partnership (RCEP), which is a free trade agreement negotiated on the platform of ASEAN-led multilateral institutions for almost a decade. The agreement, entered into by all ASEAN states—Australia, China, Japan, New Zealand, and South Korea—would not be possible if ASEAN loses its centrality. Indeed, the eventual conclusion of RCEP in 2020—amid unprecedented regional uncertainties and COVID-related global challenges—indicates that ASEAN's continuous dynamic coexistence is not an empty ideal, but one which has attainable and progressively productive goals, even for a group of highly diverse countries. Hence, ASEAN centrality is good for all countries, not just Southeast Asian nations, but also ASEAN's dialogue partners in and out of the region, including the competing powers.

ASEAN centrality, in turn, is possible only when ASEAN neutrality is firmly in place. If and when ASEAN states depart from their long-held principles of impartiality and non-alignment, they will lose their unique position of attracting all powers and players to engage with ASEAN-led mechanisms. Such a scenario will increase such systemic risks as group marginalisation, regional polarisation, and conflict entrapment.

Theme Three: Non-Alignment via Multi-Alignment

In the face of growing uncertainties and intensifying rivalries, non-alignment and neutrality must be pursued via inclusive, multi-layered alignments.

Southeast Asian states do not think alliances and clear-cut alignments are the solutions to manage the challenges in Asian security. This is in contrast to post-Ukraine Europe, where neutrality is rejected, and alliance embraced. Finland and Sweden's bids to join the North Atlantic Treaty Organization (NATO) in the wake of Russia's invasion of Ukraine signify that the alliance now trumps neutrality in Europe. This, however, is not the case in Southeast Asia. In Europe, the smaller states' realignment decisions are driven by two conditions. First, the threat from Russia is becoming more profound and direct; and second, the allied support from US-led NATO is immediately available, credible, and reliable.

These two conditions are far from straightforward in Asia. The small and secondary states' perceptions of threats and patrons are not black-and-white, but shades of grey. In the eyes of Southeast Asian countries, the sources of threats are less than clear-cut and allied support is less than certain. China has been a source of growing security concerns, as Southeast Asian claimants in the South China Sea dispute and littoral states in the South China Sea have been increasingly worried by Beijing's growing maritime assertiveness. At the same time, however, China is also an indispensable provider of economic and diplomatic support for all Southeast Asian governments, who are more occupied with tackling a wide range of more pressing domestic challenges and non-traditional security problems, as they seek to rebuild the post-COVID-19 economy and society.

Equally important, unlike the European states, which see NATO as a readily available and reliable source of allied assistance, Southeast Asian states do not see a straightforward solution. ASEAN states do not view alliances as a principal, one-size-fits-all instrument to tackle the multiplicity of their external challenges. ASEAN states also see the danger of a self-fulfilling prophecy: overly and overtly forming an exclusive alignment targeting the perceived China threat will turn a security concern into an immediate and greater threat, as there will be action-reaction countermeasures and China may act more aggressively.

ASEAN states are reluctant to put all eggs in any power's basket, not even the US basket. In the eyes of Southeast Asian states, although the United States still enjoys unparalleled military might and a comparative strength in technology and other key areas, there are serious gaps in the US's Asia strategy. It is (a) imbalanced: emphasises military partnerships but under-invests in economic and functional cooperation; (b) uneven: prioritises some member states of ASEAN more than others; and (c) uncertain: overshadowed by the prospect of the possible return of Donald Trump as President of the United States or "Trumpism" after 2024.

Therefore, while Southeast Asian states are committed to upgrading their relations with Washington, they have also sought to diversify by entering into as many strategic and development partnerships with other powers as possible. They have done so by strengthening multifaceted partnerships not only with the tier-two powers in and out of Asia but also with China. Some of these partnerships—with the US, China, and the other powers—are strategically driven, supported by institutionalised mechanisms and sustained by continuous policy coordination across domains. They are "alignments" in the broad sense of the word.

ASEAN states, in other words, are pledging "non-alignment" but practising "multi-layered alignments" across the defence, diplomatic, and development domains. Under the current circumstances—less-than-clear-cut threat and less-than-certain allied support—Southeast Asian states are likely to deepen their hedges by widening more multi-layered, multi-track alignments with as many powers and players as possible. ASEAN and ASEAN-plus multilateral institutions will continue to serve as indispensable platforms, alongside bilateral and minilateral mechanisms.

To conclude, hedging-driven, multi-layered alignments with all the key powers will remain the dominant approach in Asia in the years to come. This is neither an ideal approach nor the best strategy. Panaceas do not exist in the real world, and each policy entails its shortcomings and drawbacks. While this trend might not be preferred by the big powers, multi-layered alignment is a good second-best mechanism for all, for it offers the needed space, channels, and platforms for pragmatic partnerships, while avoiding any vicious cycles of regional polarisation.


POONAM GUPTA
NACHIKET MOR
DEEPALI KHANNA
YOSE RIZAL DAMURI
AMITA BATRA


INDIA IN ASIA


V. ANANTHA NAGESWARAN
SHEKHAR SHAH


ANOOP SINGH


SYED MUNIR


WEERAKOON
SYED MUNIR KHASRU


RAJESH CHADHA
NITIN PAI


SIHASAK PHUANGKETKEOW
MONTEK S. AHLUWALIA
DEWI FORTUNA ANWAR


JANE YUMIKO ITTOGI
NAOKO ISHII
VIKRAM S. MEHTA


HOE EE KHOR
INDRANI GUPTA
C. RAJA MOHAN
KUIK CHENG-CHWEE
DEEPAK MISHRA


SURJIT BHALLA

SESSION 5

The Impact of Climate Change

SESSION NOTE

Montek Singh Ahluwalia and Laveesh Bhandari

Asia is among the most vulnerable regions subject to climate change. It has already seen the ramifications of increased extreme weather events and heat waves. In 2021, for instance, over 57 million people in the region were affected by climate disasters, as reported by the International Federation of Red Cross and Red Crescent Societies (IFRC, 2021). Three ASEAN countries, Myanmar, the Philippines, and Bangladesh, have been classified as among those that have suffered the greatest economic damage and number of fatalities due to climate (Global Climate Risk Index, 2021). This is not surprising as Asia accounts for the bulk of the global population; moreover, more people reside in Asian coastal cities than all other cities in the world combined. By 2050, as will also occur globally, large parts of the region are likely to experience increasing average temperatures, lethal heat waves, extreme precipitation events, severe hurricanes, drought, and changes in water availability (Woetzel et al., 2020). Rising temperatures and lethal heat waves will affect the liveability and effective working hours in major Asian economies, which will possibly lose close to 10% of daylight work hours by mid-century (International Labour Organization [ILO], 2019). This will naturally impact economic growth, with more than two-thirds of the total annual global GDP expected to be impacted (ILO, 2019).

Decreasing the human contribution to climate change requires mitigation policies along with coordinated adaptation policies. Asia is positioned well to address these challenges and capture the opportunities that come from effectively managing climate risks. Many countries in Asia are only now building their infrastructure and urban areas. This provides the region with an opportunity to ensure that the infrastructure is more resilient and better able to withstand the heightened risks of climate change. At the same time, key economies in the region are building technological capacities from electric vehicles and renewable energy to nuclear power, which are necessary to adapt to and mitigate climate change. Mitigation efforts, however, are unfortunately inadequate to address the massive needs, and individual country-level action has been insufficient to combat climate change.

Measures to protect people and assets include reinforcing or elevating physical assets and infrastructure, building green defences, such as by restoring natural defences like wetlands and ecosystems, and building grey defences that reduce the severity or duration of climate events, such as disaster relief community shelters. Apart from such asset hardening, the resilience of assets and communities can be enhanced and diversified by increasing alternate and backup sources or decentralising resource distribution. For instance, many regions are facing pressure on water systems and frequent droughts, leading to significant crop losses (Woetzel et al., 2020). Developing new seeds and diversification towards resilient crops that are better adapted to drought and pests are required in all parts of the world, including in Asia. Further, though evidence and analysis are still ambiguous, snow variability in the Himalayan and Tibetan plateau region could possibly impact the flows of seven major river systems in the region, namely, the Indus, Ganga, Brahmaputra, Salween, Mekong, Yangtze, and Hwang Ho. Solutions such as storing meltwater in standing structures that provide irrigation throughout the year are at a nascent stage and limited (Ice Stupa Project, 2015).

But without significant decarbonisation, these mitigation efforts cannot be fully successful. Since Asia contributes almost half of all greenhouse gas emissions, and this is expected to grow, there is an urgent need to transition from coal to renewables plus storage. Challenges not only include higher costs and losses due to stranded assets but also the availability of minerals critical for new technologies. Similarly, the financing of adaption measures is particularly important because of Asia's significant infrastructure needs. To maintain the growth momentum, eradicate poverty, and respond to climate change, the region must invest.

Impact of Mitigative Actions

Mitigative responses impact the source of the problem and are therefore the key to fighting climate change. Fiscal policies that include carbon taxes and green subsidies are arguably among the most important constituents of mitigative responses. Such regulatory and market-based mechanisms help incentivise environmentally responsible actions which, in turn, are expected to lead to a significant reduction in emissions. Further, they also facilitate energy transitions by utilising the revenue generated from carbon taxes in meeting the fossil revenue gap. However, the impacts of these instruments on the competitiveness of industries, jobs, and economically weaker sections should also be examined as these taxes could be regressive. Moreover, such taxes have also been proposed by the European Union (EU), which will also levy these on the imports of the most polluting sectors in the form of Carbon Border Adjusted Mechanism (CBAM). Such actions are only expected to increase in the future, impacting global economies and more so major exporting ones.

a. Carbon Taxation and Its Macroeconomic Impact

Carbon taxes have been used extensively in Nordic countries for the past three decades for curbing emissions. These have also been imposed in Asian countries, although they remain in their nascent stages, as their design, and hence, the impact on emissions, is ineffective. Studies have shown that if these taxes are levied on the polluting inputs/outputs appropriately and their revenues are used effectively, then these instruments can meet the twin objectives of emissions reduction and developmental gains. Some estimates show that a carbon tax of $20/ton will lead to a reduction of carbon emissions ranging from 2% to 8% varying across the six ASEAN countries. This would be accompanied by a slight reduction of their real GDPs in the range of 0.22% to 0.95%, with the Philippines and Thailand witnessing a small increase (Nurdianto & Resosudarmo, 2016). The trade-off between environment and growth can be overcome by recycling the revenue generated from these taxes for meeting the revenue shortfalls in financing developmental targets such as reducing poverty and inequality, addressing unemployment, and so on. A study by Verma (2021) finds that environmental taxes are overall progressive in India, and in rural areas, a transfer of only 2% to 10% of the revenue generated to rural households can make it progressive. Alonso and Kilpatrick (2022) studied the impact of carbon taxes in the Asia and Pacific regions, separately, and find that only 6% to 7% of the revenue from carbon taxes will be required to compensate 20% of the poorest households affected by these taxes. Verma (2021) also investigates the export competitiveness concerns of eco-taxes on the polluting sectors and finds them to be negligible. Thus, revenue recycling can conceptually eliminate the distributional concerns of such fiscal instruments.

However, these impacts will vary across countries, and with a changing economic climate, studies using dated information may not be appropriate. A much deeper understanding is, therefore, required at the national and global levels.

b. Energy Transition and Impact on the Fiscal and Macroeconomy

Asian economies rely significantly on fossil fuels to satisfy their energy requirements in the electrical and transportation sectors. Between 2018 and 2019, large Asian economies, including China and India, relied significantly on coal, oil, and fossil gas to fulfill 77%, 88%, and 89% of their primary energy consumption, respectively (Van Gelder et al., 2021). Transitioning away from this reliance and consequently driving energy transitions across the Asian continent has a variety of socio-economic, environmental, and financial ramifications. It is imperative that the overall transition is just. Asia's energy sector is still in the early phases of shifting away from fossil fuels and transitioning towards renewable resources. For instance, Bhandari and Dwivedi (2022) projected a fall in government revenues for India from fossil fuels as a proportion of GDP to 1% by 2040. Similarly, revenues from fossil fuels as a share of total government expenditure is also expected to see a declining trend by 2040. The study found that this share of fossil fuel revenues in total government expenditure will fall from 20.8% in 2019 to 10.7% by 2030 and 6.3% by 2040. This calls for the search of fiscal avenues that can finance the shift towards cleaner fuels. Revenues from carbon taxes may or may not be able to bridge this gap in a world where the use of carbon-based fuels is falling steeply. For developing countries, in general, which need to maintain high growth while transitioning, this will pose a serious dual challenge.

c. International Trade and CBAMs

The EU proposed a CBAM on energy-intensive imports related to key sectors (including electricity, iron and steel, fertilisers, aluminium, and cement) from third world countries. Though yet to be notified, the proposed CBAM seeks to reduce carbon leakage, stimulate the adoption of cleaner technology abroad, and level the playing field for domestic and foreign producers. To achieve these objectives, the CBAM must eventually apply to all imports entering the EU (Duval, Ali, Vickers, & Kravchenko, 2022). However, import surcharges based on the emission intensity of manufacturing processes may have an impact on the export competitiveness of many, if not most Asian countries, with ramifications for growth and equity.

The EU, as one of the largest importers, might have a negative impact on the GDP of Asian nations. CBAM may affect supply chain adjustments, which may lower real household spending, harming the most disadvantaged households and increasing inequality, particularly among low-skilled employees in the most affected industries (UNESCAP, 2021). The CBAM may also reduce investment in this region, at least in the short term. The Commonwealth Secretariat argued that the economies of South and Southeast Asia are particularly vulnerable to future CBAM levies because of their dependence on EU trade. The tax could pose major short-term hurdles for corporations with a substantial carbon footprint and act as a fresh source of upheaval to a global trade system already riven by tariff wars, renegotiated treaties, and increased protectionism. For instance, Aylor et al. (2020) predicted that a $30 fee on CO2 emissions might diminish the profit pool for international producers by around 20% if crude oil prices remained stable at $30–40 per barrel.

The goal of meeting net zero by 2050 would likely motivate other countries to adopt similar policies, and, hence, the Asian economies must be prepared to tackle these changes. Involvement in regional carbon pricing structures, increased investment in greener technologies, and active participation in global trade and climate change negotiations are all possibilities that can help mitigate the direct and indirect consequences of future border carbon adjustments on their economies (Duval et al., 2022).

Ensuring Funds and Stability

The United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance Needs Determination report summarised the financing needs of selected countries in Asia. While these estimates are self-reported by countries and naturally susceptible to errors of omission and commission, it is evident that the financing requirements for adaptation and mitigation are quite significant. The report showed the total financing needs to be USD 11.6 trillion for the financing of mitigation, adaptation, and cross-cutting expense needs in the selected Asian countries. The country-wise break-up in Table 1 shows that even though countries are self-reporting their needs, there remain many gaps in even the self-assessments. This could be a combination of a lack of common reporting standards on the various elements under which expenditures/investments are required to be reported, and a lack of adequate capacities within countries to estimate the range of actions and investments required, among others. Clearly, a common global framework is required that can help assess the real needs across countries, purposes, and sectors.

Though not specified, these self-reported figures are likely to be gross needs and not the "additional" required for green investments. We take the highest range of needs expressed from various reports and country submissions to the committee (First report on the determination of the needs of developing countries parties, UNFCC Standing Committee on Finance, 2021). The Asia Investor Group on Climate Change (2021) estimated the investment opportunity for Asia's energy supply to achieve net zero to be in the region of USD 26 trillion (2 °C scenario) to USD 37 trillion (1.5 °C scenario) cumulatively from 2020 to 2050 (equivalent to 1.7% to 2.0% of Asia's GDP). The International Finance Corporation (2017) report estimated the potential of USD 3.4 trillion of investments in energy, transport, and other sectors by 2030 in South Asia alone.

Table 1: Cumulative Requirements till 2030 for Selected Asian Countries (in USD Billion)

Country	Mitigation	Adaptation	Cross-Cutting/ Other	Total
Bangladesh	22.0	44.0	13.7	79.7
Bhutan	0.5	0.4		0.9
Brunei				
Cambodia	2.1	2.1		4.2
China	4,836.8	3,627.6		8,464.3
India			2,500.0	2,500.0
S. Korea	42.8			42.8
Laos	4.8			4.8
Mongolia	6.3	5.2		11.5
Myanmar		0.0		0.0
Malaysia	4.0	0.1		5.0
Maldives		0.1		0.1
Nepal	25.0			25.0
Pakistan	40.0	140.0		180.0
Sri Lanka	9.6			9.6
Indonesia	247.2			247.2
Philippines	3.0			3.0
Singapore	0.1	0.0		0.1
Thailand	3.0	0.0		3.0
Vietnam	44.1			44.1
Total requirements	**5,292.2**	**3,819.5**	**2,500.0**	**11,611.7**

Note. Reproduced from UNFCCC 2021, cumulative requirements till 2030 as of 2021.

A major share of the climate finance flowing into developing countries is public financed through bilateral, multilateral, and multilateral development banks. Climate Policy Initiative (2022) states that only 16% of total climate finance between 2011–2020 was concessional finance, wherein 61% of total climate finance was debt based, 34% equity based, and 5% grants based. The large component of climate finance, and the limited grant component, is an issue on which a much better understanding is required vis-à-vis repayment capacities of countries, how they might impact macroeconomic stability, and of course, the risks that come with an increased reliance on debt to fund any investment. Moreover, the possibility that a substantial proportion of these funds would be used to replace productive capacity also calls into question the issue of repayment capacity.

At the same time, avenues are available that need to be better understood and in which coordinated action might yield superior results. These include risk sharing between countries, ways in which insurance-related mechanisms need to be developed for climate-related events, and ways in which greater private funds can be brought in without having to resort to government guarantees or with none or minimal subsidies. Examples such as blended finance are being increasingly mentioned these days, but they come with their own challenges where greater cross-country interaction would enable superior information sharing and the development of an effective and coherent enviro-financial policy.

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SIHASAK PHUANGKETKEOW
BILAHARI KAUSIKAN

PAPER 1

Climate Catastrophe and Carbon Markets

Vinod Thomas

Opening Summary

Extreme spillover damage linked to carbon emissions from burning fossil fuels is the principal cause of runaway climate change. In a framework of cause and effect, pricing carbon effluents would be a principal policy response. While mainstream economics' obsession with short-term Gross Domestic Product (GDP) has regrettably given cover to carbon-intensive growth, economists' preference for adopting carbon pricing has great merit. Pricing can result explicitly from a carbon tax, or carbon trading or a tariff on the carbon content of trade. It can also be an implicit signal sent through a quantitative restriction on carbon effluents.

Global estimates of avoided climate damages from carbon pricing overwhelm the costs of such action, but there are inconveniences to individual sectors, especially in transition. No region exhibits the perceived conflict between short-term growth and climate investments as sharply as Asia. But it is precisely the region's constraints to decarbonisation that make the case for a program of bold carbon pricing that can unleash unforeseen solutions, including technological ones. The region should advance its timelines for net zero carbon and complement them with a proposal for carbon pricing in time for the 2023 G20 Summit hosted by India.

Decades of environmental destruction and high-carbon growth backed by mainstream economic policy are the roots of the rapidly escalating crisis. The preoccupation with GDP has meant the neglect of negative externalities (spillovers) from economic activities—like greenhouse gas (GHG) emissions and deforestation. It is time to reverse the thinking that climate action is inimical to growth and competitiveness (Carton and Natal 2022; IMF 2019); or that future benefits of climate investment should be heavily discounted.

Economic prescriptions for pricing carbon, if done at scale and efficiently, holds one of the keys to tackling the crisis. If countries immediately adopt carbon pricing, through carbon markets or carbon taxes or tariffs on carbon imports, or equivalent quantitative restrictions (below), a price floor would be set to discourage carbon-intensive growth. Importantly, the implicit price for clean air also motivates investing in clean energy. As a side effect of pricing, governments can also raise money to finance green investments.

Nowhere are the stakes higher than in the Asia region, the biggest incremental contributor to GHGs (Hsiang and Kopp 2018), and the most vulnerable to climate disasters (Lau 2021; Thomas and Jagil 2022; WEF 2018). Global and country imperatives have been laid out (IPCC 2022, IEA 2021), while China, India, Japan, South Korea, and Singapore, have outlined target dates for net zero emissions (ADB, 2018; Ahluwalia and Patel 2022; CSEP 2021). The biggest breakthrough will be in clean energy technologies, including storage, distribution and batteries.

Economic Sources of the Climate Crisis

The upper-left cell in Table 1 shows transactions based on market prices and market interest rates, without counting externalities or future effects. The upper right cell presents price signals that correct externalities, for example, via carbon taxes. While these decisions account for externalities, they do so only from the viewpoint of "normal" investors and their time frames. The upper right cell corresponds to Nordhaus' picture of heavily discounting climate investments (Nordhaus, 2007).

The lower two cells introduce corrections to interest rates, treating the welfare of future generations as being like that of the current. The lower left cell, while reflecting market prices, uses normative rather than market interest rates. This accommodates the interests of future generations, while some argue that this leads to wasteful subsidies even to ordinary investments. The lower right corner introduces price signals that reflect externalities and the interests of future generations, corresponding to the Stern Review (Stern, 2007).

Table 1: Prices, Interest Rates and Externalities

Price Discounting	Market Prices	Externality-Corrected Prices
Market interest rates	Market decisions	Decisions that internalise the external effects of transactions
Normative (low) interest rates	Decisions that internalise the interests of future generations	Decisions that internalise external effects and the interests of future generations

Source: Petri and Thomas, 2013.

The implications of the bottom right cell are to invest in both climate mitigation and adaptation, including internalising externalities. Climate mitigation comprises steps such as taxing carbon-emitting fossil fuels and subsidising cleaner renewable fuels. Adaptation, such as improving drainage systems or building coastline protection, is a vital and complementary step. Some measures, such as reversing deforestation or protecting mangroves, achieve both mitigation and adaptation. On market interventions relating to climate change, three are noteworthy. First, there is the direct pricing of carbon—the central focus of this paper—that will cut the flow of emissions (Stiglitz and Stern, 2017). The IMF's proposal for a global minimum carbon price is appealing (Parry et al, 2021). It has price floors of $75, $50, and $25 per ton of carbon for the US, China, and India, respectively. It believes this could help achieve a 23% reduction in emissions by 2030 to keep global warming below 2 degrees. Even if the country coverage is partial, India could see benefits via revenue generation and its allocation to green investments. A domestic tax should also negate border taxes by the EU or the US.

A second approach is to regulate, for example, using quantitative restrictions in the spirit of command-and-control policies. Examples include pollution controls, emission standards and licenses; input controls over the quantity or mix of inputs; output quotas or prohibitions; and location controls, such as zoning, and relocation of industry. The best is the use of direct controls on pollution as it allows the producer flexibility in how the effluents are reduced. Such a quantitative restriction can be equivalent to a pollution tax, except for the revenue generation with the tax. Note that a restriction or a tax on the carbon content of petroleum is superior to a limit or a tax on petroleum itself, a blunt instrument to cut emissions.

Third, and for completeness even if utopian, emissions can be lowered through changes in consumer behaviour and consumption patterns. The idea that individuals do not exclusively act in a narrowly utilitarian way suggests that behaviour change has promise. The success of ethical investment funds and charities are cases in point; so is social responsibility, for example, environmental labelling of volatile organic compound emissions in Germany (Global Regulation, 2004), and paper recycling in South Korea (US EPA, 2001). Related, voluntary agreements and bargaining between interest groups can make a difference.

The primary benefits of carbon pricing are the damages avoided. Studies of the European Union's (EU) emission trading system, the oldest carbon market, indicate modest annual reductions of some 1% annually, but that is across countries and sectors employing low rates and low coverage. By one estimate, the EU's emission trading helped cut GHG emissions of power generation and energy-intensive industries by 43% over the past 16 years. With the Swedish carbon tax (the highest in the world, after the Danish now), GDP increased by 78% during 1990-2017, while domestic GHGs decreased by 26%.

On the cost side, European countries indicate a zero or modest positive impact on GDP and employment. British Columbia's carbon tax policy has also been shown to cut emissions without compromising growth. In Canada, for a C$50 carbon tax, four industries—petroleum and coal, agriculture, power, and chemicals—were estimated to face unit production cost increases of 5% in the short run; 40 industries by more than 1%, and rest 0.6%; the economy 2.4%. In the US, the electric power industry was estimated to have a far greater impact from a carbon tax than would most others.

A carbon tax needs to be complemented by more stringent environmental regulations, or the carbon tax would have to do all the heavy lifting and would need to be untenably high. The revenues from the tax can be used to protect vulnerable consumers or to reinvest in cleaner sources of energy. The pricing also gives a boost to investors inclined to promote renewables, protect forests or invest in clean technologies (Koval et al, 2022).

Ways of Pricing Carbon

More than 60 systems of carbon price exist today, covering over one-fifth of global greenhouse gas emissions (World Bank, 2020; Economist, 2022). In June 2021, G-20 finance ministers endorsed carbon pricing to transition to low carbon growth (Farand, 2021). Of 38 OECD countries and G20 countries combined, covering 80% of world emissions, only 10 countries were pricing carbon at half the mid-range of the estimated cost of CO2 emissions for 2020.

Three ways of pricing carbon directly are: (i) the use of an emission trading system (ETS), (ii) the establishment of a carbon tax domestically, and (iii) the application of an import tariff on carbon content. There is a synergistic link between the three, and all three can be employed at the same time, as the EU is doing. In the case of a carbon tax, the price of effluents is fixed, but not the quantity of emissions cut. In the case of an ETS, the emission cut is decided, but not the price.

Following the EU, the second biggest market, South Korea and New Zealand in Asia Pacific, China, the biggest, took the path of emission trading with online trading starting on July 16, 2021, initially for coal and natural gas (Nogrady, 2021). But China's price was only US$9 in 2022. With emission trading, countries set limits on carbon effluents and allow companies to trade their surplus and deficit effluents using tradeable certificates of carbon credits. There are challenges in designing the enterprises to be included and quotas to be distributed. Emission trading gives policymakers control over emission levels, but not the price. The trading does establish a price of pollution and encourages polluters to consider alternatives (Black, Parry, and Zhunussova, 2022).

Carbon credits, which are part of ETS, can have broader ramifications beyond allowable emissions. For example, investors can receive tradable carbon credits for reforestation, using recycled materials in road construction, and making energy more efficient. Carbon credits can be boosted if they can be traded in global markets. Making carbon credits eligible for offsetting carbon taxes would reinforce the price–invest approach (European Commission, 2015).

A tax on polluters is another way to price carbon, a long-preferred means of economists (Jorgenson and Wilcoxen, 1995; NCCS, 2023). It has limits and is only a part of the package of needed measures (Green, 2021; Prasad, 2022). One way is to add a carbon tax to the price of say petroleum or steel, as Singapore is doing for major emitters like power stations (Xu, 2021). (Japan was the first to tax carbon in the Asia Pacific, but its rate has been among the lowest in the world.) Ideally, the tax would be equivalent to the estimated damage from the discharge. If the tax is big enough, producers would cut pollution to avoid the tax. The highest rate has been set by the Danish government for 2025 increasing to €150/tCO2 in 2030 (Enerdata, 2022). But the global average is only US$6 a ton of CO2. A high tax across major polluters like China, the US, India, Russia, and Japan (60% of global effluents) could be decisive (Rapier, 2019).

A carbon tax is not to be confused with a tax on say gasoline that raises the price of gasoline, which, to the extent it discourages gasoline use, also indirectly reduces carbon emissions. A tax on gasoline can meet revenue-raising objectives but is an inefficient way to get at carbon emissions. In the political economy, however, petroleum pricing needs to be kept in mind. Inclusive of taxes and subsidies, Saudi Arabia and Russia are at the low end of gasoline prices, China and India in the mid-range, and Germany and France at the high end.

To the extent that pollution continues with the tax being paid, the tax revenue raised could be used to support cleaner fuels. Some 0.5-2% of GDP can be raised for a US$50 per ton tax (Parry, 2022). It can be directed to motivate investment in low-carbon technologies. The governments can also finance schemes like coastal protection or disaster risk reduction. A part of the revenues can also be used to finance safety nets for the poor, hurt by short-term rises in energy costs.

Box 1: Mechanics of a Carbon Tax

The coverage of polluters and the tax rate, as well as implementation mechanisms, are big choice variables. Since the primary goal is to cut emissions and not to raise money, it pays to cover the largest polluters (comprising say 80% of the effluents). It also pays to target ones with elastic emission schedules. In Singapore, power generation accounts for nearly 40% of emissions and is likely responsive to a carbon price, especially with the adoption of new technologies. Transport is less so, in many other countries as well.

It also makes sense to allow companies to use high-quality international carbon credits to offset up to say 10% per cent of their taxable emissions. This avoids double dipping. The impacts on low-income groups, say of utility costs, needs to be considered. For meaningful results on emissions, however, a decisive entry is recommended, but coupled with safety nets for low-income segments. Carbon revenues themselves can be used to cushion the consumer impact. Some make a case for exempting “emission intensive trade exposed” enterprises from the carbon tax over concerns of competitiveness and leakage effects. Output-based rebates and border carbon adjustments are superior to carbon tax exemptions.

Fiscal policy has set in place the basic structures needed for a carbon tax. For example, they can be weaved into road-fuel taxes, which are established in most places, and extended to industry and agriculture.

A third approach is to get at the part of the emissions occurring through trade. Roughly one-fifth of global emissions can be identified as being import-related. China has the highest emission generation in all industries, exporters or importers. When considering emissions linked to consumption rather than just domestic production, a carbon tax should also target discharges contained in imports. The divergence between consumption and production-based emissions has been rising. For example, instead of a 3% increase in production-based emissions since 1990, the US would have a 14% increase in consumption-based (Ritchie, 2019).

An import tariff policy should be for regulating the environment rather than discouraging the flight of domestic industries. The success of an import tariff depends on its scale across countries. The effect of the tariff on emissions in the exporting country depends on possibilities for export diversion to others. The success of the policy is reflected in how little countries will eventually be paying in tariffs. Implementing a border tax would face tougher challenges than the carbon tax or the ETS. For starters, one issue is if the World Trade Organization views the tax as a form of import protection and a violation of international rules.

Reality Check

Because there is no way around the cost to special interest groups from carbon pricing, the coverage and the rate of the pricing can end up excluding big chunks of the economy. Industrial firms argue about losing their competitive advantage to exporters from countries with a lower carbon price. Canada, EU, Japan, Singapore and others allow some forms of exemption inter alia to prevent “carbon leakage”, where firms consider relocating elsewhere. Add to that the political pressures in the wake of special events: soaring energy prices in 2022 led the EU to sell millions of permits causing a 10% drop in carbon prices.

While the principle of polluter pays does not give room for the producers’ complaints, the impact of higher prices on low-income groups needs to be addressed. The EU excludes transport, where higher costs would be passed on to voters directly. Singapore provides vouchers for consumers hit by the utility price rise. The Californian system, which covers a small number of big emitters making up 80% of the state's emissions, uses proceeds from the sales of carbon permits partly to subsidise purchases of electric cars.

Australia illustrates the difficulties even when new revenues are used to compensate consumers (Benney, 2023). Australia even aided businesses that might be unfairly impacted. Tax increases were very gradual, yet the carbon tax remained politically vulnerable. When a new, conservative government took office, it repealed the 2012 tax just two years after it was instituted.

Difficulties also beset ambitious emissions trading systems, such as the EU ETS covering 11,000 emissions producers in 31 countries. Monitoring and the avoidance of cheating are difficult; the system also faces market instabilities and weak implementation. Wild swings in the price of carbon are a big problem.

Sweden may have handled some of these political constraints as well as any (Parry, 2022). Taxes were started on fuels for transport and heating in 1991, going from below US$30 to over US$120 per ton of CO2. Industry faced a favourable rate initially, but increases were phased. The tax was also presented as part of a bigger fiscal package lowering energy (as distinct from carbon), household, and business taxes, combined with social safety nets. The process was participatory with voice given to key stakeholders.

Communicating the idea of societal net wins even in the presence of individual producers' win-lose is vital. ETSs face the possibility of being misunderstood as they give rights to pollute or reward polluters for refraining. Carbon offsets, which can form part of ETSs are especially controversial in being a license to pollute and paying others to offset.

Pricing and Investment

For a sharp drop in emissions, carbon pricing needs to be accompanied by investments in renewable energy, electric vehicles and afforestation (Roy, 2020). Establishing a market and pricing for carbon can help materialise green investments (Zheng, 2022). That is not automatic, however. Because solar and wind energy still present business risks, they need mechanisms for risk sharing, such as government guarantees for energy sale prices.

IPCC indicated in 2019 that temperature increases below 1.5°C would involve costs in energy alone of 2.4 trillion a year in US$2010 (from 2016) through 2035, with a sometimes-cited figure of US$36 trillion in total (Fogarty, 2018; Yeo, 2019). If lives and livelihoods are threatened, such financing should be possible. In the wake of COVID-19, an estimated US$14 trillion was mobilised by G20 nations in 2020-21 (Nahm, Miller, and Urpelainen, 2022).

Comparisons of the investment costs with benefits would also help. By one estimate, averted global indemnities by containing warming to 1.5°C could be US$150 trillion to 792 trillion by 2100 (E360 Digest 2020; Kahn et al. 2019; Wei et al., 2020). In the same time frame, one set of projections suggest that global real GDP per capita would fall by 7.2 percent by 2100 with a continued rise in world temperature by 0.04°C per year in contrast to a loss of 1.07 percent with a temperature increase of 0.01 percent under the Paris Agreement (Kahn et.al., 2019).

The economic benefits of adaptation are large. By one estimate, investing in resilient infrastructure in developing countries could bring benefits of the order of US$4.2 trillion (Hallegatte et al., 2019). Another assessment is that adaptation investments of US$1.8 trillion globally during 2020-30 could generate US$7.1 trillion in net benefits (Global Commission on Adaptation, 2019).

Conclusion

One might ask if a full-fledged application of market interventions in Asia could move the needle (ADB, 2022). Imagine if:

- Countries stop using the gross measure of growth, GDP and at least complement it by one that nets out damages from externalities.
- All countries adopt carbon pricing, for example, say via a significant carbon tax that is levied on the pollution source.
- A high enough quantitative restriction is placed on fossil fuels, in addition to eliminating all subsidies for this pollution source, while subsidies go to clean energy in accordance with its social benefits.
- All development projects pass a climate test and are required to be accompanied by legal covenants on mitigation and adaptation.
- High-income countries provide vast climate financing to low-income countries, facilitated by a global public goods mandate of MDBs, and an unprecedented alliance among the IMF, WBG, ADB and NDB.
- G20 hosted by India puts forward a proposal for G20 nations to adopt an ambitious carbon pricing scheme, which may not be a win-win but a net win.

Such a package will have a decisive impact on decarbonisation. The roadblocks are political with the minority of the losers from the policy reform lobbying to block the change. That in turn is linked to people's valuation of the individual versus the society, and the present versus the future. All this can go the right way if decarbonisation is seen as a winning formula. That is not unthinkable: as carbon pricing gains acceptance, the first movers will be the most competitive.

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Discussant Comments

Jong Ho Hong

I enjoyed reading the paper by Professor Vinod Thomas. He emphasised the need for carbon pricing, which can serve as a price signal to economic agents in the economy and as a source of revenue generation. I agree with his assessment. Professor Thomas also asked for the Asian region to come up with a proposal for carbon pricing in time for the G20 summit. If his proposal were to be realised, I think it would be a major step forward to carbon neutrality in this region.

I'm from a country where, only 60 years ago, according to World Bank statistics, the per capita income of the people was US$94, which was one of the lowest in the world at that time. The mountains in Korea were devastated by forest loss because of a long history of poverty, exploitation, and war (Figure 1). But with orchestrated efforts by the government and the people, the per capita GDP of Korea is currently over $35,000, and our mountain area has totally transformed (Figure 2).

Can this success story, which exemplifies green and sustainable growth, of Korea also be applied to the climate crisis? It is a much more complicated issue because carbon is not a local, but a global pollutant. All the issues related to "public bad" is relevant to greenhouse gases. In the climate change dialogue, talk is cheap, while action is expensive at least in the short term.

Last December, I had a chance to give an online lecture on "challenges to tackle climate crisis" to undergraduate students at an Indian university in Delhi. After my presentation, several students asked questions. Their questions were essentially the same. "When and how much will the climate finance and technology transfer come from the developed countries such as US and EU? After all, those countries are historically responsible for climate change." I agree with the students. Developed countries should provide financial resources and green technologies, which are essential for global-scale mitigation and adaptation efforts.

Figure 1: Barren mountains in the 50s

Source: Korea Forest Service (2023)

Currently, however, annual carbon emissions are dominated by developing countries in Asia (Figure 3). As of 2021, China accounts for 30.9%, India for 7.3%, and Russia for 4.7%, respectively, while Japan, Iran, Indonesia, and South Korea are all among the world's top 10 carbon emitters. Many Asian countries are also exposed to the human and economic costs of climate change. In Pakistan, in 2022, one-third of the country was under water and more than 1,600 people died. The dire situation of Asian developing countries from climate damage is not favourable for them to demand only the responsibility of Western developed countries in reducing carbon emissions and adapting to climate change.

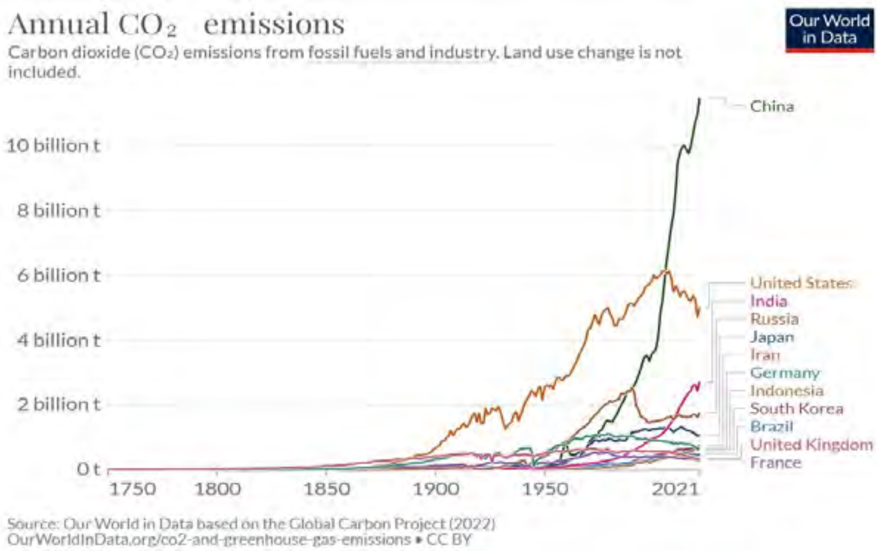
My point is that countries in Asia, as long as they are serious about the catastrophic impacts of climate change including people's lives, their health, biodiversity, and economic growth, should find ways to persuade their people for better social acceptance in mobilising policy measures and financial resources toward decarbonising the economy.

Let me talk about the current status of South Korea. Figure 4 is a scatter plot of GDP per capita and carbon emissions per capita over the last 40 years for five countries: South Korea, China, Japan, Germany, and the United States. As you

Figure 2: Autumn colour in the mountains of Korea

Source: Kim, Jung Wk (2010)

Figure 3: Annual carbon emissions by country



Source: OurWorldinData (2022)

Table 1 NDC by 2030 and carbon neutrality target by country

Country	NDC (2030)	Carbon Neutrality
EU	55% Reduction (1990)	2050 (Dec. 2019)
U.S.	50~52% Reduction (2005)	2050 (Jan. 2021)
China*	60~65% Reduction (2005)	2060 (Sept. 2000)
Japan	46% Reduction (2013)	2050 (Oct. 2000)
Korea	40% Reduction (2018)	2050 (Dec. 2000)

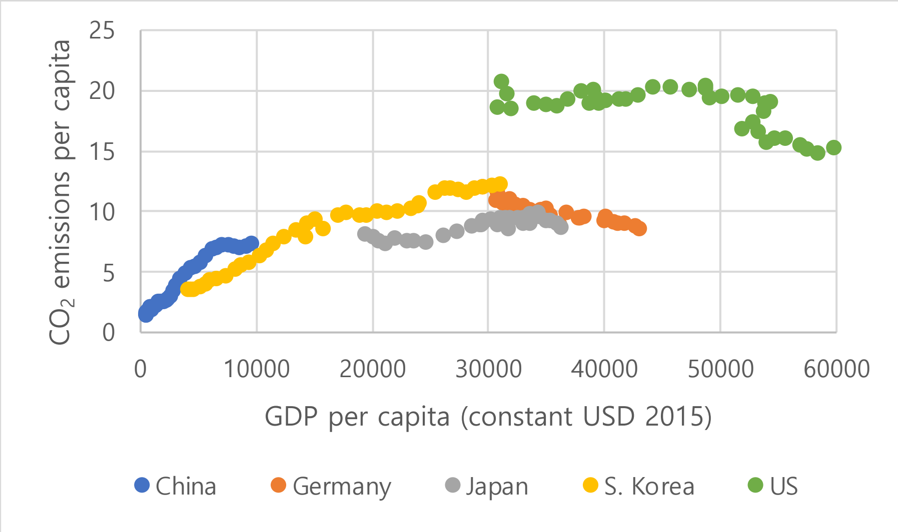
**Target based on carbon intensity (Emission/GDP) reduction*

can see, South Korea's economic growth and carbon emissions have been quite consistent, showing almost a linear relationship. This is strong evidence that South Korea has long relied heavily on a carbon-based economy. South Korea now faces a very big challenge: reducing its carbon emissions by 40% from 2018 levels by 2030 (Table 1). Unfortunately, there is not much public consensus on this national goal, and the pressure on industry is very high.

The Korean government announced its Green New Deal policy at the end of 2020, but South Korea still has a long way to go in terms of achieving the NDC goal by 2030 and carbon neutrality by 2050. The Korean New Deal was adopted as a stimulus policy package over the course of the COVID-19 pandemic. It consists of twin new deals, digital and green. In July 2020, the Korean New Deal was first announced without specific GHG reduction goals. Later, the Korean government pledged a carbon neutrality target by 2050.

If the Korean government fails to implement a series of consistent and effective mitigation and adaptation policies, not only will Korea be more exposed to the damaging effects of climate change, but it may also be exposed to international criticism for its inaction on climate policy. Most importantly, RE100 (100% Renewable Electricity), ESG (Environmental, Social, and Governance), and CBAM (Carbon Border Adjustment Mechanism), which will rapidly transform the global market into a decarbonised trade regime, will put the Korean industry in a very difficult position. If South Korea does not adapt to the new economic order created by decarbonisation, the Korean economy will be shunned by investors and consumers, and we will be left out of the global competition. This sense of urgency should be shared by all Koreans.

Figure 4: Per capita GDP and carbon emissions by country



The problem is that there is so much South Korea needs to do for a successful energy transition. According to IEA (2022), South Korea's share of renewable energy generation, which is 8.6%, is at the very bottom among 38 OECD countries. The average of all the OECD countries is 31%. Denmark and Austria have a whopping 80% renewable energy share, with wind, hydro, and bioenergy. Neighbouring Japan is also over 20%. China is enjoying 30% renewables as well. The two closest geographic neighbours of South Korea are rapidly expanding renewables.

The difference between Korea and the rest of the world in terms of renewable energy, a key strategic component to attain carbon neutrality, is stark, yet some media, politicians, and even experts continue to make unfounded claims that South Korea does not have geographic conditions for renewable energy. There is still no shortage of renewable energy sceptics and even haters in Korean society, which makes me wonder if this country is ready to respond to the massive tides of change surrounding the climate crisis.

The European Union has established a 40 billion euro Just Transition Fund (JTF) to support industries, companies, and workers who have lost competitiveness in the decarbonisation process. I believe this is an essential policy to minimise social conflicts and move towards an inclusive society. South Korea will have to endure difficulties and costs to move forward with the climate crisis response and energy transition. South Korea needs a sense of urgency to overcome these difficulties and usher in a sustainable future and a new era.

PAPER 2

Scaling up Finance Needed for Climate Action in Asia and the Pacific

Tiza Mafira

The Asia and Pacific region is a crucial part of global efforts to curb climate change. Not only is the region considered significantly more vulnerable to the impacts of climate change than other regions worldwide (IPCC 2022), but it is also expected to play a key role in keeping global warming within 1.5°C. With its *share of global emissions having recently increased from 35% in 2010 to 58% in 2020 (World Bank 2020; UNESCAP 2021)*, various efforts and measures have been taken at the national, regional, and global levels by Asia and Pacific countries. This is evident in their Nationally Determined Contributions (NDCs), with a few countries recently renewing their commitments to reflect more ambitious climate targets, as well as their participation in the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. At the same time, however, these countries have increasingly conveyed the same message that those targets would not be achieved through their own efforts alone and that they would need international assistance to mobilise and scale up finance toward low-carbon transition and climate-resilient development.

Meeting the global target of keeping warming within 1.5°C and aligning with the goal set in the Paris Agreement will require vast investment and more strategic investment planning. Looking at commitments made by the 38 developing member countries of the Asian Development Bank (ADB), up to $16,999.3 billion will have to be invested between now and 2030 to meet the region's Nationally Determined Contribution (NDC) targets; for the climate-proofing of infrastructure alone, the required investments will amount to 3.3% of gross domestic product (GDP) (Fouad et al. 2021). Moreover, as these countries have committed themselves to a net-zero goal, the total financing needed to meet Paris Agreement targets will end up even higher than current estimates suggest. And while Asia and the Pacific is the largest recipient and spender of climate finance, uneven finance flows across countries and sectors within the region have resulted in unequal capacity to mitigate emissions and respond to climate impact (Barnard et al. 2015).

With the objective of bringing attention and due caution to how financing decisions promote the achievement of the region's collective climate ambitions, this paper will examine the region's climate finance landscape, key challenges in accessing and mobilising finance, as well as opportunities that can be harnessed to scale up climate finance across the region.

Asia and the Pacific Climate Finance Landscape

Based on the latest climate finance data tracked in Climate Policy Initiative's *Global Landscape of Climate Finance, Indonesia's Landscape of Private Climate Finance, Landscape of Climate Finance in China, and India's Landscape of Green Finance* (CPI 2019a, 2020, 2021, 2022), Asia and the Pacific region spent over 500 billion in climate finance between 2018-2019.

Public finance contributed 68% of climate finance flows and became the main source of climate finance for most subregions in Asia and the Pacific, except South Asia, which relied almost equally on private finance. Private finance contributed 32% of total finance flows mainly from corporations, household spending, and commercial financial institutions. Both public and private finance commitments were made mostly in the energy sector. Public finance focused on accelerating a low-carbon energy transition while private finance on the financial attractiveness of energy production and distribution due to its more mature technology, bankable project size, and available risk mitigation schemes.

Among the five subregions, East Asia remained the biggest recipient and provider of climate finance. It received 81% of total finance and placed the greater part in mitigation projects in the energy, transport, and building and infrastructure sectors, consistent with China's plan to reach peak emissions by 2030 and achieve its carbon neutrality target by 2060. The next highest was climate finance flows to South Asia (9% of the regional total) and Southeast Asia (5%), mainly in support of clean energy, railway systems, and integrated urban public transportation. Central and West Asia, for its part, channelled its share (2%) into energy transformation, security, and resilience. Meanwhile, the 0.3% share of the Pacific was directed in almost equal portions at mitigation and adaptation measures for land and marine conservation, and disaster risk management.

Mitigation finance, particularly in the energy sector, dominated 91% of climate finance in Asia and the Pacific, driven by finance directed for the most part toward solar photovoltaic (PV), wind, and hydropower generation in the PRC and India. Financing for low-carbon transport also grew rapidly, as more rail and transit investments were made by corporations and public sector stakeholders, and electric vehicles gained wider use among households (CPI 2019a).

Meanwhile, adaptation finance accounted for only 8% of total flows. The dual-benefit finance, for projects with both mitigation and adaptation outcomes, then rounded up the remaining 1%. Although adaptation finance rose by 31% during the 2018–2019 period, signalling efforts to achieve a better balance between mitigation and adaptation finance in response to Article 9 of the Paris Agreement, a wide disparity remains between the estimated costs of adaptation and the documented allocation (IPCC 2022). Although the Adaptation Gap Report of the United Nations Environment Programme (UNEP) estimated annual adaptation costs in developing countries at $70–$300 billion in 2018–2019 (UNEP 2021), only $40.8 billion was allocated, according to the CPI's Global Landscape of Climate Finance (2019a, 2020). Adaptation finance, therefore, covered less than half of adaptation needs and would not reach the 2030 target without a fundamental change, thus showing the necessity of scaling up adaptation finance.

Domestic finance, mainly from national DFIs, made up 87% of the above total flows allocated and spent within each region. Although China and India were undeniably bigger economies and had stronger local government support, making them better able to mobilise climate finance, local funding sources were still easier to access than international sources, which required compliance with tailored and complex safeguard requirements. Given the current inadequacy of climate finance flows, more international finance could be tapped if local entities were to have greater capacity and readiness to access it.

Challenges in Mobilising Climate Finance in Asia and the Pacific

Despite a respectable increase in the 2018-2019 climate finance flows to Asia and the Pacific, the region's climate finance is still not at a sufficient level to contribute to the achievement of the Paris Agreement goal. To optimise climate finance mobilisation and its allocational efficiency, the following key challenges require greater attention and immediate action.

Insufficient effort to address climate adaptation

Financing available for adaptation projects is low because these projects are perceived to carry higher investment risk, requiring higher capital up front, and longer-term planning and implementation of projects. Moreover, adaptation projects are usually fragmented, small in scale, incremental, and sector-specific—all potential deterrents to financing, particularly by private investors (IPCC 2022).

To fully address the climate crisis, more funding must be dedicated to helping countries achieve climate-resilient development. Adaptation finance is currently provided mostly by the public sector and primarily by DFIs (95% of total adaptation finance) because projects involve long-term planning and implementation. However, financing adaptation projects require more than these traditional funding sources; it calls for an appetite for risk that is more likely to be found in the private sector.

Adaptation finance, according to the Global Landscape (CPI 2019a), increased in 2018–2019, but only 0.2% of total adaptation finance during the period came from the private sector. Taking on the perspective of the private sector, investing in adaptation should offer various opportunities, such as investing in climate resilience measures to help businesses avoid rising costs due to climate risk, which could have a negative impact on their financial returns (Stenek, Amado, and Greenall 2013); developing new products and services to fill market gaps; and achieving cost savings and collaboration across the value chain.

Disproportionate climate finance flows

The landscape points to unequal distribution of climate finance between mitigation and adaptation. Adaptation finance, averaging $20.4 billion per year in 2018–2019, accounted for only 8% of total climate finance during the period — well below what was needed to respond to the impact of climate change. The UNEP's Adaptation Gap Report (UNEP 2021) estimated annual adaptation costs in the $155–$330 billion range by 2030 in developing economies.

Among all subregions, East Asia received 80% of total climate finance in 2018–2019 Asia and the Pacific during the period. Nearly all the tracked finance in East Asia flowed to China. Central and West Asia, Southeast Asia, and the Pacific as a group received less than 8% of total climate finance in Asia and the Pacific. These subregions need more support not only for climate mitigation but, more importantly, for climate adaptation, as they have a combined total of 20 least-developed countries and small island developing states, highly vulnerable to the adverse impact of climate change.

With respect to source, the public sector accounted for 68% of total finance flows in 2018–2019. This shows that climate projects rely heavily on public funds, while private investments, at 32%, are lagging behind. Moreover, climate finance is also unevenly distributed across sectors. In 2018–2019, most of it went to renewable energy and low-carbon transportation. Although many economies in Asia and the Pacific rely on agriculture and have an abundance of forest resources, and despite the relevance of the Agriculture, Forestry and Other Land Use (AFOLU) sector to both climate change mitigation and adaptation, climate finance flows to the sector remained stagnant at only 3% of total climate finance flows.

Limited access to long-term finance

As climate finance suppliers, developed countries missed the target of delivering $100 billion in climate finance a year to developing countries by 2020, but the 2021 United Nations Climate Change Conference (COP26), in a resolution, reiterated that this target would be met by 2023 (OECD 2021). A gap exists between the ambitions of financial institutions to invest in the most impactful projects and the ability of the country's most vulnerable to climate change to attract available funding. The scale of projects affects the willingness of financial institutions to consider providing finance—the smaller the scale, the higher the cost stemming from economies of scale in due diligence. Many climate-related projects require a high cost of capital and longer-tenor financing in order for the benefits and return on investment to be realised. However, long-term financing is often difficult and more expensive to obtain in many least-developed countries. This could be due in part to a lack of capital markets or regulatory restrictions on long-term bank lending.

Gaps in institutional capacity and arrangements for access to climate finance

Weak leadership and institutional capacity could result in the inefficient use of already inadequate climate finance, and in misalignment between donor interventions, development efforts, and government policies (Amerasinghe et al. 2017). The lack of a common vision and the varying climate finance perspectives among government officials, political authorities, and other stakeholders could also hinder effective interaction between private financiers, international donors, and domestic bureaucracies (Clar, 2019).

Moreover, there is an insufficiency of available and accessible sources of finance. Most climate finance is raised through debt instruments, which pose difficult repayment obligations for developing countries, thus limiting their capacity to access finance and scale it up. Grants, on the other hand, account for only 5% of climate finance in Asia and the Pacific. Without additional grant-based access, meeting the climate finance requirements will be a challenge.

Access to finance could also be impeded by the low readiness of recipients, which may be due to gaps in meeting the funding and safeguard requirements of international donors and agencies. Many countries need technical support in applying for international grants and financial assistance, including support in preparing the application documents. The Global Landscape (CPI 2019a) notes that the role of international finance is still limited, despite the funding pledges or commitments that have been made. It is therefore important to ensure not only the readiness and the capacity of recipients but also the accessibility of fund sources.

Inadequate climate finance tracking and reporting

Impact assessment helps policy-makers determine the strategic direction for national climate policy to enhance the mobilisation of funds. Gaps in climate finance data keep the government and key stakeholders from gaining a clearer and more complete perspective on underserved regions, countries, or sectors, and constrain efforts to capture more granular information because of definitional issues and unsystematised information (GFLAC and UNDP 2018).

The Global Landscape (CPI 2019a) takes note of challenges in obtaining data on both public and private climate finance. There is limited information on domestic public climate finance in public budgets dedicated to domestic climate action. While several countries track climate finance, institutional limitations prevent a full accounting of those public budgets (CPI, 2021). Some countries like Bangladesh, India, and Indonesia are better at tracking climate action information on public budgets with the help of the Climate Budget Tagging tool, but this mechanism is still limited to tracking national budgets; it does not fully cover the tagging of expenditure from state-owned enterprises (SOEs) or other government agencies and does not yet consider the mapping of private sector investments. These limitations may result in an information gap in climate finance tracking and reporting.

There is also a lack of transparency in the private sector, despite the existence of the industry-based Task Force on Climate-Related Financial Disclosures (TCFD). Data on private investment in energy efficiency, low-carbon transport, and land use are still largely unavailable for confidentiality reasons. Often, the relevant investments form part of larger projects, which require additional voluntary reporting and disclosure by private stakeholders. Disclosure by the private sector has so far been limited, however, constraining tracking at the project level.

Tracking and reporting of adaptation finance, which has been shown to lag significantly behind mitigation finance (CPI 2019a) also faces key barriers. These include (i) the lack of universally accepted impact metrics for defining adaptation finance; (ii) limitations in adaptation finance accounting methodology; and (iii) constraints on the definition of adaptation-relevant activities (UNFCCC 2018; CPI 2019b).

The Way Forward: Opportunities to Optimise the Region's Climate Finance Flows

Addressing the foregoing challenges requires collective effort and coordination among governments, funding institutions, and the private sector. To enhance the flows and impact of climate finance, all stakeholders need to work together and consider the following strategic opportunities that directly address the previously discussed challenges.

Climate finance availability and accessibility

In ensuring that climate finance is available, sufficient, accessible, and appropriately targeted at underserved subregions, countries, and sectors with the most impact on achieving NDC targets, few corrective measures can be undertaken. These include (i) streamlining the coordination among international and national public and private sectors in carrying out their climate finance roles and responsibilities; (ii) ensuring policy coherence across sectors and strengthening relevant regulatory framework by mainstreaming climate targets into national planning and policy; (iii) leveraging government's fiscal capacity, through subsidies, tax incentives, public–private partnerships, and other measures, to attract private investors and mitigate the perceived financial risks e.g., regulations classifying climate-related activities and placing a portion of the banks' loan portfolios in climate projects; (iv) sustaining the catalytic role of governments and multilateral development banks through blended finance, co-financing, and scaled-up risk management instruments; and (v) ensuring the accessibility of climate finance, by prioritising grants and concessional funding, particularly for the countries and sectors that need financial support the most.

Knowledge of climate finance effectiveness and impact

A better understanding of climate finance effectiveness would enhance the capacity of developing countries to use and disburse finance to achieve the highest value for every dollar flow, possibly leading to the upscaling of climate projects and finance. There is an apparent opportunity to close the knowledge gap by sharing lessons from countries that have had more success in meeting the funding requirements of international donors or agencies and mobilising finance by having a national strategy, as well as national mitigation and adaptation policies and plans, aligned with NDC priorities.

Access to long-term finance

Past examples of certain government initiatives have shown how the barriers to long-term finance can be overcome. In 2012, China Development Bank provided \$80 billion in low-cost debt for renewable energy projects, at a time when most solar projects and over five-sixths of wind projects were built and owned by SOEs. The collaboration between the national development bank and SOEs provided subsidised low-cost debt for low-carbon and climate-resilient development at scale. Another example is how Indonesia and India's governments respectively introduced energy-sector initiatives that replaced subsidies with feed-in-tariffs or power purchase agreements to significantly reduce state expenditures (UNESCAP 2016).

Transparency and capacity for climate finance tracking and reporting

Each national government in Asia and the Pacific can lead the work in this critical area by consistently improving climate finance tracking and reporting methodologies and frameworks. This should be done with a view to filling the gaps in private investment and adaptation finance data (e.g., easing confidentiality restrictions and addressing the absence of universally accepted impact metrics) and enabling full accounting and tracking of climate finance.

At the broader regional level, there should also be efforts to enhance disclosure across financial systems, covering commercial financial institutions and other related stakeholders that invest in climate-related activities, and taking the initiative to measure, disclose, manage, and mitigate climate risks in the private sector, e.g., compliance by commercial financial institutions with Task Force on Climate-related Financial Disclosures (TCFD) recommendation. Moreover, through further collaboration with international climate finance institutions, a robust institutional framework can be established comprising a consistent system for monitoring the progress of adaption measures as well as technical guidelines to meet the safeguards required to access global international climate initiatives and finance.

Capacity of governments to mobilise resources based on climate finance data

Comprehensive information from the climate finance database can induce a large volume of finance, on the assumption that key stakeholders respond rationally to information on climate finance data (quantitative) and policy signals (qualitative) to redirect investment flows, domestic and international, to targeted subregions/countries/sectors. Data limitations have laid bare the gaps in climate finance tracking and reporting; the granular level of climate finance could therefore be under-tracked and underreported. More efforts are needed to capture the significant potential for tracking climate finance from the private sector and for enhancing domestic public finance methodology, such as: (i) defining key services and technologies, and working with key data providers across a variety of stakeholders to improve data quality; (ii) optimising finance for strategic climate projects; and (iii) sharing lessons learned from countries that have succeeded in enhancing transparency and improving their data tracking for better alignment of investments with their climate policy objectives.

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AJAY MAHAL
NAUSHAD FORBES
SHYAM SARAN
VIKRAM S. MEHTA
RAKESH MOHAN
SHIVSHANKAR MENON
YOON-JE CHO


TAKESHI HASHIMOTO


VINOD THOMAS
TIZA MAFIRA
MONTEK S. AHLUWALIA
MUHAMAD CHATIB BASRI
DANNY QUAH

Discussant Comments

Syed Munir Khasru

The recommendations given by the author seem reasonable and align with best practices for mobilising climate finance. However, there are a few points that can be further elaborated.

1. Guided philanthropic funding for climate finance

The recommendation to prioritise grants and concessional funding is important as debt instruments pose difficult repayment obligations for developing countries.

a. As it is already noted that grants alone may not be sufficient to finance the scale of projects required to meet climate change targets.

b. Therefore, governments should also explore innovative financing mechanisms beyond private investments such as guided philanthropy.

c. Guided philanthropic funding also may be an important area open for the government to explore as another means towards climate financing.

2. Financing climate adaptation projects

While the paper highlights the need to address climate adaptation, the recommendations can be made more effective through more specific guidance on how to increase financing for adaptation projects.

a. For instance, how governments may prioritise financing for climate adaptation projects, including those that climate support vulnerable communities, enhance water management, and strengthen coastal protection.

b. Additionally, governments should encourage private sector investment in climate adaptation by providing incentives and creating an enabling policy environment.

3. Internationally standardised climate financing framework or report (by G20, G7, UN, COP and beyond)

Recommendations to improve tracking and reporting methodologies and frameworks are crucial for the effective mobilisation of climate finance.

a. For this, governments should focus exclusively on establishing a common reporting standard to ensure transparency, comparability, and accountability of climate finance flows. The author mentioned creating a framework, which also needs to be internationally standardised.

b. This can be achieved through collaboration with international organisations such as the United Nations Framework Convention on Climate Change (UNFCCC) and the Green Climate Fund (GCF).

Overall, while the author's recommendations provide a good starting point for improving the mobilisation of climate finance in Asia and the Pacific, governments and other stakeholders must work together to ensure that these recommendations are implemented effectively and that the financing gap is met to achieve the Paris Agreement goals.

Additional recommendations

Focused private sector engagement in climate financing

The author already describes the importance of a private-public partnership in climate financing. However, we need to focus more on encouraging private-sector investment in climate financing.

I. Encourage Private Sector Investment in Climate Finance:

b. The private sector's role in mobilising climate finance needs to be expanded. This can be achieved by developing innovative financial instruments, such as green bonds, to increase private sector investment in climate finance.

c. Policies and incentives should also be developed to encourage private sector investment in climate adaptation projects, including risk-sharing mechanisms, subsidies, and tax incentives that could help to diversify the sources of adaptation finance and increase the overall pool of funds available.

Existing measures and their impact

Private sector investment in adaptation is currently minimal, and Development Financial Institutes provide most adaptation finance. Encouraging private sector investment can help address this challenge.

Evidence from the Global Landscape of Climate Finance report shows that private investment in climate finance in Asia and the Pacific increased from $7 billion in 2016 to $16 billion in 2018, indicating the potential for further private investment.

Additionally, a report by the Asian Development Bank (ADB) shows that private sector participation in infrastructure projects in the region has increased, with private sector participation in infrastructure projects funded by ADB increasing from 16% in 2009 to 45% in 2019.

The inability to attract available funding due to the scale of projects, lack of capital markets, and regulatory restrictions on long-term bank lending result in limited access to long-term finance. Additionally, the 2019 Climate Policy Initiative report shows that providing policy support, reducing risks, and improving investor confidence can help attract private sector investment in renewable energy in Asia.

Encourage targeted climate financing measures

Targeted climate financing is quite essential for some critical areas in need of support, for instance, the climate adaptation measures that still require lots of support to defend against the inevitable climate change of a 1.5 degree Celsius average temperature increase.

II. Address Disproportionate Climate Finance Flows:

c. There is a need to address the disproportionate distribution of climate finance flows across the region, which favours East Asia.

d. This can be achieved by encouraging developed countries to increase their support to less-developed regions, such as Southeast Asia, Central and West Asia, and the Pacific.

e. Ensuring climate finance may be allocated to countries and regions based on their needs and vulnerability to climate change. This could be achieved through mechanisms such as the Green Climate Fund, which prioritises funding for the most vulnerable countries and regions.

III. Increase Climate Adaptation Finance:

a. There is a need to increase the amount of climate adaptation finance available to the Asia Pacific region, which is currently only 8% of total climate finance as the author already addressed.

b. This can be achieved by increasing the share of climate adaptation finance in international climate finance pledges and encouraging multilateral development banks and other climate finance providers to increase their support for adaptation.

IV. Increase Climate Finance Flows to the AFOLU Sector:

a. Efforts should be made to increase climate finance flows to the agriculture, forestry, and other land use (AFOLU) sector, which currently receives only 3% of total climate finance flows.

Existing measures and their impact

Adaptation finance accounted for only 8% of total climate finance during the period, with East Asia receiving 80% of total climate finance, Southeast Asia, Central and West Asia, and the Pacific receiving less than 8% of total climate finance.

Prioritising adaptation finance can help address the disproportionate climate finance flows and insufficient effort to address climate adaptation challenges.

The 2021 Adaptation Finance Gap Report by the United Nations Environment Programme (UNEP) highlights that investing $70 billion in adaptation in developing countries can generate $7.1 trillion in total net benefits. Prioritising adaptation finance can, therefore, generate significant social and economic benefits.

PAPER 3

How Can Asian Countries Fund Climate Change? Indonesia's Case

M. Chatib Basri

Introduction

Climate change is a major global issue, causing habitat destruction, disease transmission, agricultural changes, and natural hazards (Stern, 2006; Sachs, 2008). Despite the fact that numerous studies on the effects of climate change have been undertaken, and numerous meetings have been organised to make progress on this subject, implementation has been slow. Basri and Riefky (2023) argue that one of the primary reasons for the disparity between global agreement and global action is disagreement over who should do what. Many low- and middle-income countries, for example, are constrained by limited fiscal space, binding external financing constraints, and adaptation prioritisation, despite their commitment to decarbonisation. Even before COVID-19, large-scale decarbonisation efforts in low- and middle-income countries frequently meant sacrificing other budgetary spending on items critical to long-term economic development, such as basic infrastructure, schools, and health care. COVID-19 exacerbated the fiscal constraints faced by low- and middle-income countries, forcing them to prioritise short-term economic recovery over longer-term development projects or decarbonisation. Furthermore, their domestic financial markets are not deep enough to finance a full-scale decarbonisation effort, and they have limited access to international finance. It is unjust and impractical to leave low- and middle-income countries solely responsible for climate change mitigation. These countries face higher costs of capital and have competing economic development priorities.

Indonesia is a particularly vulnerable country due to its long coastline, high deforestation, and dependence on coal and fossil fuels (Boer, 2010; Peng et al., 2004; Sari et al., 2007). Efforts have been made to reduce greenhouse gas emissions and mitigate the impact of climate change, but there is still a long way to go. Indonesia heavily relies on coal, causing negative welfare effects, including the increased prevalence of non-communicable diseases caused by air pollution (Anwar, Yusi, & Afdal, 2016; Koplitz et al., 2017).

Because of the significant negative impact of climate change on the Indonesian economy and human life, the country has committed to reducing greenhouse gas emissions and incorporating climate transition goals into its development plans. Despite these efforts, there is no clear net-zero target in place, and existing climate ambitions have been deemed insufficient. As a result, it is critical for Indonesia to establish long-term development goals that prioritise climate resilience while remaining equitable and affordable.

Indonesia has made a commitment to reduce its greenhouse gas emissions by at least 31.89% by 2030, and this could increase to 43.2% with international support as part of the Paris Agreement. The government has incorporated climate transition goals into its National Medium Term Development Plan, with a particular focus on environmental quality, disaster and climate resilience, and low-carbon development. The country has also submitted its Long-Term Strategy on Low Carbon and Climate Resilience 2050, which outlines a goal to peak national GHG emissions in 2030, reach a net sink of the forest and land use sector by 2050, and explore opportunities to reach net-zero emissions by 2060 or earlier.

However, Indonesia's current climate ambition has been assessed as "highly insufficient" by Climate Action Tracker due to the lack of clarity in Nationally Determined Contribution (NDC) targets and the country's heavy reliance on fossil fuels. There are also concerns about the commitment to "greening" other sectors, given the NDCs focus on the forestry sector for emissions reduction. Moreover, the projected emissions in the business-as-usual scenario exceed the current policy projections.

The National Energy Policy sets more ambitious targets than the NDC, including increasing the share of renewable energy to 23% by 2025. However, this is unlikely to happen due to the slow development of renewable energy in the past decade and the low utilisation rate. Additionally, the reliance on coal-fired power plants, which still contribute 14 GW and meet 64% of the demand, is inconsistent with the Paris Agreement's goal of limiting coal-fired power to 10% by 2030 and phasing it out by 2040.

The brown sector in Indonesia is a major impediment to reducing greenhouse gas emissions, and addressing this issue requires significant funding, political power, and technical capacity. However, it is critical to approach this challenge with caution in order to avoid any negative effects on socioeconomic aspects and welfare. The government must carefully plan its long-term national development goals in order to achieve climate resilience through a fair and affordable transition (Basri and Riefky, 2023).

Indonesia faces significant challenges in implementing an energy transition, including financing and political economy issues. This paper will attempt to address the question of how Indonesia can finance this energy transition and aspects of its political economy.

Limited Financing and Capacity

One of the major issues facing many developing countries, including Indonesia, is financing. The Third Biennial Update Report (BUR) 2021 of Indonesia's NDC estimated that it would require around US$28.5 billion annually to achieve its NDC target by 2030. This amount does not even include massive transition costs such as supporting the green sector, compensating affected stakeholders, and providing financial support to vulnerable groups. The Ministry of National Development Planning Indonesia states that financing needed to decarbonise the economy could be up to US$200 billion per year until 2030, equivalent to 20% of the Indonesian GDP.

However, Indonesia faces challenges in meeting these financing needs due to its limited financial capability. The government's fiscal space is limited and its public spending is currently not in the best shape to prioritise climate-related projects. The central government's budget allocation only amounted to 1.1% of its total spending in 2020, while the subnational government's spending is highly dependent on budget transfers from the central government. Furthermore, the government allocates around 5% of its budget to fuel subsidies, mostly for dirty energy. Interest payments on government debt have also been increasing, putting pressure on debt sustainability.

On the revenue side, Indonesia's tax revenue is poor, recorded at 9.11% of the GDP in 2021, which is lower compared to the Asia-Pacific average of 21% and the OECD average of 33.4%. The Ministry of Finance has implemented tax policy reforms to broaden the tax base, increase tax revenues, and make the overall system more efficient. However, the efficacy of these reforms remains to be seen.

One positive development is the implementation of climate budget tagging (CBT), which is a set of climate-related finance mechanisms to spur and mainstream climate change public financing. Currently implemented in 11 provinces, the budget has reached US$4.8 billion per year, with 61% allocated towards adaptation and 39% towards mitigation.

In conclusion, Indonesia faces various challenges in financing its NDC target by 2030 due to its limited financial capability, but efforts are being made to address these challenges through budget tagging and tax policy reforms.

Indonesia, like many other developing countries, faces a limited fiscal space. The debt-to-GDP ratio is currently 40%, and the budget deficit-to-GDP ratio is required to be less than 3% under the Indonesian finance law. As a result, climate finance in Indonesia must make use of available resources from the government, private sector, or external financing. While there is a risk of debt problems and current account deficits in some developing countries, this paper focuses on explaining the various sources of funding available for climate finance.

One source of funding is domestic resource financing, under which the government can increase funding sources for climate by allocating funds from the government's budget to climate. The COVID-19 pandemic has left a significant impact on the economy, including income inequality, deteriorating human capital quality, and gender inequality. The government can implement pro-development and pro-climate policies, such as the Green Fiscal Stimulus, to provide access to the wider community, achieve fiscal consolidation, and promote a green recovery.

It is crucial to view the Green Fiscal Stimulus from both the development and climate change perspectives. Environmental concerns are often considered a "luxury" in developing countries, where poverty, low productivity, poor education, and inadequate infrastructure are more pressing issues. Therefore, environmental policies must be integrated into the development agenda to gain attention and support. The Green Fiscal Stimulus can promote a green recovery while fulfilling government priorities, such as public health, social aid, and small and medium-sized enterprises (SME) support (World Bank, 2010; Basri, Hanna and Olken, 2020).

The COVID-19 pandemic and climate crisis have left their mark on vulnerable groups, and post-pandemic development must be all-inclusive. To fund this, the Indonesian government can increase the budget allocation for climate change. However, it is essential to consider its impact on debt sustainability and current account deficits in some developing countries. Therefore, climate finance must make use of available resources and implement pro-development and pro-climate policies to promote a green recovery and achieve fiscal consolidation.

The key issue addressed here is the prioritisation of expenditure to make it more environmentally friendly. Budget allocation is a political process that involves trade-offs between different sectors, and the goal is to make the green sector a priority. This requires establishing a link between the green sector and government development priorities. The budget allocation is prioritised based on the potential environmental impact, socioeconomic multipliers, and redistribution impact.

A funding gap exists between the actual budget allocation and the NDC document's funding needs in sectors such as land use, energy, transportation, industrial processes and product use (IPPU), and waste, for both climate change adaptations and mitigations. The challenge is to close this gap and gain political support for the budget reallocation. To do this, spending must be reallocated to sectors that provide multiple benefits such as job creation, protection of vulnerable groups and SMEs, and being environmentally friendly.

Budget allocations that meet these criteria include sustainable land restoration, pollution recovery, and waste management. Energy subsidy reform has also been shown to free up fiscal space for priority sectors while also providing economic, social, and environmental benefits. I propose allocating some of the savings from reduced fuel subsidies and excises on fossil fuels and plastics to NDC action programmes such as mangrove rehabilitation and labour-intensive irrigation, which have a high environmental impact, job opportunities, and benefits for vulnerable groups. SMEs' waste management programmes should be prioritised in the upcoming climate budget planning. The government may set aside funds for these activities while also creating jobs. This makes the activity politically feasible and allows it to become a government priority.

Reducing energy subsidies can have a positive impact on Indonesia's fiscal countercyclical measures and income distribution. Currently, the government's revenue heavily relies on natural resources, resulting in a pro-cyclical fiscal policy. Reducing fuel subsidies will create more room for discretionary spending while also improving the environment and income distribution. To achieve these goals, the government must eliminate fossil fuels and reduce fuel subsidies.

In September 2022, the Indonesian government took a wise step by raising fuel prices and reducing subsidies. This move can help to decrease the demand for fossil fuels. However, the government's efforts are still limited, and more needs to be done to provide fiscal space for the green economy. One option is to impose a carbon tax. This can potentially increase government revenue while also contributing to green development. Carbon taxes can support the operation of the carbon market and incentivise private sector investment in renewable energy. Additionally, the government can reduce subsidies for the "dirty sector" and allocate funds to renewable energy. By increasing budget allocation and climate financing sources, the government can encourage the private sector to participate in renewable energy.

Another key factor is external funding (Songwe, Stern, & Bhattacharya, 2022). Domestic funding alone is insufficient, so an external source of funding is required. This external financing can come from multilateral institutions, philanthropy, or the private sector. If investing in climate change is commercially viable, the private sector will likely participate. However, because some projects are not fully commercially viable, the government or multilateral institutions must de-risk them. One approach is to expand the use of concessional financing, including grants and blended finance. This can incentivise investments whose benefits would extend beyond borders or whose risks would be high due to high project preparation costs.

An enabling environment is also critical for attracting private investments. To reform the Basel regulations, green assets can be included as high-quality assets, which can help to reduce the cost of funds. ANU (2022) proposed reforming the Basel III global capital rules to include environmentally friendly assets as safe assets. This can provide incentives for banks to hold assets on their balance sheets and extend more green debt, thus lowering the cost of capital.

In summary, reducing energy subsidies, imposing a carbon tax, and increasing external funding can all help Indonesia achieve its climate goals. These measures must be taken in conjunction with an enabling environment for private investment and a focus on renewable energy.

The Importance of Project Preparation

We discussed the availability of funds to invest in and support energy transition (supply side). However, the demand side, namely a country's ability to deliver its projects, is no less important. Various experiences in various projects in developing countries, both health and environmental, show that projects are socially beneficial but unbankable. As a result, the private sector will only participate, and donor countries will only assist if the project or investment is viable. As previously mentioned, one solution to this problem is to de-risk. However, other factors must be considered when preparing for a project. Funding was also required in this case. Can donor organisations provide financial assistance for project preparation and capacity-building even if borrowing is not provided by them? Or, alternatively, are philanthropy and the private sector willing to provide funds and capacity building for project preparation? Here's a case of the chicken and the egg. Developing countries, such as Indonesia, will want to know where the money is to help them make the transition, while donors will want a country platform with good project preparation. This issue must be resolved if investment in the energy transition is to take place.

Political Economy

Aside from the issues mentioned above, another issue that must be addressed is the political economy. The success of a policy reform depends on political support for its continuation. Reforms need to be implemented quickly and show swift wins to gain support from politicians and leaders. Policies must also consider existing institutional conditions and the political cycle. Basri (2017) argued that policy implementation requires political support, which is often limited due to the scarcity of political capital and the short time frame of the political cycle. Success stories or quick wins are crucial for implementing reforms with available resources. The sustainability of reforms depends on political support, rather than the quality of the reform agenda. However, reforms that solely address long-term issues may struggle to gain support from leaders who prioritise short-term benefits over immediate costs. The Green Fiscal Stimulus must be politically and economically appealing, showing the overlapping benefits of development and environmental issues. Policy recommendations should be crafted considering political economy factors, institutional conditions, and time frames.

The implementation of government policies aimed at transitioning to a green economy must take into account the potential risks and challenges in the adjustment process. Policymakers must consider not only the final outcome of the transition but also the impact it may have on various sectors, such as the potential for economic and employment disruptions, as well as the time required for behavioural changes to take place. The transition to a green economy may result in immediate costs, while the benefits will be realised only in the long term, leading to resistance to policy changes in the short term.

To mitigate these risks, policy time frames and phases should be carefully considered. The objective is not to hinder development but to promote sustainable development. The focus should be on managing transitional risks, and not on the false dichotomy between development and the environment. Indonesia's future lies in utilising its human capital rather than exploiting its natural resources.

According to this description, the important narrative is to concentrate on development issues by using green instruments because the focus of many governments in developing countries, including Indonesia, is on issues such as poverty, health, education, and providing protection for vulnerable groups. The issue of climate change should not be treated separate from the issue of development. With this approach, mainstreaming climate finance becomes both politically and economically feasible.

Governments need to implement climate change policies but lack political will. We must investigate why developing countries don't prioritise this issue and take action. Table 1 summarises the winners and losers of a green stimulus, including government, businesses, and society.

Table 1: Policy Impact on Stakeholders

Policy	Winners	Losers	Policy Mitigation
Carbon Tax	Green sectors. This policy helps the Ministry of Finance, Ministry of Environment, and Ministry of Development Planning to achieve their KPIs.	Dirty sectors. This policy may not be supported by the Ministry of Industry, Ministry of Trade, and Indonesia Chamber of Commerce (KADIN).	Gradual implementation of carbon tax to ensure broad participation and setting up the right framework for a carbon market
Excise on fossil fuel	Poor/vulnerable groups (if they get compensation). This policy helps the Ministry of Finance, Ministry of Environment, and Ministry of Development Planning to achieve their KPIs.	Vulnerable groups (lower middle-income group, who don't receive compensation), SMEs, middle and upper-income class, oil importers, smugglers	Expansion of social protection programme for poor and vulnerable
Excise on plastics	Green sectors. This increases the revenue for the Ministry of Finance and helps the Ministry of Environment to achieve its KPIs.	Plastic producers, industries consuming plastics for intermediate products, affect the Ministry of Industry and Ministry of Trade's KPIs.	Subsidies for plastic substitutes
Removing all dirty sector subsidies	Green sectors. It provides more room for fiscal: this will help the Ministry of Finance, Ministry of Environment, and Ministry of Development Planning to achieve their KPIs.	Dirty sectors	It provides incentives to transition towards low-carbon production activities.
Expanding green tax incentives	It helps the Ministry of Environment, green sector, Ministry of Development Planning, Ministry of Industry, and Ministry of Trade to achieve their KPIs.	More burden for the Ministry of Finance	Exploring new sources of fiscal revenue
Reduction on fuel subsidy	Poor/vulnerable groups (if they get compensation). It helps the Ministry of Finance, renewable energy sector, Ministry of Environment, and Ministry of Development Planning.	Lower middle-income group, who don't receive compensation, SMEs, middle and upper-income class, oil importers, smugglers	Expansion of social protection program and subsidies for MSMEs

Source: Basri and Riefky (2023)

The way ahead

This paper demonstrates that the financing issue is critical to address. The problem is that developing countries, including Indonesia, have limited fiscal space. As a result, several steps must be taken, including ensuring that the budget allocation for climate finance does not result in future debt sustainability issues. To avoid this, climate finance financing must include a mix of domestic funding sources such as the government budget, reallocating the budget, increasing government revenue through Pigouvian taxes, and so on. In doing so, it is critical to consider the issue of political economy, in which the government's goal is to focus on development issues through the use of green instruments. These options, however, require political support to become a reality. In the future, the green economy must be framed as a component of economic development.

Due to limited fiscal space, external financing and the private sector play an important role. The role of multilateral development banks (MDBs), philanthropy, and the private sector becomes critical in this context. External and private sector financing, as discussed in this paper, becomes feasible with proper project preparation. Climate financing is a significant issue that must be addressed collaboratively; it will not be an easy task, but we must begin now in order to mitigate the risks of disasters caused by climate change to humanity.

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Discussant Comments

V. Anantha Nageswaran

1. The paper highlights the realities developing economies face when diverting substantial resources towards climate change financing. The author accurately points out how pertinent issues such as the domestic budget gap and the political economy can act as headwinds against climate change mitigation measures, the former mainly due to the scarcity of available resources. Developing economies focus on prioritising poverty reduction, enhancing health, and educating their citizens. Thus, I compliment the author for grounding this paper in reality, which supplements his discussions.

2. There are some issues worth thinking about, which are not only applicable to this paper but go beyond it:

A. The first issue lies in using normative words, for instance, 'dirty fuels'. While there is no question that reliance on fossil fuels contributes to warming the planet, we cannot ignore the fact that fossil fuels are still vital for many parts of the world and will be for the next few decades. These fuels are the only means of lifting people out of energy poverty and ensuring they have the same access to energy as people in developed economies. Basic electricity access is necessary for bettering people's living standards in developing countries, and at present, the available alternatives are too expensive from a fiscal standpoint. Therefore, we must be careful with the usage of words such as 'dirty' since it attaches a strong negative connotation to what, in reality, is contributing to an important need.

Normative-sounding words like 'transparency', 'innovation' and 'predictability' have pressured public authorities to serve narrower ends of select market participants in the financial industry. Similar language must be avoided here. Many other 'dirty' activities that the public engages in and patronises are unchecked and unregulated. Unlike fossil fuels with a clear utility value, they cause greater harm without mitigating benefits.

B. Another concern that must be kept in mind is the capacity of the external accounts to receive investments. Given the offsetting nature of the current and capital accounts, would developing nations be allowed to run large current account deficits, too, if they receive a large quantum of foreign funds for climate financing? How would investors and the financial markets react to a widening current account deficit? Developing countries cannot be expected to maintain sustainable current account deficits while simultaneously accepting billions in foreign funds for climate mitigation financing. It is an impossibility in national income accounting.

3. The assertion that revenues raised from carbon pricing can be used to fund green investments is somewhat unrealistic. It assumes there would be no short-run macroeconomic growth costs to carbon pricing. Jean Pisani-Ferry of the Bruegel Institute is making a case for the short-term macroeconomic costs of the energy transition. Whether there will be net revenue gains from carbon pricing is unclear. It is an assumption that has to be tested in different contexts.

   Further, whether the carbon price reflects the underlying cost of de-carbonisation or merely reflects financial market speculation needs to be clarified. One study found that over a five-year period from 2010 to 2015, derivatives accounted for 99% of all trades in the EU Emission Trading System (ETS).[1,2]

   Finally, and fundamentally,

   "Carbon pricing does not allow society to discriminate between spurious uses of carbon–such as sending billionaires into space–and vital uses, such as building the infrastructure for a non-carbon economy. In a successful transition, the first would be made impossible, the second as cheap as possible. As such, a unique carbon price becomes a clear pathway to failure."[3]

1 Nathalie Berta, Emmanuelle Gautherat and Ozgur Gun, 'Transactions in the European Carbon Market: a bubble of compliance in a whirlpool of speculation', Cambridge Journal of Economics 41, no. 2 (2017): 575-593 cited in 'The Value of a Whale: On the illusions of Green Capitalism' by Adrienne Buller.

2 See also Ewa Krukowska, 'EU urged to protect carbon market from excessive speculation', Bloomberg, 15th December 2021, cited in 'The Value of a Whale: On the illusions of Green Capitalism' by Adrienne Buller.

3 Cedric Durand, 'Energy Dilemma', New Left Review: Sidecar, 5th November 2021, cited in 'The Value of a Whale: On the Illusions of Green Capitalism' by Adrienne Buller (https://amzn.in/ixFxm1T).

4. When it comes to climate action, economic growth matters. It has been well documented that with rising income levels, people will internalise concerns related to the climate. But first, incomes must rise to levels where extreme poverty, poor health and a lack of education do not persist. Further, as the economy continues to grow, the environment benefits too. Research has shown how richer countries take more carbon out of the air than poorer ones. Economic growth increases carbon sequestration in many ways, including better waste processing, increased forest coverage, and higher agricultural productivity that reduces the acreage of cultivated land. For instance, the economic growth of South Korea helped turn barren mountains into lush green forests. Climate action in the name of global warming mustn't kill the goose that lays the golden eggs. This is particularly relevant for emerging and developing economies.

   In November 2022, 'Economist' published a long article (https://econ.st/3FDCnb1) on Africa's energy challenges in the context of energy transition imposed by climate change considerations and the region's growth imperatives. It concluded, *"For much of Africa the best way of adapting to a warming planet is to become rich enough to deal with its consequences. Denying Africans cheap and reliable power will make this task much harder while doing almost nothing to curb global warming."* To become rich enough, countries must prioritise economic growth; policies should be geared towards that, meaning they cannot jettison fossil fuels entirely.

5. Lastly, the sequencing of action for mitigation and adaptation matters a lot. Before cutting down the usage of fossil fuels and other non-sustainable methods of electricity generation, we must ensure that the generation capacity of non-fossil fuel energy is feasible and viable. Sustained availability of rare earth and critical minerals must be ensured before nations are asked to switch to non-fossil fuels. Labour market adjustment to energy transition is smoother in theory but rarely so in practice. Tortuous, delayed and incomplete labour market adjustments to trade liberalisation must serve as warnings. Prematurely reducing reliance on fossil fuels while simultaneously struggling to set up expensive renewables would result in a net loss to both social welfare and economic growth. Energy prices can skyrocket, resulting in loss of opportunities and inequity between income groups in a developing nation.

I conclude my comments by drawing attention to the importance of being aware of the law of unintended consequences, since, with wicked problems, the road to hell is paved with good intentions. Public policy is a 'wicked problem'.

Discussant Comments

Naoko Ishii

Climate change – how to reset the relationship between humanity and the earth

Climate change and its solution in many cases has been discussed within the context of energy transition. This provides us with a partial view of the problem and accordingly fails in presenting a comprehensive solution to the problem. In this note, I provide three pieces of information which deepens our understanding of the climate change and its solution.

First, let us take a longer-term and broader view of climate change. Figure 1 on the average temperature of the earth shows that the temperature had been fluctuating widely and that it is only for the past 10,000 years that the temperature has been remarkably stable which leads to human civilisation based on agriculture. This epoch is called as the Holocene, the only geological era humanity knows.

For the past 70 years, humanity has achieved great economic development, called great acceleration, which has brought to us many benefits such as poverty reduction, advancement in human health and education. However, those achievements are not free; they are accompanied with a surge in environmental stress as well as inequality. Earth system scientists led by Johan Rockstrom have presented the planetary boundaries (Figure 2). They have identified 9 critical planetary (sub) systems and functions which consist of the stable and resilient earth system, the one in the Holocene era. They concluded that 6 out of 9 planetary boundaries have been breached and that we humans have left the Holocene and entered the Anthropocene; a new ecological era when humans have extraordinary power to change the function of the earth system, and there is no guarantee that the planetary system can support civilisation as it did under the Holocene.

In order for humans to safeguard the stable and resilient earth system, our very foundation for the civilisation, called as Global Commons, we need to reset our relationship with the earth system. Put it simply we changed the earth system, so it is our turn to change ourselves.

This leads to my second point. To safeguard the global commons, we need to transform our way of life, not only energy system. The economic system which has put enormous stress on the earth system does include energy system, urbanisation, food system and linear production and consumption system. We should transform those key systems altogether to safeguard the earth system.

The Center for Global Commons at the University of Tokyo together with research partners has presented the Global Commons Stewardship Framework (Figure 3). We have identified four action levers to ignite the systems transformation; namely; setting vision and targets; resetting economic incentives including pricing; ensuring the transition is inclusive; and harnessing innovation. It is important to recognise that holistic systems transformation is only possible to employ a set of action levers or enablers. In a sense, a whole-of-government and a whole-of-society approach is required. Even if each one of us operates within one of the boxes of a 4 by 4 matrix, it is important to understand that we are part of a bigger endeavour under which the entire machinery is moving on.

The third and the last point is that agents of promoting systems change need to understand the economic activities and the accompanying environmental stresses that are taking place across national borders. Despite that, GHG emission targets are set within national borders which is production based. The fact is that current national targets and policies fail to capture international spillover impacts through trade. Let us take an example of Japan which imports more than 60% of food (calorie based). Those imported foods are to some extent causes of deforestation, water stress, fertiliser overuse, and land degradation, as well as GHG emissions. Those impacts are not accounted for when the national target is set and progress is measured. As of today, it is only Sweden which has decided to adopt the GHG target on a consumption-based (including trade impacts) in addition to the current production-based target.

The Center for Global Commons has been working with SDSN and Yale University to capture those spillover impacts beyond national borders. Figures 4, 5, 6, 7 and 8 present environmental impacts of a few selected sectors caused by producing countries and consuming countries. This provides the following insights. (1) supply chains are so global that we need to bring both producing countries and consuming countries together to figure out how to address those spillover impacts, (2) in many cases richer countries are outsourcing their environmental impacts to poorer countries without compensation, (3) those spillover impacts are not fully priced and one way to address those impacts is to put monetary value for usage of natural capital. Indeed, Asia holds a great deal of natural capital but guardians of this natural capital, such as smallholder farmers, forestry community, small scale fishermen, as well as indigenous people, are not economically rewarded for their role as maintainers of that natural capital. The economic system, including accounting and valuing, needs to be transformed to reflect these contributions, so far unpaid. As of today, several efforts are ongoing such as Task Force on Climate-related Financial Disclosures (TCFD), Taskforce on Nature-related Financial Disclosures (TNFD) and natural capital accounting along this direction. Asian communities should play an active role to participate in shaping the international rule-making so that its interest is fully incorporated in emerging rules.

Figure 1

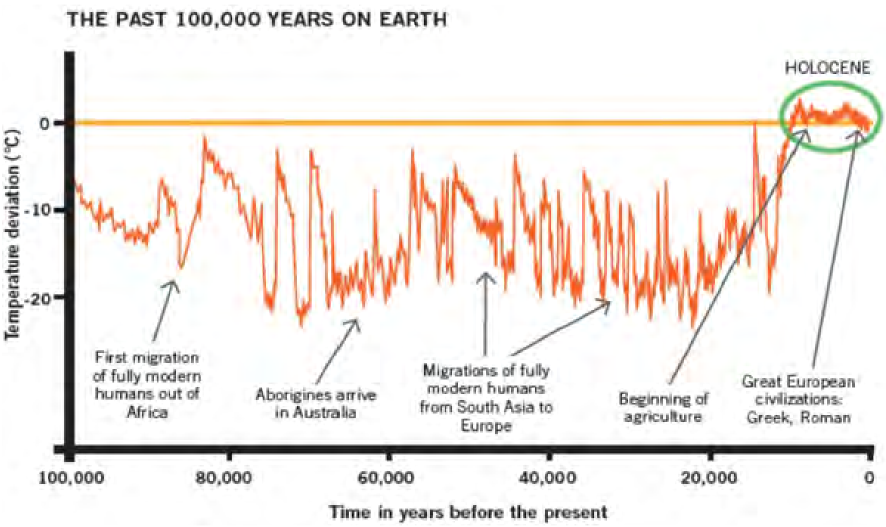


Figure 2

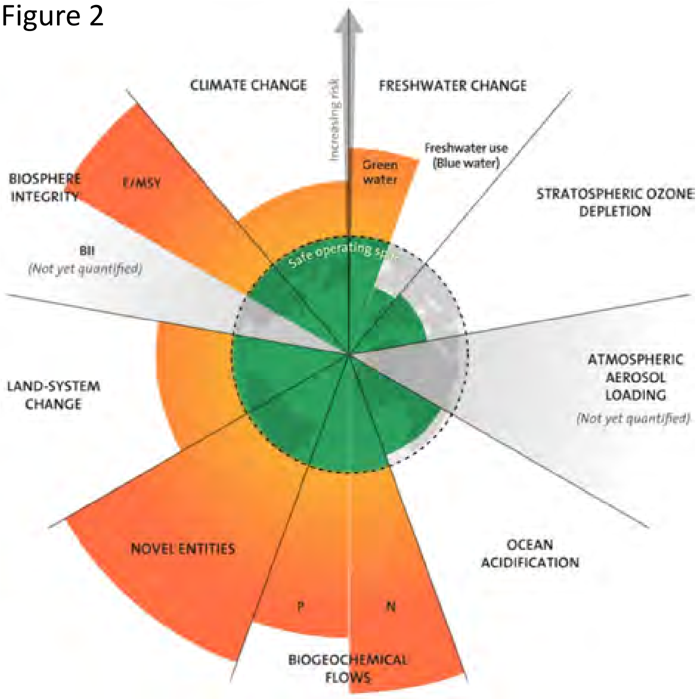


Figure 3

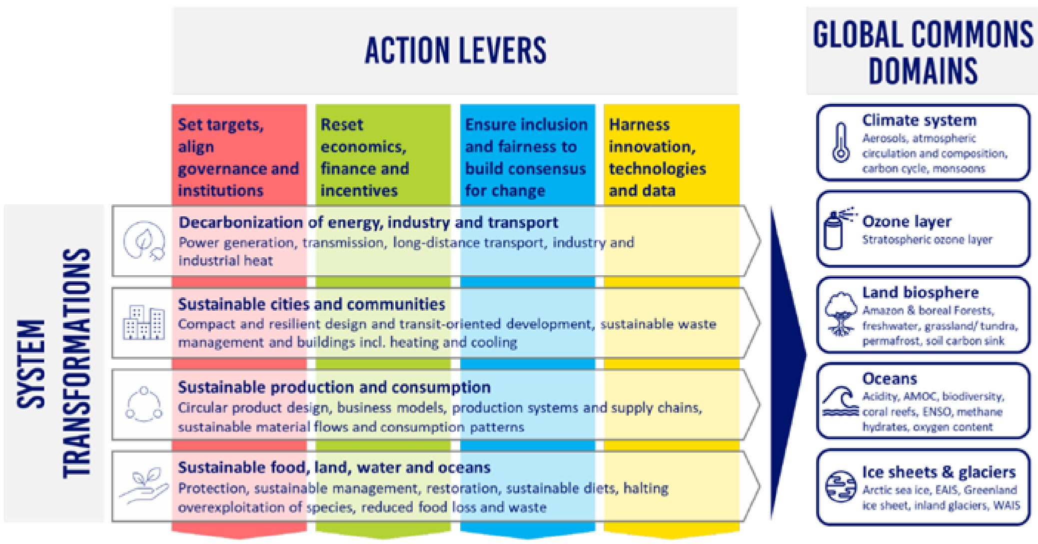


Figure 4

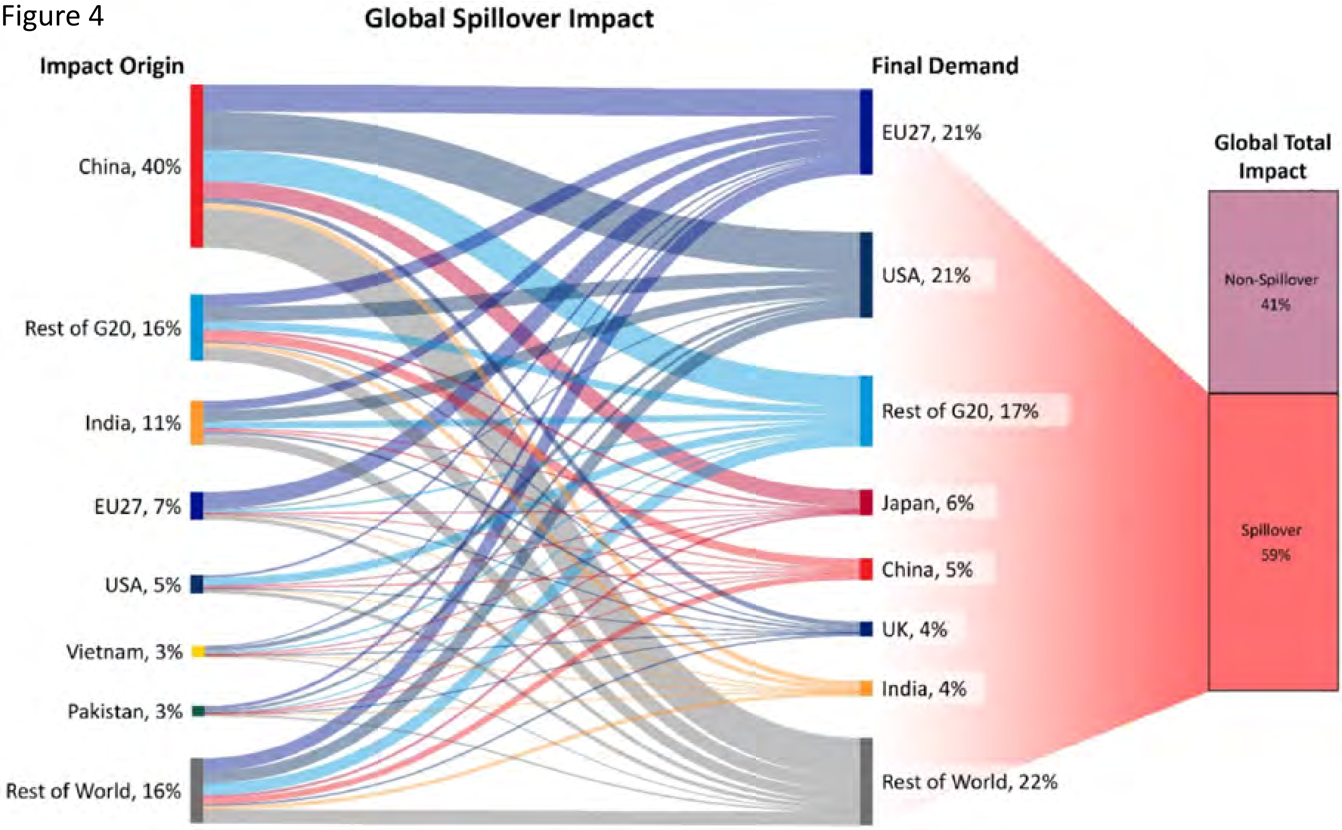


Figure 5

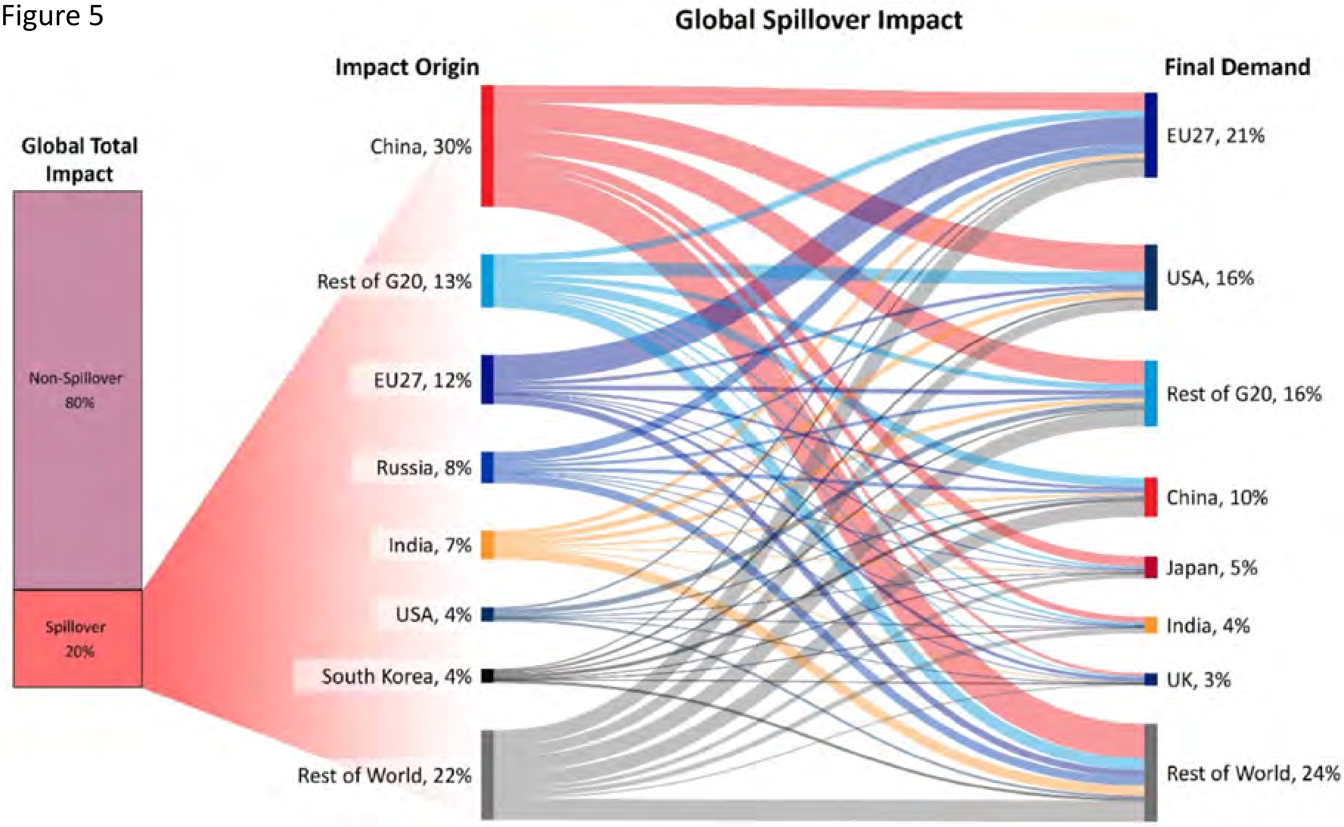


Figure 6

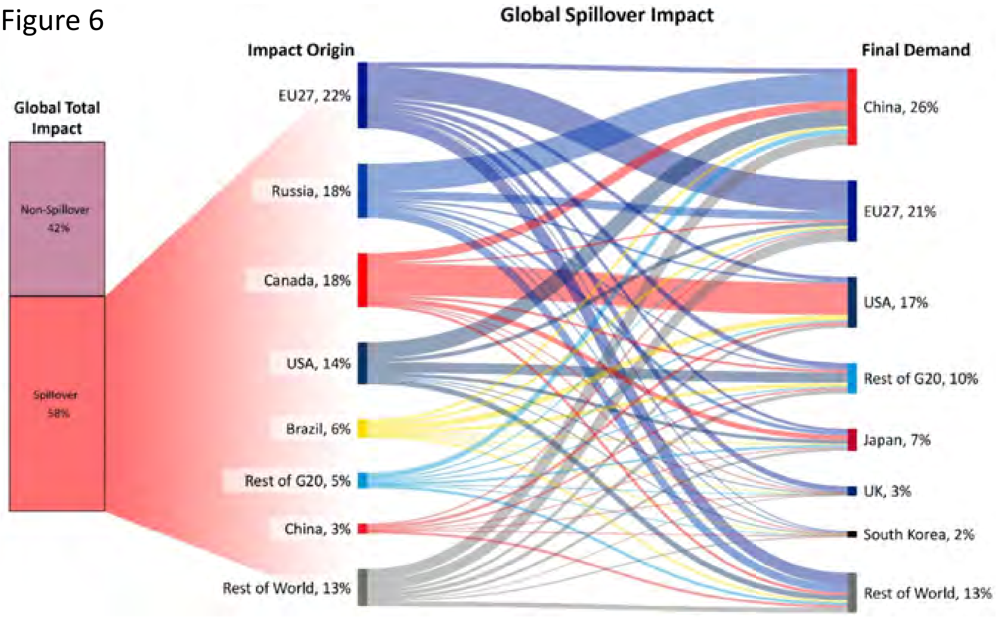


Figure 7

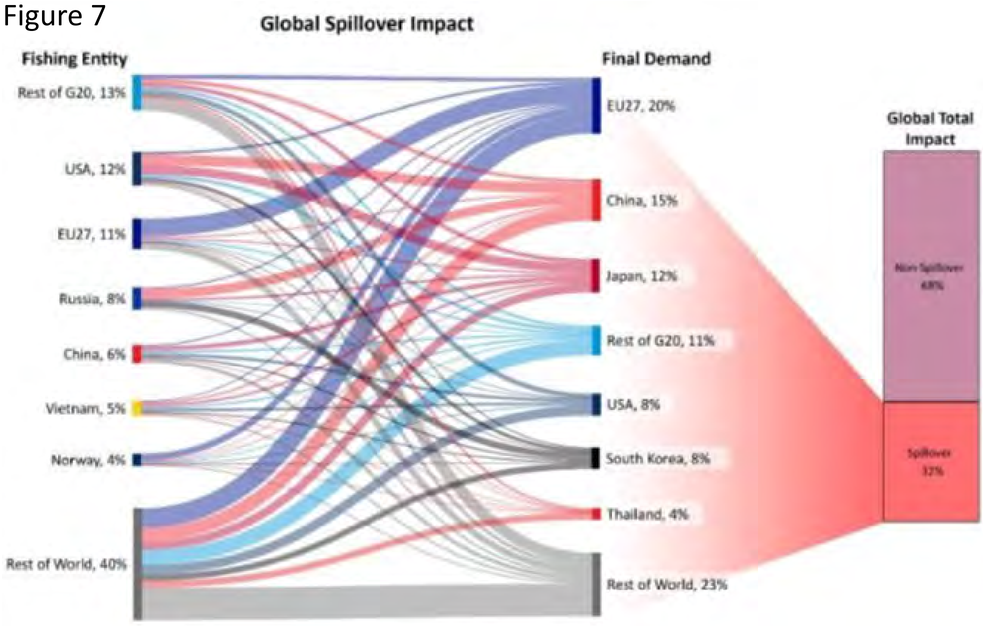
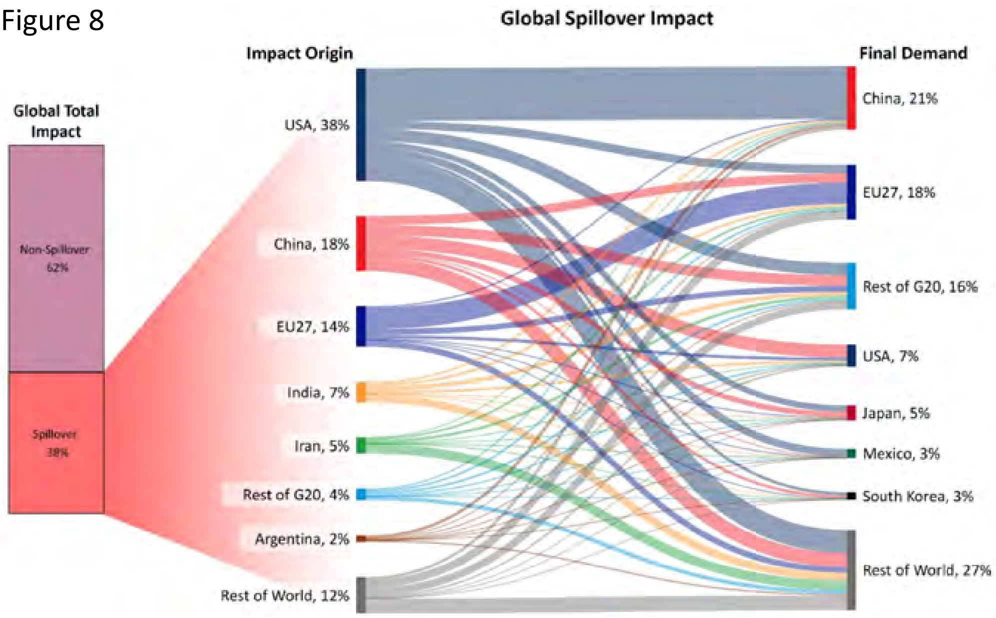


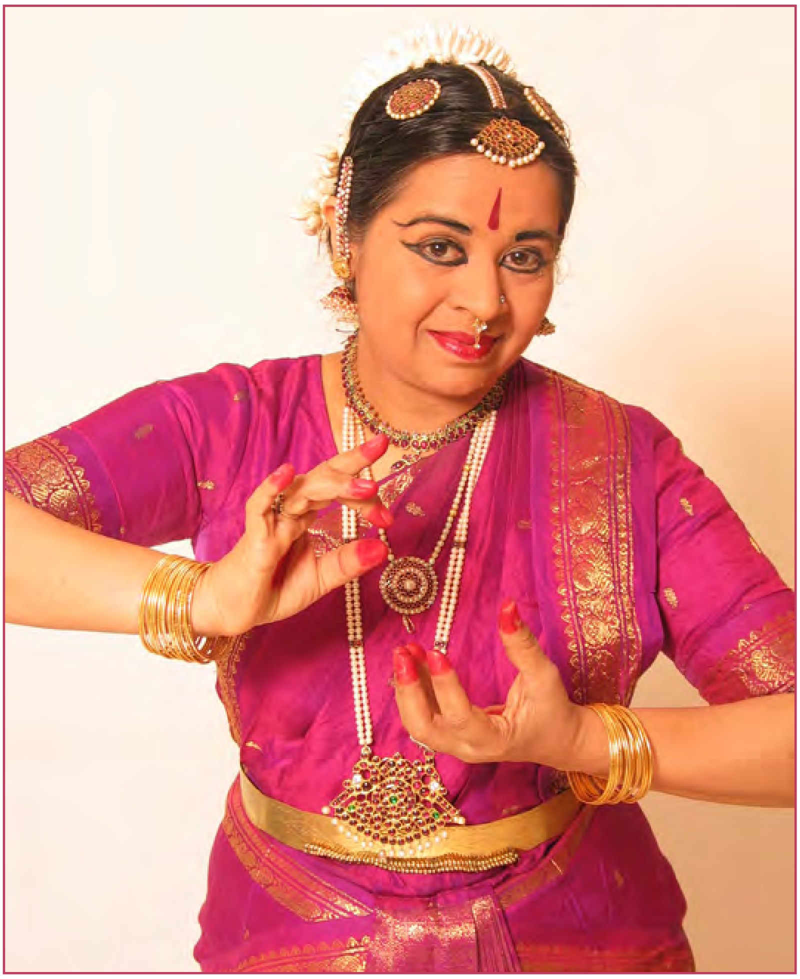
Figure 8



"The Drum and The Flute"

A lecture-demonstration in Bharatanatyam by

Rasika Khanna



Venue: Badroon Mahal, Neemrana Fort-Palace

Date: Saturday, March 4, 2023 • Time: 7.00 pm

Born in Mumbai, Rasika Khanna is the daughter of Renu and Krishen Khanna, the artist. She was fortunate to be initiated into Bharatanatyam by the legendary Balasaraswathi as a child in Chennai. Her love for Bharatanatyam as a solo art form was later nurtured by her subsequent gurus, Smt Lalitha Shastri, Shri Adayar Lakshman, Guru Nana Kasar and Smt. Kalanidhi Narayanan, each of whom gave her a different insight into the art form.

Rasika has performed professionally on many prestigious platforms both in India and abroad. In Asia she has performed in Jakarta and Bali in Indonesia, Singapore, Sri Lanka and Pakistan. She has taken her art further to the US, Europe, Canada, Chile, Colombia, Brazil, Tanzania, South Africa and Russia in Moscow and the Hermitage in St. Petersburg.

CLOSING SESSION

Making up for Lost Time: Towards an Annual Conference

Suman Bery

VALEDICTORY ADDRESS

My thanks to Vikram Mehta for his kind introduction and to Rakesh Mohan and Vikram for their invitation to speak at this session. I am pleased that the Chief Economic Adviser of the Ministry of Finance, Dr V. Anantha Nageswaran, from the Union Government is also present at this important event. I am deeply flattered that this valedictory address is given equivalent billing as the opening remarks by Singapore's Senior Minister Tharman Shanmugaratnam, a person of the highest global eminence, who I respect enormously.

Neemrana has a special resonance in my relationship with Rakesh. Our families knew each other before he and I first met at boarding school in Britain. We have Princeton in common, as also the World Bank and the Reserve Bank of India and he has recently shared with me written acknowledgement in his Princeton PhD thesis for my assistance in commenting on his dissertation draft, long forgotten by both him and I!

It is Rakesh's role as an energetic and successful institution builder at three think tanks NCAER, ICRIER and now CSEP that I wish to acknowledge here. He left me a magnificent legacy at NCAER in terms of a top-drawer governing board, and a very fine set of researchers. Rajesh Chadha and Laveesh Bhandari, today at CSEP, are part of that legacy as were the Neemrana conferences, joint with the NBER of Cambridge, Massachusetts. These were helmed by Marty Feldstein and Subir Gokarn, alas neither with us any longer.

The Neemrana conferences and NCAER's India Policy Forum (IPF), launched a couple of years later in collaboration with Brookings, Washington DC, played a crucial role in bringing scrutiny of Indian reform to a global audience. It was deeply encouraging for me to hear from Esther Duflo (at the time of her being jointly awarded the Memorial Prize for Economics in honour of Alfred Nobel with Abhijit Banerjee and Michael Kremer) that these India conferences were foundational experiences for her early in her career. Abhijit was generous with his time and reputation in helping bring the idea of the IPF to fruition. Yet, as this timely and well-designed conference indicates, India's gaze has remained toward the US, even as the globe's centre of economic gravity has moved steadily east, an attention deficit that needs urgent attention.

This is also an appropriate time for me to acknowledge Vikram Mehta's tireless efforts at raising CSEP to a think tank of the top rank in a relatively short period of time, initially also in collaboration with Brookings. The genial vision of Strobe Talbott and his commitment to India following his conversations with Jaswant Singh (arguably the progenitor of the 2006 US-India civil nuclear deal), first through his support of IPF, and thereafter in supporting the establishment of Brookings India must therefore also be acknowledged.

Apart from very fine work on energy, CSEP's additional strength lies in the intersection of geopolitics and economics, epitomised by the insights of Shankar Menon and his regional contacts (such as Bilahari Kausikan) at this conference. Vikram has already referred to our own shared educational background, but as a sometime employee of Shell International, I must also bear witness to Vikram's relentless effort as Chairman Bharat Shell to persuade Royal Dutch Shell to raise its game in India, a penny that took its time to drop.

The larger point of these reminiscences, spanning as they do a transformational quarter century, is that India-based think tanks have evolved a distinctive pattern of engagement and dialogue with local researchers, foreign scholars and India's own breed of scholar-administrators. This tradition has been sustained over a period of significant domestic political and economic change and shifting government attitudes toward foreign funding of policy research. It is a testament to the astute judgment of those who lead these institutions that they have continued to perform valuable service, and that they are handing over to a new generation of CEOs.

A word for those from abroad on NITI Aayog which Vikram has referred to. It is the successor to an organisation ably led for 10 years by Montek Ahluwalia, then called the Planning Commission. On assuming power in 2014, one of Prime Minister Modi's first initiatives was to abolish the Planning Commission and replace it with NITI Aayog. NITI Aayog was conceived as an indicative planning organisation with heavy focus on interaction between the Centre and the states but without the power to make annual budgetary allocations as had been the case earlier. The Hon. Prime Minister is NITI's chairman, I am the vice-chairman, appointed by him, and he annually convenes the governing council of NITI Aayog. On this sit the political heads (Chief Ministers) of all of India's 28 States and appointed heads of its 8 Union Territories.

India is a very diverse federation, but unlike Australia or the United States, it is one where the Union preceded the creation of the states. An important role of NITI, embodied in its Governing Council, is to create a neutral platform where the States and the Centre, working as 'Team India', can put aside their political differences and talk about the long-term development path of the country. During his address to the nation on August 15, 2022, India's 76th Independence Day, Prime Minister Modi declared that India should strive to achieve developed country status by 2047, India's 100th anniversary as an independent nation. He made it clear that the aspiration is moral and political, not just economic. He has also often remarked that India grows when its states grow, so the challenge is not an abstract national goal, but something that must penetrate the political and administrative discourse of each corner of this diverse country.

This sort of long-term visioning is new for India (unlike, say, Singapore's established tradition of long-term scenarios, apparently influenced at some point by Shell's own commitment to scenario thinking). While still hazy, it is within this temporal framework that we should discuss the medium-term agenda facing India, and also how successor events to this conference might assist in developing a distinctive Asian point of view on the global economy.

The conference is titled '*India in Asia: Deeper Engagement*'. Rakesh jokingly has said that my brief is to talk about 'India and Asia: Even Deeper Engagement'. In the room today are two people who have influenced my thinking greatly, Shankar Menon and Shyam Saran, both former Foreign Secretaries and, in the case of Shankar Menon, a former National Security Advisor. Both are deeply knowledgeable about the course of Chinese history and the ebb and flow of the relationship between these two ancient civilisations and modern states. Shankar Menon's book, '*India and Asian Geopolitics*' raises the issue of what Asia is and has been. He points out that for India, Asia should also encompass Asia to India's west, what we call West Asia and others call the Middle East; Asia to India's east, well represented here, and Asia to India's north as well, China and Central Asia. Shankar Menon notes the origin of the term 'geopolitics' in the work of Sir Halford Mackinder and the central role of Central Asia in driving Eurasian history, a reality that the war in Ukraine has forcibly brought back to our attention.

The organisers of this conference have chosen to focus on maritime Asia. I want to make a couple of points about what might be involved in widening the focus in possible subsequent conferences. In my time as NCAER's head, I got very interested in the concept of ASEAN+3 as a framework. Even though India opted out of RCEP, ASEAN+3 is an entity which has shape and some kind of dialogue infrastructure, although the landscape has now become more cluttered with the East Asia Summit and the Indo-Pacific Economic framework, not to mention the Shanghai Cooperation Organisation.

So, should the perimeter of who is included in future be restricted to just ASEAN+3? Especially given the fact that groups like ESCAP, ADB and ADBI comprehend a much broader concept of Asia, closer to the concept of Asia that Shankar Menon covers in his magisterial book. One filter is where are India's interests most affected or most at stake? Which definition of Asia? Certainly, when you look at India's trade and integration relationships they happen in all directions.

Also, for India, South Asia must come first. We have representation from both Bangladesh and Sri Lanka in this conference, to my knowledge, but not from Nepal or the Maldives. I remember many years ago when I was working with the Asian Development Bank Institute in Tokyo and I visited Manila, Masahiro Kawai, the chief economist at that time, who was responsible for the integration department at ADB, made the point that India should first focus on South Asian integration before gazing east. At the time, there was a lot of optimistic talk of an Asian currency union following the euro, now perhaps a more contentious issue. This raises another design issue: what space already exists for discussions of this quality and calibre within South Asia? We know that South Asia is a much less integrated part of the world than almost any region. So, it is very important and impressive that CSEP, despite being the Centre for Social and Economic Progress, comprehends, as Brookings did, a very vibrant and important geopolitical dimension, that of connectivity. Constantino Xavier is looking at connectivity in the region and between the region and ASEAN. I think this is another direction in which this conference could evolve. Either that or that CSEP, possibly with the support of the Ministry of External Affairs, think of something that is as thoughtful and well represented as this conference for South Asia alone.

When one travels within ASEAN, it is very obvious how much mutual transparency there is between individual countries of ASEAN. The kind of density of contact there is within Europe across the Atlantic, and within Latin America, India just doesn't have that with ASEAN even though we border Myanmar. So, I think transparency and the kind of networking that takes place over coffee and in the breakfast room as much as in the hall itself, is intrinsically important.

As was highlighted in the last session, there are crucial discussions taking place, most of all on climate change. I would also argue about the importance of the global financial architecture where Asia is affected but is largely passive. This is despite the fact that both the need for global investment and the scale of global saving is largely within Asia, although this may change as demographics evolve. What global financial architecture might be supportive, the flows of funds are required for climate change, for shaping a new global safety net. These are issues that impact Asia, but there isn't really a forum outside government, where these come together.

While I was at Bruegel, I was asked to work on the 10th anniversary of the summit process of the G20. How could the G20 become more responsive to the interests of emerging markets? One litmus test is – does the G20 aspire for the safe integration of the financial systems of India and China into global finance? Many of you would know the old article by Carlos Diaz Alejandro, "Goodbye Financial Repression, Hello Financial Crash". Martin Wolf, a bit like Napoleon, has argued that the financial systems of India and China should remain walled off from global finance because if there was to be a financial crisis in China it would be on the scale of the global financial crisis. Whatever concept of Asia we agree on, or the organisers of successive conferences agree on, both to unleash the investment potential of that part of Asia and to make sure that financing can take place without a financial risk-on/risk-off cycle of the kind that was discussed in the earlier session that I was here, a global architecture that allows these different systems to integrate into global finance is important.

The G20, the IMF and the Multilateral Development Banks are institutions that were developed to help the world recover from destructive policies. So, the rethinking of an architecture of global finance and global governance that can support the next boom is crucial. As we have heard, the preconditions are there, the innovativeness is there, the agenda is there. It is really the inefficiency of the global safety net which is the hindrance.

Let us admit, it is the divisions in the G7 which prevent the repeat of the Marshall Plan and Bretton Woods moment. The question is can Asia, through various fora, ultimately through governments but pushed by the think tank community, at least start to define the architecture that would serve its purpose? Once the model is in place, and India has an important role to play in that, can Asia take that development and financing model to Africa, which is 20 years behind?

I am almost at the 20-minute mark. I am very keen to hear from others but let me just say that this was a bold experiment, a noble experiment.

Thanks Rakesh, for bringing many of us back to Neemrana, Vikram for your kind words, colleagues from elsewhere who I had met before, and others who I met for the first time. It has been a privilege and I do hope that within some of the frameworks that I have articulated, you will find it possible to go forward.

Thank you.

CLOSING SESSION

The Future of India and ASEAN Engagement

Sihasak Phuangketkeow

What I have to share about the engagement between the Association of Southeast Asian Nations (ASEAN) and India, which is very important, is the ASEAN perspective. I also want to hear the Indian perspective. In the 15 minutes that I have, I probably cannot do justice to the number of issues in our relationship.

I want to recall the time when I was ambassador to France before my retirement. What I heard so often was about the rise of Asia. In that context, naturally, you would hear about the rise of China. They talked about the rise of ASEAN, but everyone also talked about the rise of India. I think how India rises and how India deepens its engagement with S Asia will have an important bearing on the future direction of India. That is the first point I want to make. The second point is from the ASEAN perspective: we attach great importance to our partnership with India. We hope that from the Indian side, you will see us as an important platform for you to engage with Asia. We believe that the relationship, and engagement between India and ASEAN, is going to be an important pivot in the regional architecture of the Indo-Pacific. Therefore, we have to think long and hard on both sides about this engagement.

When I was a young diplomat, when I joined the foreign ministry 40 years ago, the relationship between ASEAN and India was very different. There was a lot of distance between the two sides. During the Cold War, we were on opposite sides. Now all that has changed. India has reoriented its foreign policy: you "look east" and "act east". ASEAN has changed from ASEAN 5 and became ASEAN 10, as one community of Southeast Asia. Our relations have progressed tremendously in the past 30 years. First, India was a sectoral partner. Then, India became a full partner. After that, we had a summit-level partnership, and India became a strategic partner. Last year, we commemorated the 30th anniversary of our relationship, and we established a comprehensive strategic partnership. Now, what does that mean, comprehensive? I think we have to think about what it means. It is not just the form, but the substance of the relationship. To be very frank, I think we haven't really achieved the optimum in our partnership yet. We really have to work harder at trying to meet expectations. In a way, perhaps our expectations are too high, that could be the case. One disappointment, to be frank, is in the area of trade and investment. This is because India is the third largest economy, and ASEAN combined is the fifth largest economy in the world; yet, our trade figures do not reflect the strength of our two economies. I think it is about US$80 billion, whereas now trade relations with China are about US$800 billion. I think we have to do more. And of course, we were disappointed that India did not join the Regional Comprehensive Economic Partnership (RCEP), but the door is still open for India to join. We respect India's decision to not join: we know the reasons why. Still, we hope that, eventually, India will decide to join. We have the ASEAN–India free trade agreement, and it is up for review, and perhaps we can review it in such a way that it becomes a more effective vehicle to enhance trade and investments between India and ASEAN countries. Just last night, I was looking at the statement on the ASEAN–India partnership at the last summit. It covers so many areas—digital economy, connectivity, health security, supply chains, energy transitions, and so on and so forth. People-to-people contact as well, but we really have to set our priorities on all these issues.

I think one area that is very important to us, and I see Tino (Constantino Xavier) in front of me, is that of connectivity. A decade ago, I attended the first meeting on the trilateral highway between India, Myanmar, and Thailand. A decade ago! Right now, it is still a work in progress. So, we really have to do more in terms of connectivity. Thailand will be hosting the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) summit this year. India plays a key role. I think BIMSTEC provides an important vehicle to connect south and southeast Asia, and connectivity is also at the heart of BIMSTEC. We really haven't been able to move forward much on that. I think, as you know when we talk about the region, what we really have to think hard about is this: do we have a vision of the regional order that we are seeking? We see the geopolitical contest that is going on and the pressures that all of us feel, but what is the vision of the regional order that we seek? We have the ASEAN outlook on the Indo-Pacific, you have the Indo-Pacific Ocean initiative. We talk about the convergence of these two initiatives, but we haven't really translated them into what they actually mean. So, I hope that we can really work more on this vision of the Indo-Pacific. You (India) are a member of the Quad. At the same time, you support ASEAN centrality. That might be a contradiction because, for many of us in ASEAN, we feel that the Quad sort of undermines ASEAN centrality. Yesterday, Bilahari said that the regional architecture need not be one single architecture. That it could comprise overlapping frameworks and forums and be mutually reinforcing. Though, in the end, what we really want is an architecture that engages all the major powers. A multi-polar architecture that achieves a certain degree of strategic balance in the region, so that all of us can get on with the business of promoting economic development and prosperity.

CLOSING SESSION

Reflections on the Way Ahead

Deepali Khanna

Respected excellencies and esteemed guests from different parts of the world, it is an honour to stand before you today and address such a distinguished audience. It has been exhilarating listening to all the discussions over the last three days, from geopolitics to economic advancement, from health policy to human development, and from climate change to sustainability—the conversations that have taken place at this magnificent fort of Neemrana are a testament to your passion and commitment to the theme of the conference - *"India in Asia: Deeper Engagement"*. I am sure that not only was this an opportunity to gain a deeper understanding of different perspectives but also to form deep friendships that celebrate our differences.

Asia is a region that is vast and diverse, with a rich history and a promising future. Asia is home to some of the world's oldest civilisations, and it has played a pivotal role in shaping the course of human history. From the Taj Mahal in India to the Great Wall of China, from the bustling streets of Tokyo to the serene beaches of Thailand, Asia is a place of wonder, beauty, and inspiration.

But Asia is more than just a tourist destination or a repository of ancient treasures. It is a dynamic and rapidly changing region with numerous countries that are unlocking their potential and driving much of the world's economic growth and innovation. Over the past few decades, Asia has emerged as a hub of manufacturing, technology, and trade, raising standards of living for hundreds of millions at home and becoming a leading contributor to global economic growth. With three of the world's fastest-growing regions—India, China, and ASEAN—Asia's influence in global economic affairs will only continue to grow. Indeed, we are already living amidst the much-proclaimed Asian century. Despite these achievements and aggregate economic weight, I am yet to see a common regional narrative emerge on sustainable development. In this case, the diversity we celebrate may not optimally serve us. And this is understandable for a region with 4.5 billion people, 2,300 spoken languages, and a wide variety of political and economic systems and social norms.

Unfortunately, the lack of a common voice may limit our potential in defining directions for global development now and in future and undersell the importance of Asian-developed and Asian-led approaches to tackling development challenges.

Addressing this gap between the reality of Asia's role in creating a sustainable future and our collective influence on global governance makes platforms like this so critical. Such discussions are critical to bringing Asian voices together, forming solidarity around agreed development priorities and approaches, and accelerating the movement towards collective action. We need to ensure that Asia represents and asserts itself and what works for Asia on a global scale. Strengthening economic ties and promoting regional integration could help create a shared identity in Asia.

Organisations like ASEAN and the Asia-Pacific Economic Cooperation (APEC) are playing a vital role in promoting regional integration by encouraging trade and investment between countries in the region. Encouraging regional cooperation could help countries in Asia work together to address common challenges, such as climate change, geopolitical instability, and economic inequality. This could create a sense of shared responsibility and promote a shared understanding of the region's problems and solutions.

India's G20 presidency after Indonesia is a pivotal moment for Asia and the global community. As the world's largest democracy and one of the fastest-growing major economies, India's leadership in the G20 is already having a significant impact on the region's economic growth and stability. As a regional leader in South Asia, India is using its presidency to encourage discussions and cooperation between countries in the region. Hon'ble Prime Minister of India, Shri Narendra Modi, very rightly said in his message for the conference that "there is an increasing conviction in the world that the 21st century is the century of Asia". India has been a strong advocate for developing countries' interests in negotiations and has been critical of the current multilateral development order, which it sees as favouring developed countries. As the G20 presidency, India is rightly using its leadership role to push for reforms that make the multilateral development system more equitable and inclusive, particularly for developing countries, especially in the context of climate financing.

On the Day 1 of the conference, one of the speakers said that Indians should let the non-Indians talk. India is flowing with ideas and enthusiasm, and today, India is not just about the talk but is also walking the talk. Can I have a raise of hands from the people who agree with me? It is great to see so many non-Indian hands raised.

Before I conclude my remarks, I would like to express my heartiest gratitude to the team at the Centre for Social and Economic Progress, and especially Dr Rakesh Mohan, for bringing us to this historically significant venue for discussions that will shape our collective future. I hope that more partners can support this initiative next year.

I'll leave you with this till we see each other again the next year:

Asia, the land of the rising sun

Where ancient cultures and modernity are one

With its talent and power, it's clear to see,

That Asia's leading the world, brilliantly.

Thank you.

CLOSING SESSION

Reflections

Danny Quah

Thank you, Rakesh. The first thing, of course, is to say thank you to Rakesh and CSEP for such a wonderful gathering. We have all benefitted so much from this.

I have been tasked with providing some reflections on what we have done here and what we might continue to do. So, to that end, I thought I would make two observations and then issue a call to action.

The first observation is the theme of our meeting is 'India in Asia'. And if we think about what we have done here and how we take it forward, what strikes me is the building of a dialogue and an inclusive conversation. This is what these last few days of meetings have been about. It is not about everyone arriving at the same conclusion the way that a scientific conference might proceed. Instead, this is about our trying to come together to understand one another better and possibly to speak with enough of a common voice so that we can shift the needle on the great global debates of our time: whether it has to do with geopolitics, climate crisis, health, environment, education, or a whole range of other issues. So, to build this dialogue and this inclusive conversation, we need to have some idea about where we draw the boundaries. I don't have a clear idea about where we should draw the boundaries. But I do have some ideas about where not to draw the boundaries. One of the remarkable things about this meeting here is how we got people from many different disciplines and different backgrounds to speak to one another on common issues.

Everybody now thinks of Thucydides as the notorious trap where geopolitics is going to lead to violent confrontation – geopolitical reality. However, Thucydides is also thought to have said, "a nation that makes a great distinction between its scholars and its warriors, will have all its thinking done by cowards and its fighting done by fools". We don't want to fall into that Thucydides trap of decoupling our thinking. This conversation that we are beginning needs to bring everyone together – academics, think tankers, practitioners, and real-world people who have no time for airy-fairy blue-sky ideas in economics or otherwise. We need to force them to confront the same geopolitical global reality because otherwise, we fall into some Thucydides trap, each potentially more dangerous than the other.

We need to come together not just across disciplines, but across geographies and nations. I have heard very strong opinions expressed in this room about either this nation or that nation, either excluding conversation or bringing them in. Here I think about how the more we exclude each other the more we condemn the other to "live in angry isolation" for them to "nurture their fantasies", "cherish their hates", "threaten their neighbours", to paraphrase Nixon. That is not a good place for us to be. So, the inclusiveness that we need to bring into an 'India in Asia' or in an 'Asia in Asia' conference going forward is that we need to be as inclusive as possible, but not more so.

My first point was, let us make this dialogue and this conversation inclusive across disciplines and across geographies and nations. Let us state our view strongly, but also listen to what the other guy wants to say.

My second point, which leads to my conclusion, is that I feel part of what we are doing here is a call to tell Asia's story. And I say that not to suggest doing it in a triumphalist, 'we have now won the battle, Asia is king of the world', kind of way. But to tell the Asian story by speaking in a common voice, to articulate an appropriate balance rendering what Asia's agency and influence can be on world order, on the international system, and on the international economic architecture. We don't have to be number one to be able to help bring about a world order that helps ourselves and helps others as well. Hence, for this conversation, we need to have in the same room pessimists as well as optimists. We need to have in the same room the cheerleaders for Asia as well as the dismal thinkers.

Economists are the worst of the dismal thinkers. The economists here are, looking around the room, Montek, Rakesh, Anoop and many others, including myself. Paraphrasing Adam Smith, we economists do not think of people delivering to us dinner from benevolence, we think that they bring us dinner from regard of their own self-interest. We never come together to talk about any issues except to put together a contrivance to deceive the public or an attempt for industry to make ourselves more popular or to raise prices. Economists are dismal people, but we need that kind of dismal thinking together with even more dismal international security

people who are paid to think about the worst outcomes possible. Yet, we need to bring them together with the Asian cheerleaders, those who feel that the way forward is all rosy. This is because we need to come to an appropriate balanced rendering of the way ahead. We need to have cautious good sense, and at the same time, over-the-top optimism. This brings me to my final point, which is the call to action. We need to continue this inclusive conversation and dialogue to build a balanced way forward. To that end, I encourage all of us here to think about the specificity, a timeline, and an agenda for how we can continue this important journey on which CSEP and Rakesh have started us in a cautiously optimistic first step.

Thank you all very much.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CLOSING SESSION

Closing remarks

Rakesh Mohan

First, thanks to all the speakers in this as well as the other sessions. I am going to take more time than allotted to me by me.

Danny described the objectives of this conference much more eloquently than I could ever. This is clearly a very, very modest beginning to the strengthening engagement between India and the rest of Asia.

Now, Suman's talk told me that I have the wrong title, *"India in Asia: Deeper Engagement"*. I am sorry Suman, for confusing you with the title. But this has been debated a lot between Tharman, me, and others. I do not know whether we should call it India in the Indo-Pacific or India in the new ASEAN Plus 4 or Plus 2. So, I think that we must think a little more about the title of this so that people do not get confused about what we are doing and not doing. But it is clear that we had a focus on India in East Asia or India in ASEAN Plus 3, not ASEAN Plus 6. We will have to think about that because I feel that it was difficult enough to accommodate all the countries that we did. Of course, China has been the most prominent missing participant here. But that was for reasons beyond our control. I do hope that we will be able to correct this in the coming years.

Much of CSEP's work on the foreign policy strategic side is indeed on South Asia—under the leadership of Constantino Xavier, otherwise known as Tino—particularly focused on connectivity. But we are now hopefully expanding that much more towards the Indo-Pacific region.

Now, as Danny said, we have begun the engagement. I guess I cannot talk about the engagement leading to marriage yet, but I do hope that will also fructify. But I think engagement should—as the title says—lead to deeper engagement. I noted Sihasak's point that there are just not enough trade and investment links between ASEAN and India. There is no question about that. It is a real pity that India did not sign up with RCEP, which could have promoted these links. So, Sihasak, I wish you were more effective when the RCEP took place in Bangkok and should have restrained us from walking out. As you can see, I am presenting my personal views, not the government's. I should just add that as an institution, CSEP has no views. That is part of our motto. Each scholar has views.

As I said right in the beginning, the centre of gravity, or the fulcrum, of the global economy is in the process of shifting from the North Atlantic to the Indo-Pacific. So, India must engage much more with this region in the coming years. The message from the Prime Minister of India that we have received suggests that we have great encouragement from the Indian government leadership as well. This is also signified by the presence of Suman Bery, Vice Chairman, NITI Aayog, as well as the Finance Ministry's Chief Economic Adviser, Anantha Nageswaran. I am mentioning these things to indicate that we got great encouragement from the government. Both the External Affairs Minister, Mr Jaishankar, and the Finance Minister, Ms Sitharaman, in my meetings with them, did say that if it had not been for the G20 foreign ministers meeting, and the Shanghai Cooperation Organization (SCO), they would have liked to join us. Furthermore, the Principal Secretary to the Prime Minister, Dr PK Mishra, was also very keen to join, and he really tried hard to come to the lunch, but the prime minister intervened and fixed a meeting at the same time as our lunch! So, I could not win that one either. So, my point in all this is that given this kind of formal encouragement from all around, we must continue this effort, as Danny has also said.

Some people mentioned that the last conference I had the privilege of starting was the NCAER-NBER Conference, Neemrana, which lasted for 21 years. We started that as the Indian economic reform process unfolded in the 1990s in order to engage much more deeply with the United States. Over these 21 years, India's relationship with the United States has indeed improved tremendously. So, we can take credit for having started that process. I hope that this will also have a similar result.

I must say that I am really gratified with the very active participation of everyone who has come here. The people agreed through email, to write the papers and to be discussants. I asked many of the foreign participants why did you accept the invitation because they would not know me, and they would not have heard of the Centre for Social and Economic Progress (CSEP). Now, everyone knows CSEP. They said that they accepted the invitation because of the theme of the conference. We clearly need much greater intellectual think tank engagement where we can always discuss the most important issues, as we tried to do at this conference. We should, perhaps, have a different agenda next time. We are not here to solve the world's problems—that is the job of governments. But we can give our views on what ought to be done. I do feel that in India we do have a lot to learn from the most successful part of the world for the last half century. This was also borne out of all the different presentations that have been given here.

That, to some extent, is also the objective of the conference. Now, let me do the thank you part.

First, our very generous donors: Deepali Khanna, representing The Rockefeller Foundation, Takeshi Hashimoto and Ajay Singh representing Mitsui O.S.K. Lines Ltd. and Sashi Mukundan, President, BP India and SVP, BP Group for their generous philanthropic support. Deepali Khanna, Takeshi Hashimoto, and Ajay Singh demonstrated their substantive interest through their presence throughout this conference. The Rockefeller Foundation has always had a very deep interest in East Asia. My understanding is they often did not include India and the concept of Asia until more recently. But among the greatest contributions of The Rockefeller Foundation to India is the green revolution. It funded a lot of the innovations in hybrid seeds, etc., from around the world.

Aman Nath is not present here now, but he gave the opening introduction to Neemrana. If you see the photographs of how this fort looked like—a complete ruin—you would appreciate the creativity and hard work that has gone into its resurrection. You would have seen how well this place is run. And very silently—you have lots of people helping but quietly and unobtrusively. The chefs really went out of their way to serve us their delicious creations. So, a big thanks to Aman Nath and all his staff for making this conference possible in this unique historical location. I am not going to name any of my staff except for one and that is your best pen pal—Anindita Sinh. I hope you will keep corresponding with her. She is a lovely lady, so keep in touch with her.

I also want to thank the curators of each of the sessions. Jaimini Bhagwati curated the first session on the impact of geopolitics on Asian economic options; Sandhya Venkateswaran curated the health session; Rajesh Chadha the Trade and Global Value Chains session; Shankar Menon the session on the geopolitical effects of economic change; and Laveesh Bhandari and Montek Ahluwalia curated the last session on climate change. They have all been very thoughtful and helpful in conceptualising the conference as a whole in addition to curating their respective sessions. So, thanks to all of you for having submitted to my demands and for writing the background papers.

I do want to thank all of my staff. I think they are all standing at the back over there. Anyone who is not standing, please get up. We believe in atmanirbharta, so we did not outsource anything. We did it ourselves and invented things as we went along.

Once again, I would like to thank Anantha Nageswaran and Suman Bery for making this huge effort last night, of coming here and being the senior members of the government to be here.

To all the participants, of course, and the paper writers. I thought we were a little late in making the requests, right? I was amazed. Everyone accepted, they actually wrote the papers. I think that two or three offenders only made PowerPoints, but on the condition that they will write papers. This is very important because we are going to publish the papers and the discussions. So, for the discussants, if you did not write your notes, please write them because we do want to publish them. All the participants, of course. And I would say only one thing: it is amazing how such highly distinguished people, former ministers, former ambassadors, current and former distinguished professors—everyone who has come here is just so distinguished. They actually came and spent all this time—some with long, overnight flights, etc.—and stayed through the conference.

One other thing that we will be doing is that we will send you a feedback form. My staff had said to give it to you right away. I said no one will fill them out seriously, they might just be all complimentary if they give them out. So, we will send that to you so that you can also be more critical; though, of course, we will be happy with the compliments.

A word on CSEP. We are working on all the issues that were featured at this conference. Health is a very big part of our research programme. It is very important because the areas in which India has failed for 75 years are health, education, and nutrition. Of course, climate change is across the board: from critical minerals to energy transition to the financing of climate change and foreign policy and climate change. Our foreign policy work has been focused on South Asia and connectivity. We are now expanding it towards the rest of the Asia East of India. Mining is a subject that people think is very unattractive, but it will be more and more important both for our growth and climate change issues. We have a large programme on mining, including critical minerals. Anoop Singh has been leading the fiscal programme. We do a lot of work in the financial sector as well. I am mentioning these areas of work so that we can have deeper engagement on these issues with any of the institutions represented here. We do not have to do things collaboratively, but it will be nice to exchange notes. I would also say that not just the CSEP, the objective here is really to engage all other Indian think tanks, many of whom have been represented here. But I would also encourage them to look for what other Indian think tanks are doing and to engage with them.

Let me conclude here. My immediate problem is what will I do in the next few weeks? I do not know because this has engaged me fully for the last couple of months. I will probably have postprandial depression after this. So, just keep writing to me to take me out of my depression.

We will start working as soon as we can for the next round. We will appreciate any suggestions, both thematic and location. We were talking about Singapore, whether it should be Singapore or whether you like this place so much that you do not want to go to Singapore. Someone said Singapore is so boring. I did not say that by the way; I love Singapore. I was the co-chair of the framework group for the Comprehensive Economic Cooperation Agreements. So, no one can say that I don't like Singapore, but other people have said that. Maybe you can have it in Thailand. Maybe we could have it in Malaysia. Maybe we could have it in Indonesia. So, we will be happy if you send any suggestions, both thematic and substantive, structure of the conference, potential participants, and locations. But do not ask us to expand the number of countries except for China. It will not be feasible.

Bon voyage to everyone and thank you very much for coming.

Conference Agenda
India in Asia: Deeper Engagement
Neemrana Fort-Palace, March 3-5, 2023

DAY 1: FRIDAY, MARCH 3, 2023	
11:30-11:45	Arrival at CSEP office (6 Jose Rizal Marg, Chanakyapuri, opp. Sushma Swaraj Bhawan, New Delhi) *Delegates to be escorted across the road to the lunch venue - Shakuntalam Hall, Sushma Swaraj Bhawan*
12:00-12:10	Welcome remarks by **Rakesh Mohan,** President, CSEP
12:10-12:30	Address by **Amitabh Kant,** G20 Sherpa for India
12:30-13:45	Lunch
14:00-14:30	Departure for Neemrana
17:00-17:30	Arrival at Neemrana Fort-Palace and Check-in
17:30-18:30	High Tea *Venue: Qanat Lobby*
18:30-19:00	**Introduction to the Neemrana Fort: Its Evolution from the Ruins by Aman Nath** *Venue: Qanat Hall*
19:00-20:30	**Opening Session: Setting the Stage: Deepening India's Engagement with Asia** *Venue: Qanat Hall* Welcome: **Vikram Singh Mehta,** Chairman, CSEP **Message from Prime Minister of India, Shri Narendra Modi** Keynote Address: **Tharman Shanmugaratnam,** Senior Minister, Singapore Inaugural Address: **Shivshankar Menon,** Distinguished Fellow, CSEP and Former National Security Advisor of India Conference Theme: **Rakesh Mohan,** President, CSEP
20:30-22:30	Cocktail and Dinner *Venue: Mukut Bagh & Uncha Bagh*

DAY 2: SATURDAY, MARCH 4, 2023	
7:30-09:15	Breakfast *Venue: Jalgiri Mahal*
9:30-11:00	**Session I: Impact of Geopolitics on Asia's Economic Options** *Venue: Qanat Hall* Curator and Chairperson: **Jaimini Bhagwati,** Distinguished Fellow, CSEP ***Paper 1: Impact on Asian Economies of Changes in G7 Trade and Investment Practices*** *Author:* **Eisuke Sakakibara,** President, Institute of Indian Economic Studies, Japan *Discussants:* **Tetsuya Watanabe,** Special Advisor to the President, ERIA (Economic Research Institute for ASEAN and East Asia) and Visiting Professor at Graduate School of Public Policy, The University of Tokyo **Yose Rizal Damuri,** Executive Director, Center for Strategic and International Studies (CSIS), Jakarta ***Paper 2: Consequences for Asia's Financial Sector of Restrictions in the Movement of Capital and Potential Impairment of Multilateral Development Institutions*** *Author:* **Poonam Gupta,** Director General, National Council of Applied Economic Research (NCAER) *Discussants:* **Hoe Ee Khor,** Chief Economist, ASEAN+3 Macroeconomic Research Office (AMRO) **Naushad Forbes,** Co-Chairman, Forbes Marshall and Member, CSEP Board
11:00-11:20	Tea/Coffee Break *Venue: Qanat Lobby*
11:30-13:00	**Session II: Human Development and Health Policy in Asia** *Venue: Qanat Hall* Curator: **Sandhya Venkateswaran,** Senior Fellow, CSEP Chairperson: **Amarjeet Sinha,** Former Adviser to the Prime Minister (Social Sector) and Secretary to the Government of India ***Paper 1: Positioning Human Development in the National Development and Growth Plan*** *Author:* **Emmanuel Jimenez,** Director General of Independent Evaluation, Asian Development Bank, Philippines *Discussants:* **Thang Vo,** Director, Health and Agricultural Policy Research Institute University of Economics, Vietnam **Nachiket Mor,** Visiting Scientist, The Banyan Academy of Leadership in Mental Health ***Paper 2: The Role of Technological and Other Innovations in Healthcare*** *Author:* **Soonman Kwon,** Professor, School of Public Health, Seoul National University *Discussants:* **Indrani Gupta,** Professor and Head, Health Policy Research Unit, Institute of Economic Growth (IEG) **Hasbullah Thabrany,** Chief of Party, USAID Health Financing Activity Project, ThinkWell Global
13:00-14:15	Lunch *Venue: Aatam Sukh Bar*

14:30-16:00	**Session III: Trade Integration and Global Value Chains in the Asia Pacific Region** *Venue: Qanat Hall* Curator: **Rajesh Chadha,** Senior Fellow, CSEP Chairperson: **Anoop Singh,** Distinguished Fellow, CSEP ***Paper 1: Asia's Export Success: Industrial Policy or Free Trade Led?*** *Author:* **Kirida Bhaopichitr,** Research Director for International Economics and Development Policy and Director for TDRI Economic Intelligence Service (TDRI EIS), Thailand *Discussants:* **Dushni Weerakoon,** Executive Director, Institute of Policy Studies, Sri Lanka **Yoon-Je Cho,** Member, Monetary Policy Board of the Bank of Korea, Former Ambassador to the USA and the UK, and Professor Emeritus, Sogang University, South Korea ***Paper 2: Diversifying Global Value Chains in Asia*** *Author:* **Vo Tri Thanh,** Chair of the Vietnamese Committee for Pacific Economic Cooperation Council (PECC) and Senior Expert, Central Institute for Economic Management (CIEM) *Discussants:* **Amita Batra,** Professor of Economics, Centre for South Asian Studies, School of International Studies, Jawaharlal Nehru University, New Delhi **Shujiro Urata,** Chairman, Research Institute of Economy, Trade and Industry (RIETI) and Professor Emeritus, Waseda University
16:00-16:20	Tea/Coffee Break *Venue: Qanat Lobby*
16:30 – 18:00	**Session IV: The Geopolitical Effects of Economic Changes: Politics in Command** *Venue: Qanat Hall* Curator and Chairperson: **Shivshankar Menon,** Distinguished Fellow, CSEP ***Paper 1: The Rise of Asia: Economic Power and Geopolitical Implication*** *Author:* **Jong-Wha Lee,** Dean, College of Political Science and Economics and Graduate School of Policy Studies, Korea University *Discussants:* **C. Raja Mohan,** Senior Fellow, Asia Society Policy Institute **Rohan Samarajiva,** Chairman, LIRNEasia, Sri Lanka **Madhav Das Nalapat,** Manipal Advanced Research Group, Manipal Academy of Higher Education ***Paper 2: Asia's Evolving Political Economy and India's Role in it*** *Author:* **Bilahari Kausikan,** Chairman, Middle East Institute, National University of Singapore and Former Permanent Secretary, Singapore *Discussants:* **P.S. Raghavan,** Chairman,National Security Advisory Board, India **Shyam Saran,** Former Foreign Secretary, India **Kuik Cheng-Chwee,** Head, Centre for Asian Studies, Institute of Malaysian and International Studies, National University of Malaysia
19:00-19:45	Lecture Demonstration and Bharatanatyam Recital by **Rasika Khanna** *Venue: Badroon Mahal*
20:00-22:00	Cocktail and Dinner *Venue: Mukut Bagh & Uncha Bagh*

DAY 3: SUNDAY, MARCH 5, 2023	
07:30-09:15	Breakfast *Venue: Jalgiri Mahal*
09:30-11:00	**Session V: Climate Change and Sustainability** *Venue: Qanat Hall* Curators: **Montek Singh Ahluwalia,** Distinguished Fellow and **Laveesh Bhandari,** Senior Fellow, CSEP Chairperson: **Montek Singh Ahluwalia** ***Paper 1: Climate Catastrophe and Carbon Markets*** *Author:* **Vinod Thomas,** Former Senior Vice President, The World Bank *Discussant:* **Jong Ho Hong,** Professor of Economics, Graduate School of Environmental Studies, Seoul National University ***Paper 2: Scaling up Finance Needed for Climate Action in Asia and the Pacific*** *Author:* **Tiza Mafira,** Director, Climate Policy Initiative, Indonesia *Discussant:* **Syed Munir Khasru,** Chairman, Institute of Policy, Advocacy and Governance, Bangladesh ***Paper 3: Asian Climate Funding Challenge and the Indonesian Experience*** *Author:* **Muhamad Chatib Basri,** Professor, University of Indonesia, and former Minister of Finance, Indonesia *Discussant:* **Anantha Nageswaran,** Chief Economic Adviser, Ministry of Finance, India *Session Discussant:* **Naoko Ishii,** Executive Vice-President, University of Tokyo, Japan
11:00-11:20	Tea/Coffee *Venue: Qanat Lobby*
11:30-13:00	**Closing Session: Making up for Lost Time: Towards an Annual Conference** *Venue: Qanat Hall* Valedictory Address: **Suman Bery,** Vice Chairperson, NITI Aayog, India The Future of India and ASEAN Engagement: **Sihasak Phuangketkeow,** Former Permanent Secretary, Thailand Reflections on the Way Ahead: **Deepali Khanna,** Vice President, Asia Region Office, The Rockefeller Foundation Reflections: **Danny Quah,** Dean, Lee Kuan Yew School of Public Policy, National University of Singapore Onwards: **Rakesh Mohan,** President, CSEP
13:00-14:00	Lunch *Venue: Aatam Sukh Bar*
14:00	Departure for New Delhi

We request all delegates to arrive at Qanat Hall 5 minutes ahead of the scheduled start of sessions.

KEYNOTE ADDRESS

THARMAN SHANMUGARATNAM
Senior Minister, Singapore

Tharman is Senior Minister in Singapore, having previously served for eight years as Deputy Prime Minister (2011-2018), as Finance Minister (2007-2015) and Education Minister (2003-2008). He is concurrently the Chairman of the Monetary Authority of Singapore (MAS), Singapore's central bank and financial regulator.

He co-chairs the Global Commission on the Economics of Water and is on the United Nations' High-Level Advisory Board on Effective Multilateralism. He co-chaired the G20 High Level Independent Panel on Global Financing for Pandemic Preparedness and Response in 2021. Tharman also led the G20 Eminent Persons Group on Global Financial Governance that submitted its recommendations in 2018.

Tharman chairs the board of the Group of Thirty, an independent global council of economic and financial leaders from the public and private sectors and academia. He earlier chaired the International Monetary and Financial Committee (IMFC) for four years; he was its first Asian chair.

Tharman has spent his working life in public service, in roles principally related to economic and social policies.

VALEDICTORY ADDRESS

SUMAN BERY
Vice-Chairperson, NITI Aayog

Suman Bery has recently taken over as Vice-Chairperson, NITI Aayog. He has served as Director-General of the National Council of Applied Economic Research (NCAER) in New Delhi and Chief Economist of Shell International, based in Hague. Mr. Bery has served as a member of the Prime Minister's Economic Advisory Council; India's Statistical Commission; and Reserve Bank of India's Technical Advisory Committee on Monetary Policy. He comments extensively in the media on economic issues, contributing a monthly column for a business newspaper. His professional writings include contributions on the political economy of reform, financial sector and banking reform, and energy trends and policy. Mr. Bery holds an undergraduate degree from the University of Oxford and did graduate work in public policy at Princeton University.

DELEGATES

MONTEK SINGH AHLUWALIA

Montek Singh Ahluwalia, an economist, and civil servant, was former Deputy Chairman of Planning Commission, Government of India. He joined the Government in 1979 as Economic Adviser in the Ministry of Finance, after which he held a series of positions including Special Secretary to the Prime Minister; Commerce Secretary; Secretary in the Department of Economic Affairs; Finance Secretary in the Ministry of Finance; Member of the Planning Commission; and Member of the Economic Advisory Council to the Prime Minister. In 2001, he was appointed as the first Director of the newly created Independent Evaluation Office of the International Monetary Fund. He resigned from that position in 2004 to take up the position of Deputy Chairman of the Planning Commission which he held from 2004 to 2014.

Mr. Ahluwalia has been a key figure in Indian economic policy. He writes on various aspects of development economics and has been published in prominent Indian and international journals and books. He co-authored *Re-distribution with Growth: An Approach to Policy*, which, published in 1975, was a path-breaking book on income distribution. In February 2020, he published his book, *Backstage: The Story Behind India's High Growth Years*, an insider's account of policymaking from 1985 to 2014.

For his outstanding contribution to economic policy and public service, he was conferred the prestigious 'Padma Vibhushan' in 2011, India's 2nd highest civilian award for exceptional and distinguished service.

Mr. Ahluwalia graduated from Delhi University and holds an MA and an MPhil in Economics from Oxford University. He is an Honorary Fellow of Magdalen College, Oxford.

DEWI FORTUNA ANWAR

Dewi Fortuna Anwar is a member of the Indonesian Academy of Sciences (AIPI); a Research Professor at the Research Center for Politics, National Research and Innovation Agency (BRIN), formerly known as the Indonesian Institute of Sciences (LIPI); and Chairman of the Board of Directors of The Habibie Center (THC). From 2010-2017 Dewi served as a Deputy Secretary to the Vice President of the Republic of Indonesia. Dewi was a Distinguished Visiting Professor at the S. Rajaratnam School of International Studies (RSIS), Nanyang Technological University (NTU), Singapore from 2017-2018, and a Distinguished Visiting Professor at the School of Advanced International Studies (SAIS), Johns Hopkins University in 2007. She has written widely on Indonesia's foreign policy, and ASEAN regional political and security issues. Dewi sits and has sat on several national and international advisory boards including the Centre for Humanitarian Dialogue (HD) since 2019; the Stockholm International Peace Research Institute (SIPRI) from 2010-2020; and the UN Secretary General Advisory Board on Disarmament Matters from 2008-2012. She obtained her PhD from Monash University, Melbourne, while her MA and BA (Hons) were from SOAS, University of London.

MUHAMAD CHATIB BASRI

Muhamad Chatib Basri is a former Minister of Finance of Indonesia. Previously he was the Chairman of the Indonesian Investment Coordinating Board. He is now the Chairman of the PT Bank Mandiri Tbk. and Chairman of the PT XL-Axiata Tbk. Dr. Basri is a co-Chair of the Financial Intermediary Fund for Pandemic Prevention, Preparedness and Response (FIF PPR), hosted by the World Bank with technical support from the World Health Organization (WHO). He is a member of various international advisory councils including the High-Level Advisory Group on Sustainable and Inclusive Recovery and Growth formed by the World Bank and the IMF in the face of the dual crisis posed by the COVID-19 pandemic and climate change; the World Bank Advisory Council on Gender and Development; Independent High Level Expert Group on Climate Finance for COP27; Group Eminent Personalities of the OECD Development Centre; and the Advisory Board, Centre for Applied Macroeconomic Analysis, the Australian National University. He is also member of the Governing Board of the Lee Kuan Yew School of Public Policy, National University of Singapore. He teaches at the Department of Economics, University of Indonesia and co-founded CReco Research, a Jakarta-based economic consulting firm. Dr. Basri was Ash Centre Senior Fellow at the Harvard Kennedy School (2015-2016); Pacific Leadership Fellow at the Centre on Global Transformation, University of California at San Diego (2016); NTUC Professor of International Economic Relation, RSIS, NTU, Singapore (2016); and Thee Kian Wie Distinguished Visiting Professor at the Australian National University (2016-2017). His expertise is International Trade, Macroeconomics and Political Economy. He is the author of a number of papers published in international journals and actively writes for various leading newspaper and magazines in Indonesia.

AMITA BATRA

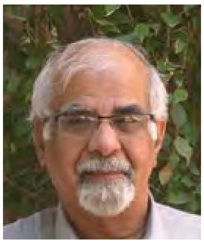
Amita Batra is Professor of Economics and former Chairperson of the Centre for South Asian Studies, School of International Studies, Jawaharlal Nehru University (JNU). Professor Batra was Senior Visiting Fellow at the Department of Political Economy, University of Sydney in October 2018 and Visiting Professor at the University of Edinburgh in 2013. She has been visiting professor at the Indian Institute of Management-Ahmedabad. Professor Batra is a member of the Advisory Group for G20 Finance Track Agenda, Ministry of Finance, Govt. of India (January 2022-December 2023). She is on the editorial committee/board of several national/international journals. Professor Batra is also an occasional columnist for the Business Standard, a leading financial daily in India. She has written and published extensively on economic integration, preferential trade agreements and India's trade policy issues. Her latest book is titled *India's Trade Policy in the 21st Century*, Routledge, London, 2022. Professor Batra has an MA, M.Phil., PhD from Delhi School of Economics, University of Delhi.

JAIMINI BHAGWATI

Jaimini Bhagwati is a 1976-batch Indian Foreign Service officer and is also a financial sector specialist. He was appointed as India's High Commissioner to the United Kingdom in 2011. Immediately prior to this appointment, Bhagwati was India's ambassador to the European Union, Belgium and Luxembourg. He was Joint Secretary (Capital Markets and Pension Reforms) in the Ministry of Finance from 1999-2002. He worked for eleven years in the World Bank Treasury in Washington DC and his responsibilities included issuance of IBRD bonds and pricing of associated derivatives transactions.

Bhagwati did his Master's in Physics from St. Stephen's college in Delhi and holds a Master's in Finance from the Massachusetts Institute of Technology and a PhD from Tufts University. In 2019, he authored *The Promise of India: How Prime Ministers Nehru to Modi Shaped the Nation* (1947–2019). This book offers a fascinating analysis on the decision making of prime ministers since independence and the consequent economic and foreign policy fallout. Bhagwati has been writing a monthly column in the Business Standard newspaper since 2005.

He was the Reserve Bank of India Chair Professor at the Indian Council for Research on International Economic Relations (ICRIER) from 2014 till end-2018. He is currently a Board member of Infrastructure Development Finance Company (IDFC) Limited and Chairman of Trustee IDFC Asset Management Company.



SURJIT BHALLA

Surjit S. Bhalla is former Executive Director for India, Sri Lanka, Bangladesh and Bhutan at the IMF (November 2019-October 2022). He has served as part-time member of Prime Minister Narendra Modi's Economic Advisory Council; Chairperson for the Ministry of Commerce High Level Advisory Group on Trade; and Economic Adviser to the Fifteenth Finance Commission, Government of India. In addition, he is a regular invitee to the Aspen Institute Program on World Economy, USA, 2002-present. He has also been a Contributing Editor for The Indian Express (2010-2019). He was founder-chairman of Oxus Research & Investments (1997-2016); and was Senior India Analyst for the Observatory Group, NY (April 2015-September 2018). Since 1999, he has been on the governing board of the National Council of Applied Economic Research (NCAER).

Surjit has taught at the Delhi School of Economics and served as executive director of the Policy Group in New Delhi, the country's first non-government funded think tank. He has worked as a research economist at the RAND Corporation, the Brookings Institution, and at both the research and treasury departments of the World Bank, as well as a consultant to Warburg Pincus. He has also worked on Wall Street in Deutsche Bank and Goldman Sachs.

He is the author of several academic articles as well as four books on globalisation and its effects on the world economy. He is the author of *Imagine There's No Country* (2002), *Second Among Equals – The Middle Class Kingdoms of India and China* (2007), *Devaluing to Prosperity* (2012), and *The New Wealth of Nations* (2017), a book which correctly forecast the changing nature of gender equality via educational attainment. His first book, *Between the Wickets: The Who and Why of the Best in Cricket* (1987), developed a model for evaluating performance in sports and was published in 1987.

His most recent book *Citizen Raj: Indian Elections 1952-2019* analysed Indian elections since 1952 and accurately forecast the Modi victory in 2019. Surjit is also a regular contributor (over 1300 articles) to Indian newspapers, magazines, and television on financial markets, economics, politics and cricket.

He holds a PhD in Economics from Princeton University, a Master's in Public and International Affairs from Woodrow Wilson School, Princeton University, and a BSEE degree from Purdue University.

LAVEESH BHANDARI

Laveesh Bhandari is a Senior Fellow at the Centre for Social and Economic Progress (CSEP) and Chief Economist at Indicus Foundation. He leads the climate change capability at CSEP and also plays an advisory role on the broad macro agenda, sub-national reform and human capital. Laveesh has published widely on subjects related to sustainable livelihoods, industrial, economic and social reforms in India, economic geography and financial inclusion. He received his PhD in economics from Boston University for which he was awarded the Best thesis in International Economics. He has taught economics at Boston University and IIT Delhi. He has been the managing editor of Journal of Emerging Market Finance and worked at National Council of Applied Economic Research (NCAER), New Delhi. Apart from applied economics research, Laveesh has built, seeded, and exited from three companies in the research, analytics and digital domains. Currently he is conducting research on issues of inclusion, India's energy transition, and how it will impact the government as well as the economy.

KIRIDA BHAOPICHITR

Kirida Bhaopichitr joined the Thailand Development Research Institute (TDRI), a leading independent think tank in Thailand, in 2015. She is currently the Director of TDRI Economic Intelligence Service (EIS) which is TDRI's corporate membership program. Dr. Kirida leads the preparation of content for the monthly seminars for corporate members on issues that are of high relevance and interest for business. Her specialisation spans monitoring and analysing developments of the global and Thai economies which includes the macroeconomic environment, geopolitical developments, megatrends, demographic changes, and technological development issues. Dr. Kirida is also currently an independent director on the Government Housing Bank's board of directors and on the Khon Kaen University Council.

Prior to this, Dr. Kirida was a Senior Economist and the Country Economist for Thailand of the World Bank Group where she worked from 1999 to 2015. Dr. Kirida's work on Thailand included monitoring and assessing Thailand's economic developments, investment climate, competitiveness, impact of the 2011 floods in Thailand, and the reforms in the public sector. Dr. Kirida was the main author of the World Bank's bi-annual Thailand Economic Monitor (2003-2015), the most downloaded and widely cited World Bank publication on Thailand.

At the World Bank, she regularly contributed to the World Bank's bi-annual report on economic development, the East Asia and the Pacific Update. In 2010, Dr. Kirida spent a year at the World Bank Headquarters in Washington DC, where she worked on regional issues in East Asia and authored a paper on estimating remittance trends in South Asia.

A recognised fixture in economic and business circles in Thailand, she appears regularly in the media and speaks at public and private high-level forums and executive courses in Thailand and overseas. She also gave a TED talk at a large TEDx event in Thailand in 2018.

Dr. Kirida holds a PhD in Economics from Cornell University (USA).

RAJESH CHADHA

Rajesh Chadha is a Senior Fellow at the Centre for Social and Economic Progress (CSEP). He was formerly a Professor & Research Director at the National Council of Applied Economic Research (NCAER) and before that, an Associate Professor of Economics at Hindu College, University of Delhi. He has worked extensively on regional and multilateral issues of international trade. His other areas of interest include foreign direct investment, agricultural markets, and non-fuel minerals and mining in India. He has provided research support to the Indian government on multiple projects. He has also played a key role in the research projects sponsored by the governments of India, Australia, the UK, and various international organisations.

He was the Managing Editor of *Margin: The Journal of Applied Economic Research*, NCAER's international, peer-reviewed journal, from 2012 to 2019. He has been a Visiting Scholar at the Universities of Michigan, Melbourne, and Monash and Visiting Faculty at many prestigious academic and research institutes in India. He was nominated as GTAP Research Fellow (2004-2007) by the Global Trade Analysis Project, Purdue University, USA.

He received his PhD in Economics from the Indian Institute of Technology, New Delhi.

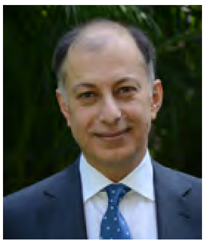
KUIK CHENG-CHWEE

Kuik Cheng-Chwee is Professor in International Relations and Head of the Centre for Asian Studies, Institute of Malaysian and International Studies, National University of Malaysia (UKM). He is concurrently a non-resident Fellow at Johns Hopkins Foreign Policy Institute (FPI). Previously, he was a Postdoctoral Research Associate at the Princeton-Harvard "China and the World" (CWP) Program and a Visiting Research Fellow at Oxford University.

Professor Kuik's research focuses on smaller-state foreign and defence policies, Asian security, and international relations. He served as Head of the Writing Team for the Government of Malaysia's inaugural Defence White Paper. Professor Kuik's publications have appeared in peer-reviewed journals and edited books. His essay, "The Essence of Hedging", won the Michael Leifer Memorial Prize awarded by the Institute of Southeast Asian Studies. He is co-author (with David Lampton and Selina Ho) of *Rivers of Iron: Railroads and Chinese Power in Southeast Asia* (2020). His current projects include: hedging in international relations, domestic politics and foreign policy choices, and the geopolitics of connectivity cooperation. Cheng-Chwee serves on the editorial boards of Contemporary Southeast Asia, Australian Journal of International Affairs, Asian Perspective, Asian Politics and Policy, International Journal of Asian Studies (Cambridge University Press), and East Asian Policy.

YOSE RIZAL DAMURI

Yose Rizal Damuri is the Executive Director, Center for Strategic and International Studies. His research activities focus on international trade, regional integration and globalisation of value chain. He received his PhD in International Economics from the Graduate Institute of International Studies, Geneva, Switzerland. He is active in many networks of research institutes in East Asia, such as in Asia Pacific Research Network on Trade (ARTNet) and ERIA Research Institute Network (ERIA-RIN) and Think 20, the think tank network of G20 countries. Currently he serves as the Co-Chair of Indonesia National Committee of Pacific Economic Cooperation (INCPEC), while also serving as a Member of the Governing Board of Economic Research Institute of ASEAN and East Asia (ERIA). Yose is also active in various policy forums in Indonesia, including as the Research Coordinator of Indonesia Service Dialogue, a forum dedicated for the development of services sector in Indonesia. He is a co-chair of Indonesia National Committee of Pacific Economic Council (INCPEC) and the founder of the Indonesia Bureau of Economic Research (IBER).



NAUSHAD FORBES

Naushad is co-Chairman of Forbes Marshall, India's leading process and energy efficiency company. He is Chairman, Ananta Aspen Centre, and Centre for Technology, Innovation and Economic Research (CTIER). Forbes Marshall helps Industry build and sustain highly efficient plants by reducing waste, optimising process and energy efficiency, and complying with regulatory requirements. Forbes Marshall has consistently ranked as a great place to work and aspires to be a multinational with Indian roots. Naushad was an occasional teacher at Stanford University from 1987 to 2004 where he developed courses on Technology in Newly Industrialising Countries. He received his Bachelor's, Master's and PhD Degrees from Stanford. Naushad is on the board of several educational institutions and public companies. Naushad has long been an active member of the Confederation of Indian Industry (CII) and was president of CII for 2016–17. He is a founding member of Nayanta University, a full-service university opening in 2024, spearheaded by CII. Naushad's book, *The Struggle and the Promise: Restoring India's Potential*, was published by Harper Collins in 2022.

INDRANI GUPTA

Indrani Gupta is Professor and Head of the Health Policy Research Unit of the Institute of Economic Growth (IEG), Delhi, India. She received her PhD in Economics from the University of Maryland, USA. She set up a centre for health economics and policy research in her institute, the first of its kind in India.

Professor Gupta's work experience has been diverse, including teaching and working at academic institutes, the World Bank and the Government of India. Her areas of interest cover a wide range of topics in the area of health economics and policy, and include demand for health and health care, health financing and coverage, poverty and health, costing and cost-effectiveness and economics of diseases.

POONAM GUPTA

Poonam Gupta is the Director General of the National Council of Applied Economic Research (NCAER), and a member of the Economic Advisory Council to the Prime Minister. She specialises in Macroeconomics, and issues related to the Emerging Market Economies. Before joining NCAER, Dr. Gupta was the Lead Economist for Global Macro and Market Research at the International Finance Corporation and led the policy research work on India at the World Bank. Prior to that, she was the Reserve Bank of India Chair Professor at the National Institute of Public Finance and Policy; Professor at the Delhi School of Economics; and Researcher at the International Monetary Fund. Her research has been published and cited widely in scholarly journals and has also featured in leading international business dailies such as The Economist, Financial Times, and The Wall Street Journal. She is currently a member of various organisations, including the Development Evaluation Advisory Committee, NITI Aayog; Board of the Global Development Network; National Executive Committee, Federation of Indian Chambers of Commerce and Industry; and Governing Body, National Institute of Public Finance and Policy. Dr. Gupta holds a PhD in Economics from the University of Maryland, USA, and a Master's in Economics from the Delhi School of Economics.

TAKESHI HASHIMOTO

Takeshi Hashimoto is a Representative Director, President, and Chief Executive Officer of Mitsui O.S.K. Lines, Ltd. (MOL). He is entirely responsible for executing the strategic direction and ongoing operations of MOL. He has been engaged in the LNG business since 1994 and is recognised internationally as a leader in the field of LNG Carriers and Offshore Business. Before assuming his current role in April 2021, he was appointed as Representative Director, Executive Vice President in April 2019 and provided overall strategic assistance to the President and CEO, mainly for all Business Divisions. He was also responsible for the Europe and Africa Area and supervised the Human Resources Division. He served as Senior Managing Executive Officer from April 2016 to March 2019, Managing Executive Officer from June 2012 to April 2016, and Executive Officer from June 2009 to June 2012, in charge of LNG Carriers and Offshore Business. Prior to this, he worked in the LNG Carrier Division for 11 years in the positions of Manager up to General Manager. He joined Mitsui O.S.K. Lines, Ltd. in April 1982 and gained more than 10 years' working experience in the Finance Division before becoming involved in the LNG Carriers and Offshore Business. He worked in the London Office on two occasions, first in the Finance Division and the second time in the LNG Carrier Division. He graduated from the Faculty of Literature, Kyoto University, in March 1982. He majored in classical literature and the History of China at university.

JONG HO HONG

Jong Ho Hong is a Professor of Economics and former Dean of the Graduate School of Environmental Studies at Seoul National University (SNU). His teaching and research are focused on environmental/energy economics and sustainable economy and policy. His involvement within the school extends to serving as the former Director of the Environmental Planning Institute and the Institute for Sustainable Development. Before his career at SNU, he held academic and research positions at Korea Development Institute (KDI) and Hanyang University, after receiving his PhD at Cornell University. He also has broad experiences working as a consultant for international organisations, such as the World Bank and Asian Development Bank, and has previously served as the President of the Asian Association of Environmental and Resource Economics; the Korea Environmental Economics Association; and Korean Association of Public Finance. Currently, he serves as Chairman of the Energy Transition Forum of Korea and policy advisor to the Korea Chamber of Commerce and Industry.

NAOKO ISHII

Naoko Ishii is a professor and executive vice president at the University of Tokyo, where she is also the inaugural director for the Center for Global Commons, whose mission is to catalyse systems change so that humans can achieve sustainable development within planetary boundaries. She believes academia can and should play an active role in mobilising movements towards shared goals of nurturing stewardship of the global commons. Before joining the university, Dr. Ishii was CEO and chairperson of the Global Environment Facility (GEF) from 2012-2020.

YOON-JE CHO

Yoon-Je Cho is currently a member of the Monetary Policy Board of the Bank of Korea. He served as the Korean Ambassador to the UK (2005-2008) and the Korean Ambassador to the United States (2017-2019). He also served as the Chief Economic Advisor to President (2003-2005) and worked as senior economist at World Bank and IMF (1984-1993) and taught economics at Sogang University.

EMMANUEL JIMENEZ

Emmanuel Jimenez is Director General, Independent Evaluation Department of the Asian Development Bank (ADB). Reporting to ADB's Board of Directors, his responsibilities include assessing ADB's development effectiveness, as well providing lessons to inform ADB operations. Prior to joining ADB, Mr. Jimenez worked as an Independent Consultant who provides advice, and conducts research and training on evaluation, economics, development management, education and social protection programs. Prior to this, he was the Executive Director and CEO of 3ie. In this role, he led and conducted impact evaluations and evidence reviews. He provided strategic direction to the organisation as it championed the generation and use of evidence to guide decisions regarding policies and programs that improve lives in low and middle-income countries.

Previously, Mr. Jimenez had worked for 30 years in the World Bank Group (WBG) and held several senior management roles across several departments such as the Independent Evaluation Group (IEG), the South Asia, East Asia, and Pacific Groups, and the Policy Research Department. Mr. Jimenez was a faculty member of the Economics Department of Western University in London, Canada. Throughout his career, he has published extensively, including articles in peer-reviewed professional journals, books and reports on economic development and served as managing editor of several international development journals. Born in the Philippines, Mr. Jimenez is a national of Canada. He holds a Doctorate in Economics from Brown University in the United States, a master's degree in Economics from University of Toronto in Canada, and a bachelor's degree in Economics from McGill University in Canada.

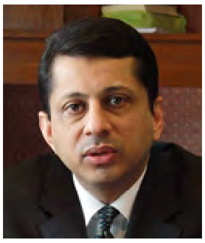
BILAHARI KAUSIKAN

Bilahari Kausikan is currently Chairman of the Middle East Institute, an autonomous institute of the National University of Singapore. He has spent his entire career in the Ministry of Foreign Affairs. During his 37 years in the Ministry, he served in a variety of appointments at home and abroad, including as Ambassador to the Russian Federation, Permanent Representative to the UN in New York, and as the Permanent Secretary to the Ministry. Raffles Institution, the University of Singapore and Columbia University in New York all attempted to educate him.

DEEPALI KHANNA

Deepali Khanna is Vice President, Asia Regional Office, The Rockefeller Foundation. She manages The Rockefeller Foundation's policy, advocacy, grant-making, and partnerships in Asia. She leads the Foundation's initiatives to convene and catalyse strategic collaborations that advance development in Asia, as well as harness Asia's role in enhancing the wellbeing of humanity in the region and around the world.

She is currently serving as co-chair of G7 Japan's Think7 task force on Development and Economic Prosperity. She is also a co-chair of G20 India's Business20 task force on Financing For Global Economic Recovery. She joined The Rockefeller Foundation in 2015. She most recently served as Director and managed one of the Foundation's flagship initiatives in India, Smart Power for Rural Development (SPRD). In this role, she provided leadership and direction across the full range of activities, partners, and resources of the initiative to provide affordable and clean energy access to over a million people in India. Prior to joining The Rockefeller Foundation, she served as Director of Youth Learning with The MasterCard Foundation, an independent, private foundation based in Toronto, Canada. She was responsible for the global grant-making strategy across more than 50 projects within the portfolio, managing a budget of USD 800 million. She has held multiple leadership positions with Plan International, including Country Director for Vietnam and Regional Director for East and Southern Africa, where she led overall strategic planning within the region and managed operations in 12 countries.

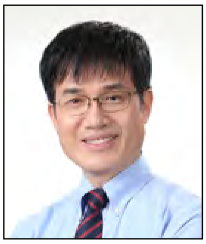


SYED MUNIR KHASRU

Professor Syed Munir Khasru is Chairman of the international think tank, The Institute for Policy, Advocacy, and Governance (IPAG) with presence across South Asia (Dhaka & Delhi), Asia-Pacific (Melbourne), Europe (Vienna), Middle East (Dubai) & Africa (Mauritius). An MBA from the Wharton School of Business, University of Pennsylvania, USA, he has extensive experience in international relations as well as SDG, digital transformation, climate change, and energy transition. He is a Global Expert of the World Economic Forum (WEF); member of (i) SDG's Global Councils by UN, World Bank, and OECD (ii) Energy Leaders' Forum, ADB. He has written nine policy briefs for G20 Leadership Summits from 2017-2022 and is the only person to be co-Chair of two Task Forces (i) SDG and (ii) Digital Transformation under G20 Indonesian Presidency. He is also co-Chair Task Force on Peace, Security, and Global Governance under G7 Japan Presidency for 2023. He is Senior Advisor-Strategy, Policy, & Global Affairs, Australian Information Security Association (AISA). Professor Khasru regularly writes for leading international media outlets which include the Project Syndicate (Global), World Economic Forum (Global), Straits Times (Singapore), South China Morning Post (Hong Kong), Nikkei Asia (Japan), and the Hindu (India) among others.

HOE EE KHOR

Hoe Ee Khor is the Chief Economist of AMRO responsible for overseeing and developing the work on macroeconomic and financial market surveillance of the ASEAN+3 member economies. He is also a member of the senior management team responsible for setting the strategic direction and management of AMRO. Prior to joining AMRO in 2016, Dr. Khor was a Deputy Director of the Asia and Pacific Department (APD) at the International Monetary Fund (IMF). From 2009-2010, Dr. Khor was Head of Economic Development and Chief Economist at the Abu Dhabi Council for Economic Development (ADCED). Dr. Khor was Assistant Managing Director of MAS from 2001 to 2009 where he was responsible for economic research, monetary policy, macro-financial surveillance, and international relations. Dr. Khor obtained his bachelor's degree in Economics/Mathematics from the University of Rochester and a PhD in Economics from Princeton University.



SOONMAN KWON

Soonman Kwon is Professor and Former Dean of the School of Public Health, Seoul National University (SNU). He is a health economist and policy analyst and has worked over 30 years on UHC, health finance and systems, and health policy. He has held visiting positions at the Harvard School of Public Health, London School of Economics, University of Toronto, University of Tokyo, Peking University, and University of Bremen. He was the Chief of the Health Sector Group in the Asian Development Bank (ADB) in 2016-2017. He is the founding director of the WHO Collaborating Centre for Health System and Financing at Seoul National University (SNU). In 2021-2022, he was the president of the Korea Health Industry Development Institute (KHIDI), which is a government agency allocating public R&D funds to the health sector. He received the Excellence in Education award of Seoul National University in 2020. He served as president of the Korean Health Economic Association, the Korean Society of Health Policy and Management, the Korean Association of Schools of Public Health, and the Korean Gerontological Society. He is an associate editor (Asia Region Editor) of Health Policy (Elsevier) and International Journal of Health Economics and Management (Springer) and was the editor of the Korean Journal of Public Health and the Korean Journal of Health Economics.

He holds a PhD from the Wharton School, University of Pennsylvania (1993) and taught at the University of Southern California School of Public Policy until 1996. He has been a member of the board or advisory committees of Health Systems Global (HSG), WHO Alliance for Health Policy and Systems Research, GAVI (Global Alliance for Vaccine and Immunization), WHO Centre for Health and Development (Kobe), etc. He has occasionally been a short-term consultant of WHO, World Bank, and GIZ for health system and financing in Algeria, Armenia, Barbados, Bhutan, Cambodia, China, Egypt, Ethiopia, Fiji, Ghana, India, Indonesia, Kazakhstan, Kenya, Lao PDR, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Oman, Pakistan, Philippines, South Africa, Tanzania, Uganda, Uzbekistan, and Vietnam.

JONG-WHA LEE

Jong-Wha Lee is Dean of the College of Political Science and Economics, and Dean of the Graduate School of Policy Studies at Korea University. He is currently the president of the Korea Economic Association. He was previously Chief Economist and Director General of Economics and Research Department at the Asian Development Bank and an economist at the International Monetary Fund. He has taught at Australian National University, Harvard University, Columbia University, and Peking University and served as a consultant to the Inter-American Development Bank, the United Nations Development Programme, and the World Bank. Lee has written and published extensively on topics relating to human capital, growth, financial crises, and economic integration in leading academic journals such as American Economic Review, Journal of Monetary Economics, Journal of International Economics, Journal of Development Economics, Journal of Economic Growth, and Review of Economics and Statistics.

His most recent books include *Crisis and Recovery: Learning from the Asian Experience* (World Scientific, 2016), and *Education Matters: Global Schooling Gains from the 19th to the 21st Century* with Robert J. Barro (Oxford University Press, 2015). He was awarded the Korean National Academy of Sciences Award, Kyung-Ahm Prize, Inchon Award, Cheongram Prize, Maekyung Economist Award, and Dasan Economics Award. Lee obtained his PhD and master's degree in Economics from Harvard University, and his master's and bachelor's degrees in economics from Korea University in Seoul.

TIZA MAFIRA

Tiza Mafira is Director at Climate Policy Initiative, based in Indonesia, where she leads a team of analysts to deliver robust studies on climate finance effectiveness and innovations for policymakers. With a background in environmental law, Tiza is a public policy expert specialising in climate finance. Tiza joined CPI in 2014 and played a large role in establishing the Indonesia office. She has led work at CPI on fiscal policy, finance effectiveness, and innovative finance. She has been involved in various technical expert and advisory roles for the Indonesian government. Prior to joining CPI, Tiza worked as a corporate attorney in Jakarta specialising in natural resources and forestry law. She has also worked at the Office of the Special Staff of the President during President Susilo Bambang Yudhoyono's term as a speech writer and climate change policy handler. She holds a Master of Laws from Harvard Law School and a Bachelor of Laws from Universitas Indonesia, with studies focusing on environmental law and climate change.

AJAY MAHAL

Ajay Mahal is a Professor of Health Economics and Global Health Systems Research and Deputy Director at the Nossal Institute for Global Health at the University of Melbourne. He has previously served as the Alan and Elizabeth Finkel Chair of Global Health at Monash University, and as an Associate Professor of International Health Economics in the Department of Global Health and Population at the Harvard School of Public Health. Prior to his appointment at Harvard, he was the Principal Economist (Human Development) at the National Council for Applied Economic Research (NCAER) in New Delhi. Professor Mahal's interests span a range of economically relevant questions pertaining to interface between ageing, chronic noncommunicable conditions, and health systems; health financing and insurance; human resources for health; household and national level impacts of (ill) health; and inequalities in the health sector. His experience on health systems practice has included policy research and advisory projects in Bangladesh, Botswana, Dominican Republic, Guatemala, India, Jamaica, Malaysia, Mongolia, Nigeria, Papua New Guinea, Solomon Islands, Sri Lanka, and Ukraine. Most recently, he co-edited a special issue of the journal *Health Systems and Reform*, on the challenges posed by ageing societies for the health systems of the Asia-Pacific region.

DEEPAK MISHRA

Deepak Mishra is the Director and Chief Executive of the Indian Council for Research on International Economic Relations (ICRIER). Prior to joining ICRIER, he was the Practice Manager at the World Bank's Macroeconomics, Trade, and Investment Global Practice, responsible for East Asia and Pacific region. Deepak has held various positions at the World Bank, including the Co-director of the World Development Report 2016 (Digital Dividends), Country Economist for Ethiopia, Pakistan, Sudan and Vietnam. His research work has been published in various academic journals including the *Journal of Development Economics*, the *Journal of International Economics* and the *Journal of Agriculture Economics*.

Deepak has also served as the World Bank's Country Economist for India, based in New Delhi, and worked closely with the Government of India and with several state governments including Andhra Pradesh, Bihar, Gujarat, Karnataka, Maharashtra and Punjab. Prior to joining the World Bank, Deepak worked at Tata Motors, Federal Reserve Board and the University of Maryland. Born in Odisha, Deepak received his MA (Economics) from the Delhi School of Economics and PhD (Economics) from the University of Maryland.

C. RAJA MOHAN

C. Raja Mohan is a Senior Fellow at the Asia Society Policy Institute in Delhi and a Visiting Research Professor at the Institute of South Asian Studies, National University of Singapore. Professor Mohan is also a columnist for the Indian Express and Foreign Policy. His research interests include India's foreign policy, Asian geopolitics, and the global governance of advanced technologies. He is currently working on a book about India and the Asian balance of power.

RAKESH MOHAN

Rakesh Mohan is President and Distinguished Fellow at CSEP. He was most recently Senior Fellow at the Jackson Institute for Global Affairs, Yale University and was also Professor in the Practice of International Economics and Finance at the School of Management at Yale University, 2010-12. He also served as Distinguished Consulting Professor at Stanford University in 2009. Mohan was also a Distinguished Fellow with Brookings India.

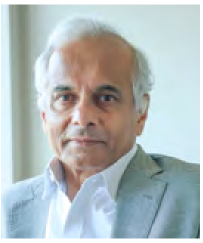
He has been closely associated with the Indian economic reforms process from the late 1980s. He was Executive Director on the Board of the International Monetary Fund; Deputy Governor of the Reserve Bank of India; Secretary, Economic Affairs, and Chief Economic Adviser of the Indian Ministry of Finance; and Economic Adviser in the Ministry of Industry. In October 2021, he was appointed to the Prime Minister's Economic Advisory Council (EAC-PM).

He has authored three books on urban economics and urban development; two on monetary policy: *Monetary Policy in a Globalized Economy: A Practitioner's View* (2009), and *Growth with Financial Stability: Central Banking in an Emerging Market*. His most recent book (edited) is *India Transformed: 25 Years of Economic Reforms*.

He has a BSc (Eng) from Imperial College of Science and Technology, University of London (1969), a BA from Yale University (1971) and an MA and PhD in Economics from Princeton University.

NACHIKET MOR

Nachiket Mor is an Economist by training with a focus on Health Systems Design. He is a Visiting Scientist at The Banyan Academy of Leadership in Mental Health and a Senior Research Fellow at the Centre for Information Technology and Public Policy (CITAPP) at IIIT Bangalore.



VIKRAM SINGH MEHTA

Vikram Singh Mehta is Chairman and Distinguished Fellow at CSEP. He was the Executive Chairman of Brookings India and Senior Fellow, Brookings Institution from 2012 to 2020. Prior to that, he was the Chairman of the Shell Group of Companies in India (1994-2012); Chief Executive of Shell Markets and Shell Chemicals, Egypt (1992-1993); and Advisor, Strategic Planning to the state-owned company, Oil India (1984-1988). He started his career by joining the Indian Administrative Service in 1978. He resigned from the service in 1980.

Vikram is an independent, non-executive, director of Larsen and Toubro Ltd, Mahindra and Mahindra Ltd, Colgate Palmolive India Ltd, Apollo Tyres, Hindustan Times and Jubilant Foods. He is also on the Board of Thomson Reuters Founders Share Company. Vikram is on the Board of Overseers of the Fletcher School of Law and Diplomacy, Tufts University; the Global Advisory Board of Macro Advisory partners; and the Board of Governors of the Deen Dayal University of Petroleum. He was the recipient of Asia House's "Businessman of the Year" award for 2010. He also received the Asia Centre for Corporate Governance and Sustainability's Award for "Best Independent Director" in India for 2016.

SHIVSHANKAR MENON

Shivshankar Menon is a Distinguished Fellow at CSEP and a Visiting Professor at Ashoka University. His long career in public service spans diplomacy, national security, atomic energy, disarmament policy, and India's relations with its neighbours and major global powers. Menon served as National Security Advisor to the Indian Prime Minister from January 2010 to May 2014. He currently serves as chairman of the advisory board of the Institute of Chinese Studies in New Delhi. He was also a Distinguished Fellow with Brookings India. He is the author of *Choices: Inside the Making of Indian Foreign Policy* published by the Brookings Press and Penguin Random House in 2016. His book, *India and Asian Geopolitics; The Past, Present* was published in 2021.

Menon has previously served as foreign secretary of India from October 2006 to August 2009 and as ambassador and high commissioner of India to Israel (1995-1997), Sri Lanka (1997-2000), China (2000-2003) and Pakistan (2003-2006). From 2008 to 2014, he was also a member of India's Atomic Energy Commission. A career diplomat, he also served in India's missions to the International Atomic Energy Agency in Geneva and the United Nations in New York.

Menon has been a Richard Wilhelm Fellow at the Center for International Studies at MIT and Fisher Family Fellow at the Belfer Center, Harvard University. In 2010, he was chosen by Foreign Policy magazine as one of the world's "Top 100 Global Thinkers". He attended the Scindia School, Gwalior and St. Stephens College of the University of Delhi, where he studied ancient Indian history and Chinese. He speaks Chinese and some German.

V. ANANTHA NAGESWARAN

Being appointed Chief Economic Adviser in January 2022, V. Anantha Nageswaran is a writer, author, teacher and consultant. He has written a weekly Mint column for fifteen years every Tuesdays, since 2007. He has co-authored four books: *The Rise of Finance – Causes, Consequences and Cures; Derivatives; Can India Grow?;* and *The Economics of Derivatives*. He has taught at several business schools and institutes of management in India and in Singapore. He was the Dean of the IFMR Graduate School of Business and a distinguished Visiting Professor of Economics at Krea University. He was one of the founders of Aavishkaar Venture Capital Fund and the Takshashila Institution. He has served on the Academic Advisory Board of DAV Schools in Tamil Nadu and the Indian School of Public Policy.

He was a part-time member of the Economic Advisory Council to the Prime Minister of India from 2019 to 2021. In his corporate career spanning seventeen years from 1994 to 2011, he was a Currency Economist at the Union Bank of Switzerland, Head of Research and Investment Consulting in Credit Suisse Private Banking in Asia, and Head of Asia Research and Global Chief Investment Officer at Bank Julius Baer. He was an independent Director on the Boards of TVS Supply Chain Solutions, Sundaram Fasteners, TVS Sri Chakra Tyres, Delphi TVS and Aparajitha Corporate Services. In 1985, he received a Post-Graduate Diploma in Management from the Indian Institute of Management, Ahmedabad. He earned his doctoral degree from the University of Massachusetts in Amherst in 1994 for his work on exchange rate behaviour.

MADHAV DAS NALAPAT

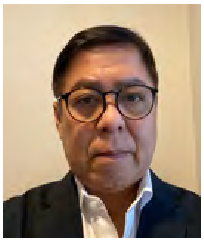
Madhav Das Nalapat was appointed India's first Professor of Geopolitics & UNESCO Peace Chair by Manipal University in 1999, positions he still holds. An Executive Committee Member of the Editors Guild of India, Member of Indian School of Social & Economic Sciences and Associate Member of the National Institute of Advanced Studies and the United Services Institution, Professor Nalapat is also the Editorial Director of ITV Media Network, having previously edited the Mathrubhumi and the Times of India. He writes extensively in national and international publications, and has authored nine books. His latest book, on major power rivalry in the 21st century, will be released by Penguin-Random House shortly.

NITIN PAI

Nitin Pai is co-founder and director of the Takshashila Institution, an independent centre for research and education in public policy. His current research includes information warfare and the geopolitics of the Indo-Pacific. He teaches international relations, public policy and ethical reasoning at Takshashila's graduate programmes.

He is the author of *Nitopadesha - Moral Tales for Good Citizens* (Penguin Random House 2023) and the co-editor of *India's Marathon: Reshaping the Post-Pandemic World Order* published in 2020. He is currently a columnist with Mint, Sakal and ThePrint.

He spent more than a decade as a technology policymaker in the Singapore government. Earlier in his career, Pai worked on satellite design, undersea cable projects and RF communications. He was a gold medalist from the National University of Singapore's LKY School of Public Policy, an undergraduate scholar at Nanyang Technological University (NTU), and an alum of National College, Bangalore.



SIHASAK PHUANGKETKEOW

Sihasak Phuangketkeow served as the Permanent Secretary of the Thai Ministry of Foreign Affairs and was also Thai Ambassador and Permanent Representative to the UN in Geneva and later served as the Thai Ambassador to Japan and then to France. He has a master degree in International Public Policy from the School of Advanced International Studies, Johns Hopkins University. Among his current positions are the Thai representative on the World Heritage Committee of UNESCO, Secretary-General to the Asian Peace and Reconciliation Council, Senior Advisor to Thailand's Eastern Economic Corridor and Senior Advisor of the Humanitarian Dialogue Centre based in Geneva.

DANNY QUAH

Danny Quah is Li Ka Shing Professor in Economics and Dean at the Lee Kuan Yew School of Public Policy, National University of Singapore (NUS). His research on inequality and income mobility characterises the range of experiences across economies to suggest that a single narrative on inequality is unlikely to be correct or helpful. His work on world order takes an economic approach to international systems, studying the supply and demand of world order: what international system do the world's superpowers wish to provide; what world order does the global community need. Quah is a Commissioner on the Spence-Stiglitz Commission on Global Economic Transformation and on LSE's Global Economic Governance Commission. He serves on the Executive Committee, International Economic Association; the Advisory Board, LSE IDEAS; the Eminent Advisory Council of the UNDP Bureau for Asia-Pacific; and the World Economic Forum's Global Future Council for Geopolitics. He is Vice President at the Economic Society of Singapore. He is the author of *The Global Economy's Shifting Centre of Gravity*.

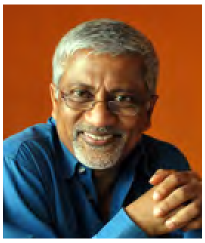
P.S. RAGHAVAN

P.S. Raghavan is a former career diplomat, who is now Chairman of the National Security Advisory Board, which advises India's National Security Council on issues of security and strategic affairs. In a 36-year diplomatic career, he has served in different capacities in USSR, Poland, United Kingdom, Vietnam and South Africa. He was India's Ambassador to Russia (2014-16), Ireland (2007-11) and the Czech Republic (2004-07). From 2000 to 2004, he served in the Indian Prime Minister's Office, dealing with Foreign Affairs, Defence, National Security, Space and Atomic Energy. In the Ministry of External Affairs (2011-14), he founded and headed the Development Partnership Administration, which implements India's projects abroad. He was also Secretary (Economic Relations), steering India's external economic engagement, and Secretary overseeing Administration and e-governance.

Among his other assignments were as Political Adviser to the Indian Peace-Keeping Force (IPKF) in Sri Lanka (1987-88), Chief Coordinator of the BRICS Summit (2012) and Special Envoy of the Government of India to the Sudan and South Sudan (2012-13) He is a Distinguished Fellow at the Vivekananda International Foundation, New Delhi and Emeritus Resource Faculty at the Rashtriya Raksha University, Gandhinagar. He writes and lectures widely on national security and strategic affairs.

EISUKE SAKAKIBARA

Mr. Eisuke Sakakibara is President of Institute for Indian Economic Studies since 2020. Professor of Aoyama Gakuin University, 2010. Professor of Waseda University, 2006. Professor of Keio University, 1999. Vice Minister of Finance for International Affairs of MOF, 1997. Director-General, International Finance Bureau of MOF, 1995. Visiting Associate Professor of Economics, Harvard University, 1980. Economist, International Monetary Fund (IMF), 1971. Joined the Ministry of Finance (MOF), 1965. BA Economics from University of Tokyo, 1964. PhD Economics from University of Michigan, 1969.



ROHAN SAMARAJIVA

Rohan Samarajiva is the founding Chair of LIRNEasia, a think tank active across South and Southeast Asia, and was its first CEO. He was Chairman of the ICT Agency, the apex body for information and communication technology within the government of Sri Lanka, in 2018-19, having been one of its founding directors. He was Team Leader at the Ministry for Economic Reforms in 2002-04, responsible for competition and regulatory aspects of reforms across a range of sectors. He served as Director General of the Telecommunications Regulatory Commission of Sri Lanka at a critical time in restructuring the sector in 1998-99. He was Associate Professor of Communication and Public Policy at the Ohio State University in the US and Visiting Professor of Economics of Infrastructure at the Delft University of Technology in the Netherlands. He frequently writes and speaks on policy matters at the intersection of economics, law and technology.

SHYAM SARAN

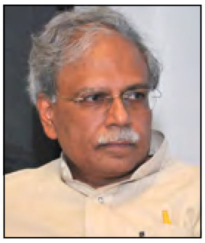
Shyam Saran is a former Foreign Secretary (2004-06) and has served as Prime Minister's Special Envoy for Nuclear Affairs and for Climate Change (2006-10). He was Chairman of the National Security Advisory Board (2013-15) and is currently President of the India International Centre. He is the author of 2 books -*How India Sees the World* and *How China Sees India and the World*. He is a regular contributor to major Indian newspapers and journals. He was awarded the Padma Bhushan in 2011 and decorated with the Spring Gold and Silver Star by the Emperor of Japan for his contribution to promoting India-Japan relations.

JEONGMIN SEONG

Jeongmin Seong is a Partner at the McKinsey Global Institute, McKinsey & Company's business and economics research arm. He leads MGI research teams in China, working on global as well as emerging market-focused themes.

Jeongmin's recent research has focused on globalisation, technology, innovation and economic development. He has co-authored several MGI reports and discussion papers, including *Global flows: The ties that bind in an interconnected world*; *Globalization in transition: The future of global trade and value chains*; *Future of Asia: Asian flows and networks are defining the next phase of globalization*; *On the cusp of a new era?*; *China and the world: Inside a changing economic relationship*; *Future of Asia: How Asia can boost growth through technological leapfrogging*; *China's digital economy: Powering the economy to global competitiveness*; *The China effect on global innovation*; *Notes from the AI frontier: Modeling the impact of AI on the world economy*; *Reskilling China: Turning the world's largest workforce into lifelong learners*; *Human capital at work: The value of experience*; *Future of Asia: Redrawing Asia's consumer map*; and *Outperformers: High-growth emerging economies and the companies that propel them.*

Prior to joining MGI, Jeongmin worked with companies around the world focusing on consumer facing industries including consumer electronics, retail, and automotive. Jeongmin also led McKinsey's emerging market growth service line.



SHEKHAR SHAH

Shekhar Shah is Vice Chair of the Academic Advisory Council at the Indian School of Public Policy in New Delhi and Nonresident Fellow at the Center for Global Development in Washington, DC. He serves on the Advisory Board of the Centre for Development Economics and Sustainability at Monash University in Melbourne and is a Senior Adviser to the International Commission on Financing Global Education. He is an economist with more than four decades of global experience working on policies and programs related to macro, trade, fiscal, labor markets, and service delivery in health and education.

Dr Shah is the former Director-General of the National Council of Applied Economic Research (NCAER), India's oldest, independent, economic think tank. Between 2011 and 2021, he led NCAER in its institutional transformation, the deepening of its research and survey capacities, the diversification of its funding and outreach, and the development of its new, world-class campus. He has served on several committees of the Government of India.

Before joining NCAER, Dr Shah spent over two decades at the World Bank, including as the Bank's Deputy Research Administrator, Lead Economist for Bangladesh, Sector Manager for Governance and Public Sector Management for Europe and Central Asia, and the Regional Economic Adviser for South Asia. He was a principal author of the 2004 World Development Report, *Making Services Work for Poor People.* He was earlier the Ford Foundation's Program Officer for Economics for South Asia based in New Delhi, and before that worked in Washington DC consulting for the US Federal Reserve Board and other financial regulators. Dr Shah holds a PhD in Economics from Columbia University, and a BA in Economics from St Stephens College, Delhi University.

AJAY SINGH

Ajay Singh is a member of the board of Mitsui OSK Lines (MOL) group based in Tokyo. He joined MOL in 2020 and is responsible for the company's businesses in the Indian subcontinent and Middle East region. Between 2014 and 2020 he was special advisor to the chairman of Japan Petroleum Exploration Co., an international energy company owned mainly by the Government of Japan. Earlier, he worked with Shell over a period of 20 years, based in Delhi, Mumbai, London and the Hague; he was instrumental in creating and managing various oil and gas businesses around the world in partnership with host governments and other energy companies. In 2019, he established his own firm to pursue green hydrogen market development. Ajay Singh is an alumnus of Harvard Business School, Manchester Business School and the Walchand College of Engineering.

ANOOP SINGH

Anoop Singh is Distinguished Fellow at CSEP and was Member of India's Fifteenth Finance Commission. Among his previous positions, he had a long and illustrious career at the International Monetary Fund (IMF), where his appointments included being Director of the Asia Pacific Department, Director of the Western Hemisphere Department, and Director of Special Operations in the Office of the Managing Director. He was also Special Adviser to then Governors of the Reserve Bank of India, IG Patel and Dr. Manmohan Singh, and has taught at Georgetown University in Washington DC as an Adjunct Professor.

Professor Singh has worked and written on macroeconomic, surveillance, and crisis management issues, including helping design IMF-supported programs in emerging markets, transition, and developing countries in South and Southeast Asia, Europe, and Latin America. At CSEP, his research focuses on the themes of India's fiscal architecture, fiscal governance, and fiscal federalism.

Professor Singh's recent publications include a book titled *Asia and the Changing Global Economy: Rebuilding Growth Potential* and articles including *India's Public Financial Management System: Need for Reforms and Way Forward; and India's Human Capital: The Regulatory Context for Leveraging Federalism.* Other publications include *The Financial Market Crisis and Risks for Latin America; Macroeconomic Volatility: The Policy Lessons from Latin America; Inclusive Growth, Institutions, and the Underground Economy; Sustaining Latin America's Resurgence: Some Historical Perspectives; Stabilization and Reform in Latin America: A Macroeconomic Perspective on the Experience Since the 1990s;* and *Macroeconomic Issues Facing ASEAN Countries.*

He holds degrees from the universities of Bombay, Cambridge, and the London School of Economics.

AMARJEET SINHA

Amarjeet Sinha is currently posted as Member, Public Enterprises Selection Board (PESB). He was earlier posted as Advisor to the Prime Minister till July 31, 2021. An Indian Administrative Service (IAS) Officer of the Bihar Cadre of the 1983 batch, he retired in December 2019 as Secretary, Department of Rural Development, Government of India. He has 40 years of experience in Government, largely in the rural and social sectors. He has had the unique distinction of having played a major role in designing Sarva Shiksha Abhiyan (India's main programme for universal education), the National Rural Health Mission, and in bringing about governance reforms in programmes for rural areas covering livelihoods, employment, housing, social security, skills, urban development, and road construction. He also successfully coordinated the work of Gram Swaraj Abhiyan in 2018 to reach seven pro-poor public welfare interventions (LPG, electricity, Bank Account, life and accident insurance, LED Bulbs, and Immunisation) to 63,974 large villages with over 50% vulnerable social group population.

At the State level, Amarjeet served in the education and health sectors. He has also had the opportunity to serve in the remote tribal district of Singhbhum in present day Jharkhand and in the Naxalite affected Jehanabad district of Bihar. He has also been training Indian Administrative Service Officer Trainees at the Lal Bahadur Shastri National Academy of Administration, Mussoorie on the social sector for the last 30 years. He has the distinction of having travelled to over 90% of India's districts to promote human development initiatives. Sinha has published seven books on public policy and many articles in publications such as Lancet, Economic and Political Weekly, Economic Times, The Hindu, The Indian Express, The Times of India, The Business Standard, The Hindustan Times, etc.

His last book *An India for Everyone – A Path to Inclusive Development*, was published by Harper Collins in 2013. A Hindi translation of the book, *Hum Sab ka Bharat*, is also available. He is working on his forthcoming book, *The Last Mile – Turning Public Policy Upside Down*, which he hopes to publish this year. Amarjeet has been associated with Public Policy with Azim Premji University, ISB, ISPP, Kautilya School of Public Policy, etc. He delivered the ICSSR Annual Lecture 2022 on Bridging the Last Mile in Pro-Poor Public Welfare. He is also an Advisor to Sampark Foundation for frugal innovations on scale in education, on Health and Human Development with the Centre for Social and Economic Progress, and with Women's World Bank on Making Finance Work for Women.

A student of St. Stephen's College, he topped the Delhi University and is a recipient of the National Talent Scholarship, the Rhodes Scholarship and the Oxford Cambridge Society of India Scholarship. He has also been the President of the St. Stephen's College Students' Union Society.

HASBULLAH THABRANY

Hasbullah Thabrany has worked in the field of health economics, including health financing, for the last three decades in Indonesia. He was a leader in developing Indonesia's national health insurance scheme (JKN), which launched in 2014 and now covers 228 million people (85% of the Indonesian population). Dr. Thabrany also served as the senior health financing adviser to Indonesia's National Social Security Council, the oversight body that is instrumental to implementing and evaluating JKN. He published a book titled *Jaminan Kesehatan Nasional (JKN)* that details the country's road to universal health coverage (UHC).

He was the main founder of the two associations instrumental to developing health economics and health financing in Indonesia. The Association of Health Insurance Managers of Indonesia (PAMJAKI) was established in 1998 and the Indonesian Health Economic Association (InaHEA) was established in 2013. He served as the chairman of PAMJAKI from 1998-2010 and the chairman of InaHEA from 2013 until present.

Dr. Thabrany joined ThinkWell as a senior policy advisor in 2018 on the Strategic Purchasing for Primary Healthcare project, supported by the Bill & Melinda Gates Foundation. Currently, he is the Chief of Party for the Indonesia Health Financing Activity (HFA), funded by the USAID. He works closely with the Center for Health Financing and Health Security (PPJK) of the Ministry of Health.

Dr. Thabrany obtained an MPH and PhD in health policy and administration from University of California, Berkeley, and an MD from Universitas Indonesia. At Universitas Indonesia, Dr. Thabrany served as a professor in health economics (2003-2018), Dean of the School of Public Health (2004-2008), and as a Director of the Centre for Health Economics and Policy Studies (2009-2016).

VO TRI THANH

Vo Tri Thanh is former Vice-president of the Central Institute for Economic Management (CIEM). He is currently Chairman of Vietnam National Committee for Pacific Economic Cooperation (VNCPEC) and a member of the National Financial and Monetary Policy Advisory Council. He is also Director of the Institute for Brand and Competitiveness Strategy (BCSI). He holds a masters degree in Economics and a PhD degree in Economics both from the Australian National University. Dr. Vo Tri Thanh mainly undertakes research and provides consultation on issues related to trade liberalisation, international economic integration and macroeconomic policies. His other areas of interest include institutional reforms, financial systems and economic development.

VINOD THOMAS

Vinod Thomas is Distinguished Fellow at Asian Institute of Management, Manila, having completed a 6-year term as Visiting professor at National University of Singapore. Previously, he was Director-General and Senior Vice-President of the Independent Evaluation Group at the World Bank Group (2006-2011), and Director General of Independent Evaluation at the Asian Development Bank (2011-2016).

Vinod held several positions at the World Bank. He was Country Director for Brazil based in Brasilia from 2001 to 2005, during the Presidency of Fernando Henrique Cardoso and Luiz Inacio Lula da Silva. He was Vice-President of the newly established World Bank Institute, which followed the previous Economic Development Institute. Having joined the World Bank in 1976, he was Chief Economist for the East Asia and Pacific region, Chief of Trade Policy and Principal Economist for Colombia, and Economist for Bangladesh. He was Director for the World Development Report 1991 on The Challenge of Development.

Vinod has a PhD and MA in Economics from the University of Chicago and a BA from St. Stephen's college, Delhi. He has authored 17 books, numerous peer-reviewed journal articles, and reports on macroeconomic, social, and environmental issues. His books include *Best Practices in Trade Policy Reform*, 1990; *The Quality of Growth*, 2000; *From Inside Brazil*, 2006; *Multilateral Banks and the Development Process*, (with Xubei Luo), 2012; *Climate Change and Natural Disasters*, 2017; *Economic Evaluation of Sustainable Development*, 2019, with Namrata Chindarkar; and *Risk and Resilience in the Era of Climate Change*, 2023.

He has taught at Vassar College and the University of Sao Paulo, been on several Boards, including International Evaluation Academy, and has addressed numerous fora in all regions. He has been advisor for evaluation at Global Climate Fund, UN agencies, and at IFAD, Centre for Social and Economic Policy, and contributed to Results for Development and the Emerging Market Forum. His work at the National University of Singapore has concerned risk management, cost benefit analysis, public finance, climate change and sustainable development, including their costly neglect by mainstream economists.

SHUJIRO URATA

Shujiro Urata is Chairman of the Research Institute of Economy, Trade and Industry (RIETI). He is also Professor Emeritus, Waseda University; Senior Research Advisor, Economic Research Institute for ASEAN and East Asia (ERIA); Specially Appointed Fellow at the Japanese Centre for Economic Research (JCER); Visiting Fellow, Asian Development Bank Institute (ADBI); and Distinguished Senior Fellow at the Institute of Developing Economies (IDE-JETRO).

Professor Urata received his BA in Economics from Keio University, MA and PhD in Economics from Stanford University. He is a former Research Associate at the Brookings Institution and an economist at the World Bank. He specialises in international economics and has published several books and articles on international economic issues. His recent books include *Achieving Inclusive Growth in the Asia Pacific*, co-editor, Australian National University Press, 2020; *Enhancing SME Participation in Global Value Chains*, editor, Asian Development Bank Institute, 2021; *The Effect of Globalisation on Firm and Labour Performance*, co-editor, Routledge, 2021; *Globalization and Its Economic Consequences: Looking at APEC Economies*, co-editor, Routledge, 2021; *Sustainable Development Disciplines for Humanity*, co-editor, Springer, Singapore, 2022; and *Sustainable Development Disciplines for Society*, co-editor, Springer, Singapore, 2022.

SANDHYA VENKATESWARAN

Sandhya Venkateswaran is a Senior Fellow at CSEP and leads the Human Development work at CSEP, with a specific focus on Health Policy. In a career spanning over three decades, she has worked on a wide range of issues in the social sector including health, nutrition, gender, natural resources, urban development and others, and has authored books, multiple articles and other publications on varied social sector issues. Over the last 15 years her focus has been on policy issues, developing and leading the policy and advocacy portfolio in organisations such as the Bill and Melinda Gates foundation, Global Alliance for Improved Nutrition and CARE. She has worked with grassroots campaigns and civil society organisations, as well as with government and international organisations. She is currently a member of the Lancet Citizens Commission on Reimagining India's Health System.

THANG VO

Thang Vo is director of Health and Agricultural Policy Research Institute, University of Economics Ho Chi Minh City. He is an expert in the field of health economics and development economics. His research focuses on the economic impacts of programs, shocks on the households' lives, health status and local development. He has published numerous articles in reputed journals.

TETSUYA WATANABE

Tetsuya Watanabe is Special Advisor to the President, ERIA (Economic Research Institute for ASEAN and East Asia), the international organisation established by East Asia Summit Member countries, located in Jakarta, Indonesia. He is also a Visiting Professor at Graduate School of Public Policy, the University of Tokyo.

His expertise covers geopolitics, economic security, global trade policy and supply chains, climate change, energy security, innovation policy, digital transformation and Asia's regional integration.

Before joining ERIA, he was Special Advisor to the Japanese Minister of Economy, Trade and Industry. Throughout his career in the public service, he was involved in Japan's major trade policy initiatives and negotiations including the TPP, RCEP, Japan-US Trade Agreement, Japan-UK Comprehensive Economic Partnership and the WTO Reforms as Director General for the Trade Policy at the Ministry of Economy, Trade and Industry (METI) and Chief Counsellor of the TPP Headquarters at the Cabinet Secretariat.

He graduated from the University of Tokyo and Columbia Law School.

DUSHNI WEERAKOON

Dushni Weerakoon is the Executive Director of the Institute of Policy Studies of Sri Lanka (IPS) and Head of its Macroeconomic Policy Research. Her research and publications cover areas related to macro-economic policy, regional trade integration, and international economics. She has extensive experience working in policy development committees of the Government of Sri Lanka, working as a consultant to international development organisations, and serving as a director on the boards of corporate and academic entities. She holds a BSc in Economics with First Class Honors from the Queen's University of Belfast, UK, and an MA and PhD in Economics from the University of Manchester, UK.

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Holding this conference was a very complex and novel exercise for the Centre for Social and Economic Progress (CSEP), since this was the first large conference organised by us, and that too off-site. Finding all the external speakers, persuading some of them to write substantive papers, arranging for the travel and visas, hotel accommodation and the like was almost like a military operation. So, it was all hands on deck and I was gratified to see how our whole staff pitched in to make the conference the kind of success that it was.

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Jayant Bothra, *IT Support*

Shalini Chauhan, *Research Analyst*

Ajay Gupta, *Senior Executive Assistant*

Saumya Jain, *Research Analyst*

Ayush Khare, *Research Associate*

Narendra Kumar, *Office Attendant*

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Aprajita Prasad, *Development Associate*

Mukesh Rawat, *Senior Graphics Designer*

Malvika Sharad, *Communications Associate*

Aakanksha Shrawan, *Research Associate*

Anindita Sinh, *Research Analyst*

Ganesh Sivamani, *Research Associate*

Preeti Vij, *HR & Admin Associate*

Rakesh Mohan
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Centre for Social and Economic Progress

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

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