Tensions between India and China increased after skirmishes in the contested Pangong Lake region of eastern Ladakh in the Kashmir region bordering the two countries in the Himalayas. On June 15 there occurred a border clash between the two countries in the contested Galwan valley in the Ladakh region in which 20 Indian soldiers were killed, and several Chinese casualties but it is yet to give out details. According to a US intelligence report, the number of casualties on the Chinese side was 35.¹ The fighting was the first-time soldiers were killed over the border dispute since 1967. China and India went to war over their disputed border issues in a 1962 conflict that spilled into Ladakh and ended with an uneasy truce. Since then, troops from opposing sides have guarded the undefined, mountainous 2,200-mile border area, occasionally clashing. Today, Indian and Chinese officials are holding talks to try to resolve a months-long standoff along their disputed frontier, where the two countries have deployed tens of thousands of soldiers.

There was a wave of nationalism sweeping India, the likes of which has not been seen before. After the Galwan Valley border clash between the two countries, there was a popular call for a boycott of Chinese products. Although there is a stalemate on the border, tensions between the two countries continue to escalate, resultantly. The Indian-controlled territory runs along the Line of Actual Control (LAC), a loose demarcation line created after the 1962 China-Indian War and now the de facto border between the two countries. The line separates Ladakh from a China’s Tibet and is part of the ongoing China-Indian border dispute.² India and China have now agreed to resolve all outstanding problems in an "expeditious manner" and in accordance with the existing protocols. The two countries have deployed thousands of troops across their disputed frontier since late April after Chinese troops entered into territories that India claims its own. China denies it has transgressed the LAC. The two countries have already held about a dozen rounds of talks, including at the military level, to soothe tension, but these rounds of talks so far have failed to break the border stalemate.³

The meetings so far have not borne fruit as China has refused to pull back its troops to the pre-April position and cut down on border reinforcement. Analysts in India say the Chinese continues to occupy border areas perceived by India as its own territory. The two countries have long-standing border issues, with Beijing claiming territory in India's northeast, while India accuses China of occupying its territory in the Aksai Chin plateau in the Himalayas, including part of the Ladakh region. The Kashmir region lies between India, Pakistan and China. Kashmir’s eastern edge, the cold, high-altitude desert region of Ladakh, borders China on one side and Pakistan on the other and is home to the world's only three-way, nuclear-armed junction. Pakistan and India have rival claims to
Kashmir that date to the British Raj's Partition in 1947 and have gone to war twice over them. Each country administers a portion of the region.

Last year India divested part of the disputed Kashmir region of its autonomy, which exacerbated existing tensions with China. India also downgraded Indian-administered Kashmir to a federal territory and clamped down on dissent. India also carved out Ladakh as a separate federal territory. The region's decades-old semi-autonomy, which protected jobs and land from outsiders, was also scrapped. China saw this as a unilateral move that threatened its territorial sovereignty and condemned it at the United Nations. iv China perceived the constitutional changes in Jammu and Kashmir as a threat to its interests in the region, specifically the "Belt and Road" initiative, as a massive, cross-continental infrastructure development project aimed at expanding China's commercial connections globally. The infrastructure projects link China with Pakistan through Kashmiri territory in Pakistan's north. The “Belt and Road” initiative’s expansive road network crosses through Aksai Chin, a region it has held since 1950 and claimed by India as part of Ladakh. Most importantly, it connects the restive, Chinese provinces of Tibet and Xinjiang before descending north of Indian-administered Kashmir and cutting down through Pakistan's Gilgit-Baltistan and Azad Kashmir (Pakistan-administered portion of the region) towards Pakistan's Gwadar port in the Arabian Sea. This development was one factor that ultimately culminated in the June Galwan valley clash. Moreover, recent calls by India's powerful home minister and other leaders of Prime Minister Narendra Modi's Hindu nationalist Bhartiya Janata Party for the "liberation" of Aksai Chin further provoked China's "aggressive behavior" which led to the June confrontation. v

Most importantly, the US factor is weighing in the current India-China confrontation. The growing strategic alliance between India and the US has caused great concern in China, which sees the relationship as an attempt to block its rise to power. Now, the India-China conflict threatens to exacerbate tensions between China and the US. The two have locked horns this year over a range of issues, from trade disputes and human rights to Hong Kong's status and the initial response to the coronavirus pandemic. While China’s unilaterally changing Kashmir's constitutional status has been an "immediate provocation for China, its military posturing along the disputed border in Ladakh also reflects a "compelling narrative that India is siding with the US." Also, China expects to see Modi leveraging the recent border clashes in a manner that draws in more US support. vi

The US quickly showed it support to India after the June clash in Galwan Valley. Secretary of State Pompeo blamed China for the incident said that it “took incredibly aggressive action” which was part of a broader strategy by Beijing to challenge all its neighbors”. vii

Meanwhile, a new Cold War was in the making between China and the US. It is important to emphasize the larger context of the Cold War between India and China.
Given the context of the larger US-China Cold War, America has now openly sided with India against China. Earlier, the 2005 US-India Civil Nuclear Agreement was the turning point in relations between New Delhi and Washington. Later, the bilateral relationship received a real breakthrough in the form of the 'India-US Joint Strategic Vision for the Asia-Pacific and Indian Ocean Region' signed by Prime Minister Modi and then-president Obama. The development led to other notable landmarks: the US recognition of India as a "Major Defense Partner", the Logistics Exchange Memorandum of Agreement, the announcement of India's elevation to the top tier of the US' Strategic Trade Authorization (STA) license exception and the first of the two countries' 2+2 ministerial dialogues. Elsewhere, cybersecurity cooperation, bilateral trade in goods and services and civilian space cooperation were the other beneficiaries of the strengthened India-US ties.

It was during Trump's visit to India in February this year that America and India entered a new Comprehensive Global Strategic Partnership. In doing so, the relationship hailed by President Obama as the 'defining partnership of the 21st Century' appeared to have now been upgraded to a comprehensive global strategic partnership.

Both India and the US have much in common. Both now share the view that China is an increasing threat to both their countries. Both are alarmed about China’s rise; it is geopolitical ambitions and technological capabilities. Also, both India and the US increasingly distrust China on global trade and technology issues, even Covid-19 pandemic origin and initial spread issue. Today, India is a strategic partner of the US and is being supported by it to counter China in the region. Undoubtedly, Trump has significantly raised America's ties with India and had become the first non-treaty ally to be offered an armed MQ-9 Unmanned Aerial System. Today, US-India ties are very resilient and appear to be getting even more so with the passage of time. There is a strong convergence of national interest against the threat of Chinese expansion in the Asian region. Given the continuing India-China border standoff, US officials such as Pompeo quickly weighed in on India's side, viewing it as part of China's aggressive actions across the region.

Even prior to the clash, senior Indian and US officials appear to have been in contact. Recently, there has been a bust of statements from US officials in support of India; Esper criticized China for engaging in “systematic rule-breaking, coercion and other malign activities.” U.S. Secretary of State Pompeo reiterated criticism of China’s habit of breaking international commitments and bullying its neighbors. He said that: “With these threats from the Chinese Communist Party... We’re going to make sure we’re postured appropriately to counter the PLA. We think that’s the challenge of our time, and we’re going to make sure we have resources in place to do that.” On July 22, 2020, Pompeo once again slammed China for its expansionist agenda and urged "the entire world" to stand up to Beijing. Launching a scathing attack on the Chinese leadership over the “cover-up” of the Covid-19 crisis, the top US diplomat said the Chinese Communist Party's "exploitation of this disaster to further its own interest has been disgraceful". In a reference to India-China border
standoff, Pompeo accused Beijing of bullying its neighbors and accused it of instigating a deadly confrontation with India in Ladakh. He said that:

We think that the entire world needs to work together to ensure that every country, including China, behaves in the international system in ways that are appropriate and consistent with the international order. You cannot go make claims for maritime regions that you have no lawful claim to. You cannot threaten countries and bully them in the Himalayas. You cannot engage in cover-ups and co-opt international institutions like the WHO…The CCP's exploitation of this disaster to further its own interests has been disgraceful. Rather than helping the world, General Secretary Xi Jinping has shown the world the party's true face. We talked about how we have seen Hong Kong's freedoms crushed…Chinese took incredibly aggressive action and the Indians have done their best to respond.

Very recently, The Trump administration launched the Clean Network program in involving 30 countries. It aims at decreasing the expansion of China’s IT capabilities and other infrastructure, which it deems as a threat to its national security. On August 5, 2020, Pompeo, US Secretary of State said that the Trump administration is going to undertake the following five actions, namely:

Ensure that “untrusted” Chinese telecom companies do not provide international telecommunications services between foreign destinations and the United States. The FCC will revoke and terminate the authorizations of China Telecom and three other companies providing these services.

“Untrusted” Chinese apps removed from U.S. stores. Apps like TikTok, WeChat, and others are “significant threats to the personal data of American citizens, not to mention tools for CCP content censorship”.

Prevent Huawei and other “untrusted” making available for download vendors or from pre-installing the most popular U.S. apps, as “We don’t want companies to be complicit in Huawei’s human rights abuses or the CCP’s surveillance apparatus”.

Protect US’s most “sensitive personal information” and “most valuable intellectual property” from being accessed on cloud-based systems run by companies such as China Telecom, Tencent, Alibaba, Baidu, and China Mobile. Limit in the US itself, the capability of Chinese cloud service providers to collect sensitive information, store, and process vast amounts of data.

Ensure that China cannot “compromise” information carried by the undersea cables that connect US, and others to the global Internet. Huawei Marine significantly underbids other companies on multiple procurements to connect Asia, Europe, the Pacific, and Africa, using Chinese state-backed undersea technology. The US cannot allow that to continue.

The State Department maintains that several countries are already on board the US initiative thereby allowing only trusted vendors in their5G networks. Many have agreed to use Nokia, Samsung, or Ericsson, rather than Huawei, to develop its 5G infrastructure. These countries
include Sweden, Estonia, Romania, Denmark, the United Kingdom, Greece, and Latvia. Although India is not on board yet, Jio is already in the Clean network program. Other large telecom companies part of the program are: SK and KT in South Korea, NTT in Japan, SK and KT in South Korea, NTT in Japan, Orange in France, Telstra in Australia, O2 in the United Kingdom, and 3 telecommunications companies in Canada have decided to partner with Ericsson, because public opinion was overwhelmingly against allowing Huawei to build Canada’s 5G networks.\textsuperscript{xii}

Chinese telecoms Huawei and ZTE are expected to be locked out of India's 5G rollout plans. The country will restrict bidders from any country it shares a land border with, under amended investment rules that cite concerns over national security, according to the report. The decision is awaiting approval from the Indian Prime Minister's office and is set to be announced within one to two weeks.

If approved, India will join a growing list of countries including the US, UK and Australia that have banned Huawei from providing 5G technology for their respective wireless networks over security concerns. In late June, Singapore chose Europe's Nokia and Ericsson over Huawei to develop the city-state's main 5G network. Huawei has repeatedly denied it poses a security risk.\textsuperscript{xiii}

Reflecting bipartisan support for India, Democratic lawmakers have also come out slamming China and supporting India. Presidential candidate, Biden told the Indian-American community on the occasion of India's 74th Independence that: "I'll continue to believe and continue what I've long called for including — standing with India and confronting the threats it faces in its own region along its borders."\textsuperscript{xiv} He then recalled his pronouncements from 15 years ago, saying, "I said that if the US and India became closer friends and partners, then the world will be a safer place."\textsuperscript{xv}

The open support of India against China by the US is a significant development and must be seen in the greater context of new Cold War between the US and China. Relations between India and the US have never been better in history. Both, commercial relations, and defense cooperation are now rapidly increasing. President Trump's Indo-Pacific strategy prioritizes closer cooperation between India and the US to "secure a free, open, inclusive, peaceful and prosperous Indo-Pacific region".\textsuperscript{xvi} India's navy and the U.S. Navy have conducted joint deployment in the Indian Ocean. Ties continue to expand as the U.S. seeks a broader Indo-Pacific coalition against China. Much earlier, in 2011, US emphasis on ‘Indo-Pacific’ and the ‘pivot’ to Asia led enhanced ties with India. Today, the Trump administration’s rhetoric and policy on China has become more confrontational as it viewed China as presenting the greatest strategic threat to the US. The Indo-Pacific is where the US fears displacement by China, and a risk to its values and interests. Most importantly, there is bipartisan support in the US for aggressive policies against China. The strategic interests of the US and its partners have come to converge in the Indo-Pacific. Thus, it is now clear that China’s perceived threat to the region has become more pronounced and has brought the Quad countries closer. India is now participating in the naval exercises with the
US. These exercises come as China conducts military drills of its own in the area, near the contested Paracel Islands, which have been criticized by the US and other countries. xvii

Earlier, the 2017 US National Security Strategy marked a sea change in America’s battle to compete with, challenge, and confront the PRC. Specifically, it states that the US must compete for positive relationships around the world and that it shall seek to increase quadrilateral cooperation with Japan, Australia, and India. Henceforth, the quadrilateral cooperation initiative between the four countries has been dubbed as the Quad by the media.

In late 2019, the US, along with Australia and Japan, announced the formation of the Blue Dot Network on the sidelines of the Indo-Pacific Business Forum in Thailand. The aim of the organization is to “promote quality infrastructure investment that is open and inclusive, transparent, economically viable, financially, environmentally and socially sustainable, and compliant with international standards, laws, and regulations.” The State Department says that it “builds on the success of Japan’s G20 leadership in building consensus on the Principles for Quality Infrastructure Investment, which is the basis for the visions of the Blue Dot Network.” These veiled descriptions point squarely to China’s Belt and Road Initiative. The Quad’s ability to check Chinese aggression and influence has been downplayed by a seemingly divergent set of national security interests among member states. While bilateral issues remain distinct, each Quad nation’s greatest national security threat is undeniably China. xviii India has its own equivalent of an Indo-Pacific strategy, known as the Act East policy. This policy entails stepped-up efforts to deepen New Delhi’s footprint in areas where Beijing has long held sway, particularly in Southeast Asia. Washington and New Delhi share a similar vision of a free, open, and rules-based region. While other shared interests drive US-India security cooperation, undoubtedly the China factor is the strongest link. The Trump administration has taken a particularly hard line on China, but there is a strong bipartisan view in Washington that Beijing is a strategic rival and should therefore be a source of concern. xxxi Amid tension between India and China over the Ladakh border dispute, the Indian Navy took part in military exercises with a US Navy battle group near the Andaman and Nicobar Islands in the Bay of Bengal. Two US aircraft carriers and four warships have been operating in the contested South China Sea region to assert freedom of navigation and provide a deterrent to China's expansionist plans. Earlier this month the Americans responded to an article by Global Times, a Chinese government mouthpiece that appeared to warn the US of anti-aircraft carrier weapons. The US Navy said its aircraft carriers, which were "operating in the international waters of the South China Sea", were unafraid. xxx India, the US and Japan are close naval partners in the region, with Australia likely to take part in the trilateral Malabar Naval exercises in the future. Indo-US naval exercises come as China conducts military drills of its own in the area, near the contested Paracel Islands; these exercises have been criticized by the US and other countries. Meanwhile, India increasingly views China as its biggest strategic
competitor, and a series of factors inhibit normalized relations. This deep-seated strategic concern about China in both Washington and New Delhi portends continued support in both capitals for US-India military partnership.\textsuperscript{xxi} Definitely, India-US strategic partnership is now converging on the increasing Chinese regional threat. These threat perceptions are influencing India’s position on the Quadrilateral Security Dialogue (Quad). India viewpoint springs from what it sees as China acquiring a footing in strategic locations in South Asia and the Indian Ocean Region. Increasingly aggressive Chinese behavior has caused India to shed its shyness. It is now wary of China’s designs. Today, the Indian Navy’s Maritime Strategy emphasized greater focus on the need to preserve trade and energy routes, maintain freedom of navigation, and strengthen the international rules that govern the far seas, including the UN Convention on the Law of the Sea. There have been deepened concerns over China’s impact on the stability of the region.\textsuperscript{xxii} Given the tensions with China, India will most likely cooperate more with the Quad initiative.

Today, the India-US security relationship stands to remain strong mainly because of shared concern about China’s growing power in the Indo-Pacific. The US hopes to enlist New Delhi as a partner in its Indo-Pacific strategy, which represents an effort to increase US investments and influence in Asia, and by extension to counterbalance China’s power and presence there. In support of this endeavor, Trump formed a strong friendship with Indian Prime Minister Modi. The two had already met four times, before the February 2020 meeting. Then India and US finalized two defense deals worth a combined value of over $3.5 billion. The two men spoke of their geopolitical views and goals in a joint speech in New Delhi. In stark contrast to the often characterized “most important relationship” in the world between the US and China, Modi referred to U.S.-India relations as the “most important partnership of the 21st century.” In the same speech, Trump highlighted how he and Modi were “revitalizing” the Quad.\textsuperscript{xxiii}

Meanwhile, India has always been suspicious of the remarkably close strategic relations between China and Pakistan, and concerns intensified with the launch of the China-Pakistan Economic Corridor (CPEC) in 2013. India believes that the $62 billion CPEC serves a geostrategic purpose of establishing Chinese presence in the region against India. Key to this strategic ambition is the Chinese-operated Gwadar port in Pakistan’s Balochistan province. India believes it can be used by the Chinese navy to establish a presence in the region. Meanwhile, Pakistan’s ties with China are becoming deeper, than ever in history. Relations between the China and Pakistan are deepening further during the current Imran Khan government. On August 25, welcoming a Chinese business delegation, prime minister Imran Khan stated that:\textsuperscript{xxiv}“Strengthening of business to business ties of the people of the two countries is a foremost priority Pakistan accords great importance to strengthening its relations with China…Pakistan and China have a shared destiny.”
Pakistan is a significant factor in deteriorating Chinese Indian relations. Kashmir is the primary factor in tense Pakistan-India relations as well as the Chinese Indian confrontation in Ladakh. Another area of deep unease for India is China’s acquisition of a majority stake in Sri Lanka’s Hambantota Port and the economic crisis looming large over the Maldives, which owes a staggering $3.4 billion in debt to China. Previously, Maldives not only ‘negotiated’ a skewed free trade deal and several exorbitantly priced infrastructure projects to Beijing’s advantage, it also leased the Finolhu Island to Chinese developers, raising suspicions in India.

Very recently, India made a major move towards cementing close bilateral Indo-Maldivian strategic ties and keeping Chinese influence in the maritime neighborhood at bay, India on August 14, 2020 announced a financial package consisting of a grant of $100 million and a new Line of Credit of $400 million for civilian infrastructure projects. India’s total financial commitment is now well over $2 billion since 2018. India has so far provided $150 million to Maldives under the bilateral currency swap agreement of $400 million. Seven big projects are also being implemented under the US$800 million Line of Credit extended by India to Maldives. The projects include water supply and sewerage systems, road development, expansion of fisheries facilities, the Gulhifalhu Port, Airport redevelopment, cricket stadium and a hospital in Hulhumale.

Thus, India actively seeks to expand its own influence in the region.

The US and India have shared interests in promoting global security, stability, and economic prosperity through trade, investment, and connectivity. The US supports India’s emergence as a leading global power and vital partner in the Indo-Pacific region. To the credit of both the US and India, a number of mechanisms have been established to strengthen security ties between the two countries. For the purpose, the 2+2 serves as the premier dialogue mechanism between the US and India.

**Ministerial 2 Plus 2 Dialogue**

Earlier, Secretary of State Michael R. Pompeo and then Secretary of Defense Mattis visited India on 6 September 2018 for the inaugural India-U.S. Ministerial 2+2 Dialogue with Minister of External Affairs [EAM] Sushma Swaraj and Minister of Defense (MD) Sitharaman. During the visit, Secretary Pompeo and Secretary Mattis jointly called on the Prime Minister. They also held separate bilateral meetings with EAM and MD, respectively. The launch of the 2+2 Dialogue is a reflection of the shared commitment by Prime Minister Modi and President Trump to provide a positive, forward-looking vision for the India-U.S. strategic partnership and to promote synergy in their diplomatic and security efforts. During the visit, the Communications Compatibility and Security Agreement (COMCASA) was signed that will facilitate access to advanced defense systems and enable India to optimally utilize its existing U.S.-origin platforms. The two sides agreed to the creation of a new, tri-services exercise and to further increase personnel exchanges between the two militaries and defense organizations. It was also agreed to start exchanges between the U.S. Naval Forces Central Command
(NAVCENT) and the Indian Navy, underscoring the importance of deepening their maritime cooperation in the western Indian Ocean. A Memorandum of Intent [MoI] between the U.S. Defense Innovation Unit (DIU) and the Indian Defense Innovation Organization – Innovation for Defense Excellence (DIO-iDEX) was also concluded on the eve of the Dialogue.xxvii

Further, at the Dialogue, it was agreed to increase information-sharing efforts on known or suspected terrorists and to implement UN Security Council Resolution 2396 on returning foreign terrorist fighters. Both sides also agreed to enhance their ongoing cooperation in multilateral fora such as the UN and FATF. Further, both sides reaffirmed their support for a UN Comprehensive Convention on International Terrorism that will advance and strengthen the framework for global cooperation and reinforce the message that no cause or grievance justifies terrorism.xxviii

The US had reaffirmed its support to India for its permanent role in a reformed United Nations Security Council during the second annual India-US 22 Ministerial Dialogue in Washington last year.

The second annual meeting had undertaken a comprehensive review of crosscutting foreign policy and defense and security issues in the bilateral relationship between two countries. The high-level mechanism was hosted by the US State Department and attended by External Affairs Minister Jaishankar, Defense Minister Singh, along with their American counterparts Secretary of State Pompeo and Defense Secretary Esper on December 18 last year. xxix There are now more than thirty bilateral dialogues and working groups, which span from space and health cooperation to energy and high technology trade. These include, among others, the U.S.-India Counterterrorism Joint Working Group, the Strategic Energy Partnership, Cyber Dialogue, Civil Space Working Group, Trade Policy Forum, and Defense Policy Group. Both India and US look forward to this year's 22 Ministerial Dialogue between the two countries. Very recently, Foreign Secretary Shringla and the US Under Secretary of State for Political Affairs Hale had exchanged views on a number of regional and global issues of shared interests. They agreed to remain in touch and move forward on the bilateral agenda through a range of mechanisms like the 22 Ministerial that India will host later this year.

India and the US also cooperate closely at multilateral organizations, including the United Nations, G-20, Association of Southeast Asian Nations (ASEAN) Regional Forum, International Monetary Fund, World Bank, and World Trade Organization. The US welcomes India joining the UN Security Council in 2021 for a two-year term and supports a reformed UN Security Council that includes India as a permanent member. India is an ASEAN dialogue partner, an Organization for Economic Cooperation and Development partner, and an observer to the Organization of American States. India is also a member of the Indian Ocean Rim Association (IORA), at which the US is a dialogue partner. In 2019, the US joined India’s Coalition for Disaster Resilient Infrastructure to expand cooperation on sustainable infrastructure in the Indo-Pacific region.
India and the US cooperate closely at multilateral organizations, including the United Nations, G-20, Association of Southeast Asian Nations (ASEAN) Regional Forum, International Monetary Fund, World Bank, and World Trade Organization. The US welcomes India joining the UN Security Council in 2021 for a two-year term and supports a reformed UN Security Council that includes India as a permanent member. India is an ASEAN dialogue partner, an Organization for Economic Cooperation and Development partner, and an observer to the Organization of American States. India is also a member of the Indian Ocean Rim Association (IORA), at which the US is a dialogue partner. In 2019, the US joined India’s Coalition for Disaster Resilient Infrastructure to expand cooperation on sustainable infrastructure in the Indo-Pacific region.

Over the last 5 years, the US has taken many important steps to expand defense cooperation with India. Among the highlights:

Defense Cooperation

India-US defense cooperation is based on New Framework for India-US Defense Cooperation, which was renewed for a period of ten years in 2015. Bilateral dialogue mechanisms in the field of defense include Defense Policy Group (DPG), Defense Joint Working Group (DJWG), Defense Procurement and Production Group (DPPG), Senior Technology Security Group (STSG), Joint Technical Group (JTG), Military Cooperation Group (MCG), and Service-to-Service Executive Steering Groups (ESGs).

India-US defense cooperation is marked by high-level exchanges at Ministerial and official levels. Raksha Mantri Smt. Nirmala Sitharaman met with Secretary of Defense James N. Mattis on the margins of the 5th ASEAN Defense Ministers Plus Meeting [ADMM Plus] on 19 October 2018 in Singapore. Both the leaders reviewed the progress in the bilateral defense cooperation and discussed a wide range of bilateral and regional issues of mutual interest.

Logistics Exchange Memorandum of Association (LEMOA) (August 2016); Fuel Exchange Agreement (November 2015); Technical Agreement (TA) on information sharing on White (merchant) Shipping (May 2016) and the Information Exchange Annex (IEA) on Aircraft Carrier Technologies (June 2016). The most significant of these is the Logistics Exchange Memorandum of Agreement (LEMOA). LEMOA is a facilitating agreement that establishes basic terms, conditions, and procedures for reciprocal provision of logistic support, supplies, and services between the armed forces of India and the U.S. As mentioned above, the Communications Compatibility and Security Agreement (COMCASA) was signed during the inaugural Ministerial 2 Plus 2 Dialogue held on 06 September 2018 in New Delhi. A Memorandum of Intent [MoI] between the U.S. Defense Innovation Unit (DIU) and the Indian Defense Innovation Organization – Innovation for Defense Excellence (DIO-iDEX) was also concluded on the eve of the Dialogue.

Major Defense Partner [MDP]: During the visit of the then US Secretary of Defense Ashton Carter to India in December 2016 an understanding was reached regarding US
export control policy towards India and on recognition of India as a “Major Defense Partner” of the US. This US government designation, a status unique to India, is intended to elevate defense trade and technology sharing with India to a level similar to that of its closest allies and partners. The most important element of MDP was also implemented on 30 July 2018 when US Commerce Secretary Wilbur Ross announced the US Government’s decision to move India into Tier-1 of the US Department of Commerce’s Strategic Trade Authorization license exception.

Maritime Security Dialogue: The third round of the India-US Maritime Security Dialogue was held on 30 April-01 May 2018 in Goa. Sharma, Joint Secretary (D&ISA), Mahawar, Joint Secretary (AMS), Ministry of External Affairs and Misra, Joint Secretary (Navy), Ministry of Defense, led the Indian delegation jointly. Helvey, Principal Deputy Assistant Secretary of Defense for Asian and Pacific Security Affairs and Rosenblum, Deputy Assistant Secretary, Bureau of South and Central Asian Affairs led the US side. During the Dialogue, the two sides discussed developments in the maritime domain in the Indo-Pacific Region and exchanged views on ways to further strengthen bilateral maritime security cooperation. They also reviewed the implementation of the decisions taken during the previous Maritime Security Dialogues.

Defense Technology & Trade Initiative (DTTI) Projects (2015): While technically launched three years earlier, the DTTI came to life during U.S. President Barack Obama’s visit to India in January 2015. During the visit, the US and India announced a series of joint projects and working groups to expedite defense technology cooperation.

Department of Defense Creates India Rapid Reaction Cell (IRRC) (2015): The IRRC’s role is to accelerate defense technology collaboration with India.

The US and India Sign Defense “Enabling/ Foundation” Agreements (2016, 2018, and 2019): India and the US have signed three agreements to further enable technical aspects of defense cooperation. First was the Logistics Exchange Memorandum of Agreement (LEMOA) in August 2016, which was followed by the Communications Compatibility and Security Agreement (COMCASA) in September 2018 and the Industrial Security Annex (ISA) in December 2019. Only one agreement remains to be signed—the Basic Exchange and Cooperative Agreement (BECA).

India Given Tier-1 Status Under Strategic Trade Authorization (2018): India would be given Tier-1 status under the U.S. Strategic Trade Authorization (STA) rules. This provides India with easier access to a range of embargoed technologies related to defense, policing, medical research, and more.

Beyond specific bilateral initiatives, the US has also played a crucial role in helping secure India’s membership in global nonproliferation regimes. India is now a part of three of the four main global nonproliferation regimes, including the Missile Technology Control Regime (MTCR), the Wassenaar Arrangement, and the Australia Group. The Nuclear Suppliers Group (NSG) is the only regime India is not yet a part of. There are two unique initiatives created only for India- IRRC and DTTI.
The two countries now conduct more bilateral exercises with each other than they do with any other country. Bilateral exercises held annually include Malabar (between the two Navies and also include Japan; the last Malabar exercises were held in June 2018 in Guam), Cope-India (Air Force), Yudh Abhyas (Army) and Vajra Prahar (Special Forces). India also participates in annual RIMPAC exercises as well as in Red Flag exercises, which are US led multinational exercises. It was agreed to add a new bilateral tri-service exercise during the Ministerial 2 Plus 2 Dialogue held in September 2018 in New Delhi.xxxiv

Sale of US Commercial Airplanes to India

Earlier. Boeing had expected Indian airlines to order up to 2,100 new aircraft worth $290 billion over the next 20 years, calling it the highest-ever forecast for India. The company expected single-aisle planes, such as the next generation 737 and 737 Max, to account for the bulk of the new deliveries, with India likely to take 1,780 such planes. India is one of the world’s fastest-growing aviation markets, with domestic passenger traffic growing at around 20 percent in the past few years. Boeing said it expected passenger growth of about 8 percent in South Asia, dominated by India, over the next 20 years, compared with the world average of about 4.7 percent. Last year, India overhauled rules governing its aviation industry, liberalizing norms for domestic carriers to fly overseas and incentivizing air travel to smaller cities by capping airfares and opening airports. Boeing dominates the wide-body airplane market in India. It expects worldwide demand for 41,030 aircraft over the next 20 years, putting India’s share of the total at about 5 percent.xxxv

Meanwhile, Boeing's commercial airplanes business will get a boost from the delivery of two new VVIP 777-300 jets to India's government, offering new long-distance rides to Prime Minister Modi, and other top officials. The company is handing off the jets this month to Indian government and the two jets will cost India's government a total of $1.1 billion, after they have been outfitted with special military hardware and missile avoidance systems, and luxury interiors. That deal had been approved by the U.S. Defense Security Cooperation Agency in February 2019.xxxvi

US Arms Sales to India

The US has increased Quad consultations and it has now become the second-largest arms supplier to India, growing from virtually no arms sales a decade ago to more than $20 billion today. xxxvii Defense procurements from the US have been an area of remarkable growth in the last decade. India has procured around $18 billion worth of defense items from the US since 2008. India already has several US military platforms and equipment and many such proposals for new acquisitions are in the pipeline. The defense procurement activities are monitored through the Defense Production and Procurement Group (DPPG), the last meeting of which took place in Washington DC on 7-9 June 2018.xxxviii In total during 2019-2020, the Trump administration has notified Congress of more than $6.3 billion in potential foreign military sales to India.xxxix
Defense is now driving the relationship and, as the two countries come closer on the idea of the Indo-Pacific, this aspect will only get stronger. Thus, US arms sales to India will only increase in the future.

According to a latest study released by the Stockholm International Peace Research Institute (SIPRI), India, which until two years ago had been listed as the world’s largest arms importer, now is second largest, accounting for 9.2 percent of global arms imports. Russia remains the country’s top supplier, providing 56 percent of arms deliveries, down from 72 percent during the earlier five-year period. The US, which was India's second-largest arms supplier in 2010–2014, delivered half as many weapons to India in 2015–2019. In December 2019, the US hosted the second 2+2 Ministerial Dialogue in Washington led by the U.S. Secretaries of State and Defense and their Indian counterparts, at which both sides reaffirmed India’s status as a Major Defense Partner and deepened cooperation on maritime security, interoperability, and information sharing. Meanwhile, US-India defense ties continue to expand and deepen. India is modernizing its military to narrow the gap with China and has increasingly turned to the US over traditional supplier, Russia. In the February 2020 visit with Indian Prime Minister Modi in New Delhi, Trump and Modi announced they would sign off on a $3.5 billion arms deal, which would see the sale of 24 Sikorsky MH-60R Sea Hawk multi-role helicopters for the Indian Navy and six Boeing for the Indian Army. Trump said the two countries were also making progress on a trade deal, which had been an area of growing friction between them. Trump said he also discussed with Modi, whom he called his “dear friend”, the importance of a secure 5G telecoms network in India, ahead of a planned airwaves auction by the country. The US has banned Huawei, arguing the use of its kit creates the potential for espionage by China - a claim denied by Huawei and Beijing - but India, where telecoms companies have long used network gear from the Chinese firm, is yet to make a call.

According to the Stockholm International Peace Research Institute, India’s defense purchases from the US jumped a whopping 569 per cent between 2013 and 2018. In the same period, defense imports from longtime ally Russia came down from 76 per cent to 58 per cent. Currently, US arms sales to India stand at around $18 billion, and could reach $25 billion after deals in the pipeline are cleared. The Modi government outlined only a modest rise in its 2020/21 defense spending to $73.65 billion in the budget on Feb. 1. 2020. India has pivoted away from traditional supplier Russia, looking to modernize it’s military and narrowed the gap with China. The sale of 24 MH-60 Romeo Seahawk helicopters manufactured by Lockheed Martin for $2.6 billion seems to be done. The helicopters will be procured under the U.S. FMS route, under which the two governments will agree details of the deal. The MH-60 is the US navy’s primary anti-submarine and anti-surface warfare helicopter and is capable of search and rescue, and supply missions. India is also procuring six more Apache attack helicopters, worth around $1 billion, for the Army. Called ‘flying tanks’, the helicopters are capable of detecting and engaging 256 moving targets. On February 11, 2020, the U.S. State Department approved an Indian request for an Integrated Air Defense Weapon System for an estimated cost of $1.87
billion, which would further strengthen the two countries’ defense ties. The two sides are expected to move forward on the deal over the year.

The multirole helicopters from Lockheed will be equipped with Hellfire missiles and torpedoes and are meant to help the Indian navy track submarines in the Indian Ocean, where China is expanding its presence. The U.S. State Department approved the sale of the helicopters to India last year along with radars, torpedoes and 10 AGM-114 Hellfire missiles. The clearance came after the Trump administration rolled out a new “Buy American” plan in 2018 that had relaxed restrictions on sales, saying it would bolster the American defense industry and create jobs at home. The deal is worth $930 million. The US has offered thirty armed Sea Guardian (Predator-B) drones for more than $2.5 billion for the three services These Guardian drones that were originally authorized for sale as unarmed for surveillance purposes. India would be first country outside the NATO alliance to get such a weapon from the US. India plans to buy these unmanned aircraft for surveillance of the Indian Ocean.

The US has also agreed to sell two missile defense systems to Air India One for an estimated $190 million, a move that will enhance the security of planes flying the prime minister and the president. There is also the Indian Navy’s plan to acquire 10 more Boeing Poseidon-81 long-range maritime aircraft. The deal, worth over $3 billion, will be finalized under the FMS program. The MH-60R is the latest variant of the Seahawk naval helicopter, itself a spinoff of the land-based twin-engine Blackhawk helicopter. Anti-submarine warfare is a growing concern for the Indian Navy as China’s PLA Navy is building towards operating the world’s largest submarine fleet, and possesses roughly four times as many as India. While the PLAN is focused on Pacific operations, it has been expanding into the Indian Ocean. India needs to investment in more maritime surveillance assets if it wishes to retain dominance of the Indian Ocean. The Indian Navy will deploy the helicopters to its new aircraft carrier due for commissioning in 2022.

Earlier, the US agreed the sales of key defense platforms such as the CH-47 Chinook heavy-lift helicopter increase India’s mobility in difficult terrain. Today, the Indian air force (IAF) operates 15 Chinook helicopters; the first was delivered just a year ago. Apart from moving troops and weapons into tight spaces, the Indian government wants to leverage the Chinooks’ heavy-lift capabilities to support the construction of infrastructure along the border. The M-777 “ultra-lightweight” howitzers supplied by BAE Systems again assist the Indian army with mobility and firepower. BAE Systems will supply 145 howitzers to India, with domestic production underway. The US has now completed delivery of all new AH-64E Apache and CH-47F(I) Chinook military helicopters to the IAF. The final five of the 22 Apache attack helicopters were handed over to the IAF at Air Force Station, Hindan. Earlier in March, Boeing handed over the last five of 15 CH-47F(I) Chinook heavy-lift helicopters to the IAF.

India is one of 17 nations to select the Apache and has the most advanced variant, the AH-64E Apache that is also flown by the U.S. and many other countries. The AH-64E Apache is designed and equipped with an open systems architecture including the latest
communications, navigation, sensor and weapon systems. It has an improved Modernized Target Acquisition Designation System that provides day, night and all-weather target information, as well as night vision navigation capability. In addition to classifying air and ground targets, the Fire Control Radar has been updated to operate in the maritime environment.

The Indian Ministry of Defense finalized its order with Boeing for the production, training and support of 22 AH-64E Apache and 15 CH-47F(I) Chinook helicopters in September 2015. Earlier this year, India and the U.S. signed a contract for the acquisition of six Apaches for the Indian Army during President Trump’s visit to New Delhi in February 2020. Boeing’s joint venture in Hyderabad, Tata Boeing Aerospace Limited (TBAL) has been producing aero-structures for the AH-64 Apache helicopter for both US Army and international customers. TBAL marks a major step towards the co-development of integrated systems in aerospace and defense in India. Boeing’s suppliers in India are manufacturing critical systems and components for the Chinooks, including the crown and tailcone assembly by Tata Advanced Systems and the ramp and aft pylon by Dynamatic Technologies. Boeing today works with over 200 suppliers and partners in the country in support of “Make in India” and “Skill India.” Boeing has strengthened its supply chain with 200 partners in India, and a JV to manufacture fuselages for Apache helicopters. Annual sourcing from India stands at $1 billion. Boeing currently employs 3,500 people in India, and more than 7,000 people work with its supply chain partners.

Over the last five years, Boeing has quadrupled its growth in India and sourcing up to $1 billion of products and services from the country. With its over 200 suppliers employing 7,000 employees, complex components and subassemblies for some of Boeing’s most advanced defense platforms, including the F/A-18, F-15, P-8I, CH-47 Chinook and AH-64 Apache, are made in India. The Tata Boeing Aerospace Limited joint venture has increased production of fuselages and aero structures for the AH-64 Apache. The Boeing India Engineering and Technology Center (BIETC) in Bengaluru and Chennai undertake advanced aerospace work and supports Boeing’s global engineering growth. Boeing has made strategic investments in an upcoming wholly owned engineering and technology campus with future avionics manufacturing and assembly capability in Bengaluru. Engineers at BIETC are helping create analytics tools for defense customers to make critical and informed decisions.

Several arms purchases are being planned such as a $1.87 Billion for Integrated Air Defense Weapon System. Earlier on February 7, the State Department also authorized a separate deal to purchase the Integrated Air Defense Weapon System (IADWS) from Raytheon/Kongsberg comprising five MPQ-64F1 Sentinel air defense radars, 134 short-range FIM-92L heat-seeking Stinger missiles, and 118 AIM-120C-7/8 medium-range radar-guided missiles for the land-based Norwegian NASAMS-II system. The package also includes High Mobility vehicles and static launch systems, electro-optical sensors and communications equipment and control terminals.
The Trump administration on April 13, 2020 notified Congress that it will sell 10 harpoon air launched missiles and 16 MK 54 lightweight torpedoes to India worth $155 million under the FMS program. Also, air defense systems worth $1.867 billion. The total amount of 2020 Congress notification of arms sales under FMS was $ 2,022 billion.

The State Department had approved sale to India of 10 AGM-84L Harpoon Block II air launched missiles and related equipment for an estimated cost of $92 million and 16 MK 54 All Up Round Lightweight Torpedoes (LWT); 3 MK 54 Exercise Torpedoes (MK 54 LWT Kit procurement required); and related equipment for an estimated cost of $63 million. On February 10, 2020, the State Department had approved a sale to India of an Integrated Air Defense Weapon System (IADWS) for an estimated cost of $1.867 billion. Earlier on November 20, 2019, the State Department has approved sale to India of up to thirteen (13) MK 45 5 inch/62 caliber (MOD 4) naval guns and related equipment for an estimated cost of $1.02 billion.

India’s government has given the go-ahead for the acquisition of $6.5bn in military hardware, including 111 naval helicopters, as New Delhi seeks to upgrade its ageing defense equipment, amid an escalating arms race in Asia. The move comes as the Modi Government struggles to fulfill its promise of a $250bn military modernization, with the purchase of new equipment slowed by strict bidding conditions and a series of scrapped tenders. India is on track to spend $62bn on its defense in the current financial year, up from $47bn five years ago. India has approved $3bn for the purchase of 111 utility helicopters for the navy, which will be provided under a new program that allows foreign defense contractors to work with Indian private sector companies to make defense equipment. Previously, production of military hardware in India was restricted to public sector companies with foreign partners but Modi has promised to open the sector to private participation. This unlocks the door for the entry of the private sector in defense production Large Indian companies such as the Mahindra Group, Tata, Anil Ambani’s Reliance, Kalyani and Larsen & Toubro have all been awarded licenses for defense production and could partner foreign defense technology companies to produce the helicopters. Given India’s painfully slow decision-making process when it came to acquiring military hardware from foreign companies, the delay can take years because of bureaucratic snags.

The Modi Government also gave the nod for the procurement of 24 anti-submarine helicopters and 14 vertically launched short-range missile systems P-8I Poseidon: The P-8 multi-mission maritime patrol aircraft were acquired through the FMS program to address gaps in India’s airborne anti-submarine warfare capability. Four more jets are already on order, and Navy is planning on at least six additional P-8Is for a fleet size of 18. In addition to their traditional maritime role, the aircraft have been deployed during the recent border crisis in Ladakh. The Globemaster III Airlift is a key mandate of the IAF and is particularly critical in the far-flung mountain frontiers with China and Pakistan. The Boeing C-17, another FMS acquisition, granted the IAF a world-class strategic transport capability.
Following the June clash between India and China in Ladakh, the US is ramping up arm sales to India. It has laid the groundwork for new arms sales including weapon systems with higher levels of sophistication and technology, such as Category-1 MQ-1 Predators armed drones that can carry 1,000 pounds of missiles and bombs. The US in recent months has laid the groundwork for new arms sales to India. President Trump has officially amended rules that restrict the sale of military-grade drones to foreign partners like India, it said, adding that prominent among them being the recent announcement by the Trump administration changing its interpretation of the Missile Technology Control Regime. This will allow the US to consider the sale of armed drones, which had previously been restricted because of their speeds and payloads, to allow them to be considered alongside surveillance drones.

Simultaneously, a move has been made in Congress to bring India at par with NATO allies when it comes to arms sales. US Defense sales to India have climbed to over $20 billion this year. India was the first non-treaty partner to be offered a Missile Technology Control Regime Category-1 Unmanned Aerial System—the Sea Guardian UAS manufactured by General Dynamics. The US is also advocating for the Boeing F/A-18 18 Super Hornet and the Lockheed fighter F-21, and F-15 EX Eagle as part of India’s future fighter acquisitions. Meanwhile, Boeing was showing interest in the Indian market. It shall set up a completely new production facility that could be used for other programs including India's indigenous Advanced Medium Combat Aircraft program. Boeing has had past success exporting military aircraft to India, and this included a deal for the Apache Guardian, the Chinook helicopters, C-17 transports and the P8I patrol plane. However, the IAF bailed out of a deal to purchase 126 fighter aircraft.

Boeing is collaborating in the ‘Make-In-India’ initiative, which it sees as “a huge opportunity and a core element in its long-term business strategy in India” Boeing is showing growing interest in selling its F-1 Advanced Eagle multi-role fighters to the IAF. Boeing says India and Israel are the Focus for future Advanced F-15 Eagle sales. The company was seeking a license from the US Government to start discussions with India. In compliance with the US’s International Traffic in Arms Regulations. The Modi Government was planning acquire 144 jet fighters for the IAF and was looking to many manufacturers from the around world, including Boeing.

For the IAF offer, competitors have shown their willingness to offer India generous industrial participation, in line with Prime Minister Modi’s “Make in India” program. Earlier, in 2019, Boeing had also offered that should the Super Hornet win the air force deal, a “factory of the future” would be established for local production. The program is expected to work with several Indian suppliers to grow a thriving defense aerospace base, which could accelerate other programs.

The IAF faces a political choice as much as a technical one as New Delhi balances its relationship between its historical arms supplier Russia, and its growing partnership with Washington in countering pressure from China. India has never operated American jet fighters before. Currently the IAF flies Russian and French jets, in addition to its growing
fleet of domestic Tejas jet fighters. A decision to purchase American-built fighters would require India to invest in a broader inventory of weapons and avionics systems, in turn encouraging further purchases from the US. That would mark a politically significant break from its long history of Russian arm purchases.

The US and India are now ready to sign an agreement to share geospatial defense intelligence. The two sides might ink the Basic Exchange and Cooperation Agreement (BECA) during a “2+2” foreign and defense ministers/secretaries’ dialogue in September. BECA is the last of the four “foundational” agreements that underpin deepening defense cooperation between the two countries. The first was a 2002 agreement to safeguard shared military information, followed by logistics and secure-communication pacts in 2016 and 2018, respectively. When signed, BECA will allow the US to share satellite and other sensor data with India to improve the Indian military’s targeting and navigation capabilities. Earlier, India and the US had decided to quicken the agreement during Trump’s February India visit. The US has continued to provide quiet but valuable intelligence to India during key crises. It provided details of Chinese troop movement to India during the 2017 Doklam crisis. Most likely, the Trump administration’s very public stance against China during the ongoing India-China military crisis in eastern Ladakh was driven by independent U.S. intelligence on the situation, and that it was shared with New Delhi.

Meanwhile, sales to India continued, including large Aircraft Infrared Countermeasure worth $189 million. India-U.S. defense cooperation has received strong bipartisan support in the US for over two decades due to shared concerns over China’s rising military power. The Modi Government also approved the emergency purchase of Excalibur artillery rounds for M777 ultralight howitzers from the US. India expects the induction is to begin within a month and be completed within a year.

**Economic Ties**

Bilateral trade relations between India and US are growing and today the US is India’s largest trading partner in goods and services. India is now the US’ eighth-largest trade partner. In particular, energy trade has taken off. The overall India-US bilateral trade in goods and services has increased from $126 billion in 2017 to $142 billion in 2018. This growing trend continued 2019, which has seen an increase in bilateral merchandise trade. The number of Indian students in the US and the number of US companies active in India has both grown. For most US-based tech giants, India is now one of their top three customer bases. Indian companies are investing heavily in the US. Meanwhile, Indians have established the largest number of billion-dollar start-up companies in the US founded by immigrants. Last year, Indian students enrolled at U.S. colleges and universities contributed over $8 billion to the U.S. economy. The total number of Indian students in the US has more than doubled over the last decade, from 81,000 in 2008 to a record high of 202,000 in 2019.
Today, the US seeks an expanded trade relationship with India. In 2019, overall U.S.-India bilateral trade in goods and services reached $149 billion. The US is the largest export destination for India US energy exports are an important area of growth in the trade relationship. In 2018 India purchased 48.2 million barrels of US crude oil, a significant increase from 9.6 million in 2017.\textsuperscript{lxiv} President Trump’s India visit produced two energy agreements. One entails ExxonMobil helping India to strengthen its natural gas distribution network. The other is a commitment from the U.S. International Development Finance Corporation to establish a $600 million financing facility for renewable energy projects. The US and India signed a strategic energy partnership accord inked in 2018. US crude oil exports to India skyrocketed from none in 2016 to over 90 million barrels in 2019. The US energy exports to India have increased by 500 percent since Trump took office. Indian energy companies have invested at least $4 billion in US shale gas assets. This trend of intensifying energy ties is poised to continue, given robust US natural gas production; India’s strong demand for external energy sources; and New Delhi’s desire to wean itself off its longstanding dependence on hydrocarbons from the Middle East.\textsuperscript{lxv} In July 2020, India and the US signed a Memorandum of Understanding (MoU) to develop a strategic petroleum reserve in America. The two countries are in an advanced stage of discussion to store crude oil in America to increase India's stockpile. There has been a significant increase in bilateral energy trade in a short span of three years. The bilateral hydrocarbons trade alone has touched $9.2 billion during 2019-20, accounting for 10% of the overall bilateral trade. India is now the fourth-largest export destination for US crude and 5th largest for US LNG, and the trend is expected to continue with Indian companies entering more long-term contracts going forward from this year.

The U.S.-India Strategic Energy Partnership (SEP)

The SEP was established in April 2018 at the direction of President Donald J. Trump and Prime Minister Modi, recognizing the strategic importance of energy to the U.S.-India bilateral relationship, the SEP builds upon US-Indian longstanding energy partnership and wished for meaningful engagements through government-to-government cooperation and industry engagement. Recently, U.S. Secretary of Energy Dan Brouillette and Indian Minister of Petroleum and Natural Gas and Minister of Steel Dharmendra Pradhan co-chaired a virtual ministerial meeting of the SEP to review progress, highlight major accomplishments, and prioritize new areas for cooperation.

The US and India share an all-of-the-above approach to energy security and energy access. The SEP organizes interagency engagement on both sides across four primary pillars of cooperation: (1) Power and Energy Efficiency; (2) Oil and Gas; (3) Renewable Energy; and (4) Sustainable Growth. Through these pillars, the United States and India are working to strengthen and modernize the power grid and distribution utilities for clean, affordable, and reliable energy access; improve efficiency, flexibility, and environmental performance in the power sector; promote inclusive and sustainable economic growth through long-term energy development; enhance energy security
through oil and gas trade, and infrastructure investment; advance the development, deployment, and integration of renewable energy and expand access to finance for renewable energy projects; and reduce market barriers to energy trade and investment. The SEP also supports USG efforts under the Asia Edge initiative, which establishes India as a strong energy partner in the Indo-Pacific region.

The two countries are also leading joint research and development (R&D) through the U.S.-India Partnership to Advance Clean Energy-Research (PACE-R) on smart grids and energy storage to increase resilience and reliability of the electric grid. Today, they announced new areas of research on transformational power generation based on supercritical CO$_2$ (sCO$_2$) power cycles and advanced coal technologies for power generation and hydrogen production, including carbon capture, utilization, and storage (CCUS). The United States briefed about continued bilateral R&D engagement on advanced civil nuclear energy technologies through the U.S.-India Civil Nuclear Energy Working Group.\textsuperscript{lxi}

The US and India announced the following priorities for new work under the SEP.\textsuperscript{lxi}

Enhancing Energy Security

The sides signed a Memorandum of Understanding (MOU) to begin cooperation on Strategic Petroleum Reserves operation and maintenance, including exchange of information and best practices. They also discussed the possibility of India storing oil in the U.S. Strategic Petroleum Reserve to increase their nation’s strategic oil stockpile.

Harnessing Innovation

The sides launched a public-private Hydrogen Task Force to help scale up technologies to produce hydrogen from renewable energy and fossil fuel sources and to bring down the cost of deployment for enhanced energy security and resiliency. They also signed an MOU to collaborate on India’s first-ever Solar Decathlon in 2021, establishing a collegiate competition to prepare the next generation of building professionals to design and build high efficiency buildings powered by renewables. The sides jointly launched a collaboration between the U.S. DOE National labs and the Indian National Institutes under the Ministry of New & Renewable Energy as part of the newly launched South Asia Group for Energy (SAGE), supported by USAID, for joint research on development and deployment of advanced clean technologies. The sides also agreed to explore possible cooperation through joint activities and information exchange on sustainable biofuel production and use, in particular, bioethanol, renewable diesel, other advanced biofuels, and discussion on possible developments in sustainable biofuels for air and sea transport. The sides also discussed information exchange in regard to policies and regulations, and other related areas of interest. Another potential area of cooperation is the promotion of bilateral investments in the private sector. The sides will also explore cooperation on utilizing the economic value of converting biowaste into biogas.

Modernizing the Power System
As India pursues its ambitious renewable energy targets and seeks to transform its energy sector, the sides are collaborating on the deployment and integration of renewable energy and new technologies into the grid; modernizing the power distribution sector; supporting state-level planning for renewable energy; deploying distributed energy technologies, electric vehicles, rooftop solar, and battery storage; redesigning markets, and increasing off-grid energy access. The two sides have been collaborating to modernize Distribution Sector through various reform measures for achieving reliable quality 24X7 power supply through increased private participation; enhancing consumer centricity; deployment of Smart Meters across India; and, establishing Smart Grid Knowledge Centre in India as a “Global Centre of Excellence” for Smart Grids. USAID and the U.S. International Development Finance Corporation are developing a concept to establish a new $25-million credit guarantee for the Small and Medium Enterprise sector to deploy rooftop solar. Work is also underway to enhance flexible operations of coal power plants needed to address increased renewable energy penetration and variable power demand to minimize operating costs and failure risks. The sides agreed to collaborate on advanced high-efficiency coal technologies with low-to-zero emissions through carbon capture, utilization, and storage (CCUS), focusing on USDOE’s Coal FIRST (Flexible, Innovative, Resilient, Small, Transformative) initiative to develop 21st Century coal energy systems. New areas of technical cooperation include application of renewable energy in the economic sectors; development of new business models and decision-making tools for renewable energy; skill building and training programs; and adoption of emerging digital technologies and advanced IT management tools to enhance cyber security of renewable energy systems.

Enhancing Energy Efficiency and Conservation

The United States and India have been working to enhance building and appliance efficiency through enhanced building codes, design and operation of smart buildings of the future, smart meters and demand side response, as well as retrofit of buildings to improve building performance, promote energy conservation, and improve indoor air quality. The sides have also been working towards development of behavioral energy efficiency program and technical assistance for a distributed energy resources plan. The sides are also working to enhance energy efficiency in the industrial sector and will work to advance a comprehensive energy management system in accordance with ISO50001. In response to the COVID-19 pandemic, USAID and Energy Efficiency Services Ltd (EESL) jointly initiated a new activity, “Retrofit of Air Conditioning to Improve Air Quality for Safety and Efficiency” (RAISE) for healthy and energy efficient buildings. The initiative will be scaled in public sector buildings.

V. Promoting Energy Trade and Investment

The sides noted the significant increase in bilateral hydrocarbon trade since the establishment of SEP, with the bilateral hydrocarbon trade touching US$ 9.2 billion during 2019-20, marking a 93% increase since 2017-18, and affirmed to promote greater hydrocarbon trade between the two countries. Through the U.S.-India Natural Gas Task
Force, U.S. and Indian industry forged new commercial partnerships on innovative projects and developed a series of policy and regulatory recommendations to support the Government of India’s vision to increase the share of natural gas in India’s energy sector. The sides have also held numerous public-private dialogues to provide industry perspectives on challenges and opportunities to trade and investment across the energy sector. The sides took note of their governments’ strong commitment to advance our civil nuclear cooperation and welcomed recent progress on the Westinghouse commercial reactor project at Kovvada, which represents an important milestone in our strategic relationship. The two sides agreed to support each other’s vision of national development in the energy sector and encourage investment, including sharing a list of potential projects in which the companies from both sides can be encouraged to invest.

Promoting Inclusive and Sustainable Economic Growth

The sides are working to enhance long-term energy development and plans and strategies through adoption of best practices and methodologies in energy data management, capacity building in energy modeling and promotion of low carbon technologies. Think tanks, policy researchers, NGOs and Government

Bilateral Trade

An important trend in bilateral trade has been the reduction in trade deficit, which has come down by about $1.4 billion in 2017 and with oil and gas purchases along with commencement of delivery of civilian aircrafts, this trend is expected to continue. Significant exports of oil and gas from US to India have begun in the last year. There is expectation that India will import about $2 billion each of oil and gas from the US every year. If the prices are found to be competitive, this amount may increase significantly in coming years. Indian air carriers have placed orders for more than 300 civilian aircrafts from Boeing, which will be delivered over the next 6-7 years. The estimated value of this order is about $39 billion.

US Investments in India

Prime Minister Narendra Modi on July 22, 2020 said at the India Ideas Summit organized by the US-India Business Council that India and the US could together play an important role in helping the global economy recover from the coronavirus pandemic and urged American investors to invest in India. Modi inviting US companies to invest in sectors such as technology, healthcare, insurance, civil aviation, defense and infrastructure said that:

US-India friendship has scaled many heights in the past. Now it is time our partnership plays an important role in helping the world bounce back faster after the pandemic...India has what is needed to power the global economic recovery. The rise of India means a rise in trade opportunities with a nation that you can trust. Along with a rise in global integration with increasing openness, global businesses are too focused on efficiency and optimization. We forgot to focus on resilience against external shocks.
Global economic resilience can be achieved by stronger domestic economic capacities. This means improved domestic capacity for manufacturing, restoring the health of the financial system and diversification of international trade. …there can’t be a better time to invest in India. India offers a perfect combination of openness, opportunities and options. India celebrates openness in people and governance. Open minds make open markets. Open markets lead to greater prosperity…the number of air passengers here will more than double in eight years. The top private Indian airlines plan to include over a thousand new aircraft over the coming decade. This is a huge opportunity for any investor who chooses to set up manufacturing facilities in India, which can become a base for supplying regional markets. A similar case is obvious for setting up maintenance repair and operations facilities. To give flight to your aviation targets, this is an ideal time to invest.

India and America have developed strong relations in business during the past few years. Companies from America with branches in India are the second largest source of investment (FDI) for India after EU. Today, out of the 20 top IT firms in India, 9 of the companies are from the US. However, these American companies are not only concentrated in these segments, they also concentrate on agriculture, consumer products, and also cosmetics. The top 10 American companies in India: Microsoft, Apple. The JPMorgan Chase, Coca-Cola, IBM, Hewlett Packard, PepsiCo, American Express, Google, and Adobe System Incorporated. Microsoft started its working in India from the year 1990 and has invested heavily in the human resources available in India. The products offered by this company are top in its class and this led to tremendous growth of the company. Coca-Cola is one of the most well-known and oldest corporations in India with a consistent market. IBM started its operation in India in 1992 and it is the leading company that offers IT solutions in India.

In 2019, the U.S. investments made in India were valued at approximately $45.88 billion. As per data release by US Department of Commerce, Bureau of Economic Analysis, FDI from US to India as on year 2017 amounted to $44.46 billion whereas Indian FDI into the US amounted to $13.12 billion. As per a report released in November 2017 by Confederation of Indian Industries (CII) titled "Indian Roots, American Soil", Indian investment in US amounts to $18 billion, based on a survey of 100 Indian companies across 50 states in US for this report. To the credit of both the US and India, a number of organizations have been established to further strengthen mutual commercial and financial ties. The USIBC's India Ideas Summit: The US-India Business Council (USIBC) is one such organization. It holds annual meetings and the last one was on the theme of the “India Ideas Summit" held on 12-13 June 2019 in Washington, D.C. The summit was inaugurated by Ambassador of India, and it featured a robust selection of speakers from senior levels of the U.S. government, U.S. Congress, and the India-US business community, including Secretary of State Pompeo, Secretary of Commerce Ross, Co-Chair of the Senate India Caucus Warner (D-VA), and US Ambassador to India Juster, among others. Dignitaries from both India and the U.S. recognized the progress
made in the bilateral relationship and laid out the framework for this relationship to expand even further.

The US is one of the top 5 investment destinations for FDI from India. A survey done by CII in November 2017 found that 100 Indian companies have invested $17.9 billion in the US creating 113,000 jobs in all 50 states of US. India’s top companies, including Wipro, Infosys, L&T and Mahindra have recently made announcements for increasing their investments in the US. Mahindra became the first company in over 25 years to invest in Detroit investing $230 Million. The first vehicle rolled out from the plant on March 2, 2018. US direct investment in India amounts to about $33 Billion across several sectors such as manufacturing, services, pharmaceuticals etc. lxxiv

India has attracted over $40 billion in FDI by 2020 from the US, after the latest funding spree from major tech giants, such as Google and Facebook, according to a US-based business advocacy group. American companies have boosted investment in India despite the coronavirus pandemic, the nation secured over $20 billion in funds, including those from Silicon Valley multinationals as well as investors from the Middle East, among other regions. lxxv


The rising interest of American tech giants in India comes as tensions continue to rise between Washington and Beijing. India is phasing out equipment from Huawei and other Chinese companies from its telecommunication networks striking a fresh blow to the beleaguered technology giant in one of its most important markets. India has not issued any formal written ban on Chinese equipment suppliers such as Huawei and ZTE, nor has the Modi Government made any such public pronouncements. However, industry executives and government officials say key ministries have clearly indicated that local telecoms service providers should avoid using Chinese equipment in future investments, including in 5G networks. Earlier, Huawei has been one of the three biggest telecoms equipment suppliers in India, which is the world’s second biggest mobile market, with more than 850m users. It has had significant contracts with Bharti Airtel, Vodafone and state-owned BSNL. India was unlikely to ever formally ban Huawei or other Chinese equipment companies lest it provoked a tough response from China. But the Modi Government was highly wary about Chinese investment in sensitive infrastructure. India’s informal boycott comes as Huawei is under growing political pressure in western countries from the UK to Australia, where it has been banned from providing 5G kit amid concerns it could allow Beijing to hack into countries’ power grids and other critical infrastructure. lxxvi Anti-China sentiment in India has grown since June’s border dispute, after which New Delhi banned TikTok along with 58 other apps, citing national security concerns.

Meanwhile, India is believed to have long been trying to cash in on the trade tensions between the world’s two biggest economies. Earlier reports signaled that New Delhi was busy creating a framework that will attract global investors looking to shift
manufacturing from China. Another big development is US technology companies’ investment initiatives in Indian technology sector. Since the start of 2020, the biggest names in US tech have invested around $17 billion in India. Amazon pledged $1 billion in January, Facebook invested nearly $6 billion in late April and Google made a $10 billion commitment. The total investment into India's tech industry this year is now well over $20 billion, with most of it coming from the US.\textsuperscript{lxxvii}

The US distrust of Chinese technology continues to grow. Recently, President Trump claimed credit for thwarting the expansion plans of Chinese tech company Huawei, and his administration has said it is "looking at" banning hugely popular short-form video app TikTok, owned by China's ByteDance. The step that would only further aligns the US with India. Earlier, the Modi government banned TikTok and dozens of Chinese apps. The recent tensions could strengthen India's longstanding tech ties with the US. India and the US have had a longstanding tech relationship, with thousands of Indian engineers working across Silicon Valley and Indians currently at the helm of several US companies.

The US tech companies are eying India's massive ecommerce market. E-commerce has transformed the way business is done in India. The Indian ecommerce market is expected to grow to US$ 200 billion by 2026 from US$ 38.5 billion as of 2017. Much of the growth for the industry has been triggered by an increase in internet and smartphone penetration. The ongoing digital transformation in the country is expected to increase India’s total internet user base to 829 million by 2021 from 636.73 million in 2019. India’s internet economy is expected to double from US$ 125 billion as of April 2017 to US$ 250 billion by 2020, backed primarily by E-commerce. India’s E-commerce revenue is expected to jump from US$ 39 billion in 2017 to US$ 120 billion in 2020, growing at an annual rate of 51 per cent, the highest in the world.\textsuperscript{lxxviii} Another report states that the market is posed to grow to 900 million users by 2023.\textsuperscript{lxxix} Some of the major developments in the Indian e-commerce sector in 2020 are as follows:\textsuperscript{lxxx}

In January 2020, Divine Solitaires launched its ecommerce platform.

In February 2020, Flipkart set up a ‘Furniture Experience Center’ in Kolkata, its first offline presence in eastern India.

In April 2020, Reliance Industries (RIL) started home delivery of essentials in partnership with local kirana stores in Navi Mumbai, Thane and Kalyan.

In April 2020, Swiggy received an additional $43 million funding as part of its ongoing Series I round.

In May 2020, PepsiCo India partnered with Dunzo for its snack food brands that include Lay’s, Kurkure, Doritos and Quaker.

In May 2020, chocolate maker Hershey India partnered with Swiggy and Dunzo to launch their flagship online store in order to increase reach.
In recent months India has seen billions of dollars of investment by US technology giants. Most of the tech investment into India this year has gone into companies controlled by Indian billionaire Mukesh Ambani. Jio Platforms, the digital subsidiary of Ambani’s conglomerate Reliance, has raised more than $20 billion since late April from investors; companies, including Google and Facebook; venture and sovereign wealth funds looking to use it as a quick channel into India’s digital economy.

Jio launched as a mobile network in 2016 and has quickly amassed nearly 400 million subscribers. With recent forays into e-commerce, digital payments, streaming services and even a Zoom-like videoconference platform called JioMeet, Ambani appears to be looking to turn the company into an all-encompassing Indian ecosystem. As one of India’s biggest companies, Reliance has an enormous amount of local influence and is unencumbered by many of the regulations on data storage and e-commerce that have been roadblocks for Facebook, Google and Amazon. Facebook recently announced that it was making an investment of $5.7 billion in Jio Platforms part of Reliance Industries, making Facebook its largest minority shareholder. Facebook is one of the country’s biggest enablers of growth for small businesses. And Instagram has grown dramatically in India in recent years.

Triller, an app that functions similarly to TikTok, has inked a strategic partnership with a platform owned by Ambani to cash in on the Chinese app’s ban in its biggest international market. The Los Angeles-headquartered firm said has partnered with Reliance’s JioSaavn music app to embed Triller videos into the streamer “front and center.” As part of what Triller said was the “first of many announcements to come from these two digital powerhouses,” JioSaavn app will also provide a “prominent” button on its main screen that will enable its users to create a Triller video, the American firm said. The announcement comes as scores of local startups have rushed to fill the void from China’s ban on TikTok and 58 other Chinese apps over cybersecurity concerns created at the end of June this year. Some of the local firms that are attempting to cash in on TikTok’s absence include on-demand video streaming service Zee5, news aggregator app DailyHunt and Times Internet’s music streaming service Gaana and video streamer MX Player. Triller claims JioSaavn has amassed over 300 million users in India. I don’t think so: Its Android app had fewer than 30 million weekly active users and had over 104 million monthly active users.

Reliance Industries was in early discussions with ByteDance to invest in TikTok’s operations in India. Meanwhile, Jio Platforms, which has raised over $20 billion from Facebook and a dozen other investors this year, operates a bouquet of digital services, including JioTV, JioCinema, and Haptik. In July, Google announced that it will pile $4.5 billion into India’s Jio Platforms, part of the nation’s most highly valued company, controlled by Asia’s richest man, Mukesh Ambani. Facebook invested $5.7 billion for a 9.99 percent stake in the company in April. In total, investors have bought over $20 billion-worth of shares in Jio Platforms. The tech giant’s investment in India could be a signal that trust in China is falling, while “India becomes a big competitor,” White House Economic Advisor, Larry Kudlow, said.
Last month, Google became the latest big American player to invest in Indian conglomerate Reliance Industries’ digital business. It agreed to pay $4.5bn for a 7.7% stake in Jio Platforms. Reliance’s billionaire owner Ambani said the two companies would develop phones for 4G and 5G networks. Also, in July, Google said it would invest about $10 billion in India over the next five to seven years, joining a list of new investors in Jio that includes Facebook, Intel and Qualcomm.

Google is investing in India’s homegrown social networking platform, ShareChat. The companies are in the preliminary stages of negotiating an investment between $150 to $200 million. On July 13, Google said it would invest $10 billion in India over the next five to seven years. The investments will be made in forging new partnerships, and in building stronger infrastructure and ecosystems. Google has been a partner in India’s digitization journey since 2004, when it opened its first offices in Hyderabad and Bangalore. A recent example is GPay, the simple way to pay contactless or online. Together with the rise in BHIM-UPI adoption, GPay makes it easy to send money and India is now setting the global standard on how to digitize payments and help build a global product. Google’s AI-powered reading tutor app Bolo, now called Read Along, is another example of a technology built specifically for Indian users. India is great potential growth market for Google. The investment will be made through the Google for India Digitization Fund which fund would focus on four areas to scale up digital infrastructure in India. It would enable “affordable access and information for every Indian in their own language”; build new products and services that are deeply relevant to India's unique needs”; empower local businesses who want to go digital and leverage technology and artificial intelligence for social good.

India is already a major market for all of Google's key products including Android, Search and YouTube. Nearly 245 million Indians access YouTube in India. Growing internet use across smaller towns and villages has also led to a boom in regional language internet use which, according to one estimate, now commands a 66% share in overall content consumption in India, far surpassing English. This is not the first time Google has made large investments in India. Earlier, in 2015, the companies partnered with Tata Trusts to launch Internet Saathi, a program to help bridge the gender divide and deliver technology to Indian villages. The effort has helped around 28 million women across nearly 300,000 villages learn about the Internet.

Amazon is also pushing aggressively to grow its business in India, investing billions of dollars to compete. Earlier this year, Amazon's chief executive Jeff Bezos pledged to make major investments in India. Speaking at a company event in New Delhi in January, he said the 21st Century is going to be the Indian century. Amazon has set ambitious plans for expansion in India. Like rival US retailer Walmart, it sees major growth potential in the fast-growing economy. In May, Amazon entered India's meal delivery business with a trial in four parts of Bangalore. Amazon Pharmacy will make its debut in Bangalore. The move comes as the online drugs business has been given a major boost
during the coronavirus pandemic. The Amazon Pharmacy service offers prescription, over the counter and traditional Ayurveda medication as well as basic health devices.

Earlier, Amazon started its move into pharmaceutical retailing in 2017. The following year it bought US-based home delivery medications startup PillPack. At the end of last year, the company introduced its Amazon Pharmacy branding to Pill Pack’s service. In January, Amazon filed to trademark the name Amazon Pharmacy in the UK, Australia and Canada. The move was seen as a sign that the company was set to significantly expand its prescription drugs business outside of the US. lxxxvii

Amazon, which was outbid by Walmart for Flipkart, has launched Smart Stores, an online platform for local stores that allows shoppers to access its app. Reliance the giant Indian conglomerate, is targeting the online sector as well with its Jamat B2C grocery platform. lxxxviii In January, American e-commerce major Amazon had committed a $1 billion investment in India over the next five years. The company has already invested over $5.5 billion in India. lxxxix The company has now put in a total of $6.5 billion in the ecommerce sector. xc Many companies like Microsoft and Google already test-drive their products in India and other countries before taking them to the US. Lately, India has become a key battleground for Amazon and Microsoft as they view for the Indian market. Very recently, Bharti Airtel announced it was entering into a strategic partnership with Amazon to deliver cloud computing solutions to enterprises, enabled by the latter’s Amazon Web Services (AWS) suite. The Airtel-AWS partnership comes a year after Reliance Jio entered into a similar arrangement with Microsoft, to provide its clients cloud solutions enabled by Microsoft’s Azure. The two global leaders in cloud services are present in India by themselves. Each is now also aligned to the two leaders in Indian telecom, making India the latest front in the battle between the two American technology majors. At stake is India’s burgeoning cloud-computing market, expected to be worth $8 billion by 2023.

Microsoft has been quite innovative with its Indian strategy. It has been picking up equity stakes in Internet firms such as Flipkart. While AWS is still the market leader for cloud services in India, both Azure and AWS are growing at a phenomenal rate. Cloud services are omnipresent in the digital economy, ranging from email servers to advanced data warehousing and analytics capabilities for large corporations. The Covid-19-enforced lockdown has only enhanced this importance. Working from home means organizations require greater connectivity and more remote data-storage capabilities. Thus, even as total IT spends is set to shrink by 7% in 2020, revenues from cloud services are projected to grow 6%.

AWS is the clear leader in cloud services; capturing 33% of the total industry spends, as of July 2020. Launched in 2006, AWS had the first-mover advantage. Microsoft launched Azure in 2010, but it has grown steadily and holds about 18% share currently. Over the past year it has gained market share, though not at the expense of others in the top four.
Even though Microsoft doesn’t declare revenues from Azure alone, estimates by research firm Jefferies place it at $23.6 billion in 2020, roughly 17% of its annual revenues. AWS is expected to contribute $46.1 billion, or about 13.5% of Amazon’s revenues.

Although the revenue share of the cloud business still remains modest for both firms, it is growing fast. In the pandemic-ravaged June quarter, Amazon AWS revenues grew 29% on a year-on-year basis, while Microsoft’s intelligent cloud business (of which Azure is a part) grew 17%. And then, there’s profitability: AWS delivered an operating margin of 31% and accounted for 57% of Amazon’s operating profit in the last quarter.

In order to maintain this growth, India is a key market. It’s small at the moment: $2.4 billion in 2019, or 1.2% of global revenues in cloud services, according to Gartner. But with 24% growth, it ranked number three on that metric in 2019, after China and Indonesia. For 2020, the research firm expects India to grow at 26%, against the global rate of 17%.

Microsoft has been especially aggressive in its India expansion. In February 2017, e-commerce giant Flipkart signed an exclusive arrangement with Microsoft, and transitioned from AWS to Azure. Two months later, Microsoft invested $200 million in Flipkart. Microsoft didn’t say so explicitly, but industry observers drew a link between the two developments. In late-2019, Microsoft was reported to be in talks with ride-hailing company Ola—an Azure customer—for a similar investment, but that deal was not confirmed.

The most significant partnership for Microsoft in India is with Reliance Jio. In August 2019, the two entities entered into a 10-year strategic partnership, where Jio would set up data centers across India, with Microsoft deploying its Azure platform to support Jio’s offerings. Their stated objective was to enable affordable access to cloud services to Indian businesses. Jio’s formidable fund-raising over the past few months, with investments from both Facebook and Google, has enhanced the possibilities from this engagement.

While Microsoft has been aggressive in its India bets, AWS is showing its competitive intent with its Airtel partnership. AWS has also benefited immensely from the skyrocketing popularity of Zoom and Slack recently, which are predominantly hosted on its servers. Neither Amazon nor Microsoft puts out segment-specific numbers for India.

In terms of big stakes, the cloud is another front for Microsoft.xei

**Reliance to buy Future Group's retail arm for $3.38 billion**

NEW DELHI (Reuters) - Mukesh Ambani-led Reliance Industries (RELI.NS) said on Saturday it has agreed to acquire the retail and wholesale business and the logistics and warehousing business of Future Group in a deal valued at $3.38 billion, including debt.

Like many other store chain owners, Future Group’s business has been hit by a slowing economy and the impact of the coronavirus pandemic.
Walmart, the world’s largest retailer, is not alone trying to figure out the Indian retail business. It is now maneuvering to put its assorted physical and online pieces in India into a coherent package. Walmart bought 77% of the online Flipkart business in 2018 for $16 billion and has doubled down on what is the world’s last great retail frontier. It has upped its equity share of Flipkart to 82%, kicking in another $1.2 billion, raising Flipkart’s valuation to $24.9 billion. Then Flipkart announced it was buying Walmart India, which is essentially a B2B wholesaler that supplies the countries small stores selling food and merchandise. A new online marketplace called Flipkart Wholesale is expected to launch in August to service this channel. Walmart Inc. is selling its Indian stores to Flipkart, the e-commerce startup it controls, consolidating its operations in India as it works to fend off Amazon.com Inc. Walmart operates 28 warehouse-club-style stores in India that are only open to members. Branded as Best Price Modern Wholesale, the stores serve independent retailers and other small businesses. Indian regulations prohibit Walmart from operating supercenters or selling its own inventory directly to consumers through its websites.

Flipkart will buy Walmart India, adding the wholesale business and around 5,200 employees to its e-commerce and other operations, creating a Flipkart Wholesale business later this summer, Walmart said. A Walmart spokesman declined to share financial terms of the deal. Walmart said. The fresh capital would help Flipkart further grow its e-commerce marketplace in India, one of the world’s fastest-growing e-commerce markets that is poised to grow even further. India’s e-commerce market is estimated to reach more than 300 million shoppers by 2025. These shoppers will buy items worth more than $100 billion from online platforms.xcii

Foxconn plans to invest up to $1 billion to expand a factory in southern India where the Taiwanese contract manufacturer assembles Apple iPhones. The move is part of a quiet and gradual production shift by Apple away from China as it navigates disruptions from a trade war between China and the US and the coronavirus crisis. Foxconn’s planned investment in the Sriperumbur plant, where Apple’s iPhone XR is made some 50 km west of Chennai, will take place over the course of three years, the second source said. Some of Apple’s other iPhones models, made by Foxconn in China, will be made at the plant, said both sources, who declined to be identified as the talks are private and details have yet to be finalized. Taipei-headquartered Foxconn will add some 6,000 jobs at the Sriperumbur plant under the plan. It also operates a separate plant in the southern Indian state of Andhra Pradesh. Foxconn will now ramp up its investment in India. Apple accounts for about 1% of smartphone sales in India, the world’s second-biggest smartphone market, where its pricey iPhones are often seen as a status symbol. Building more phones in India will also help Apple save on import taxes that further push up its prices. Apple assembles a few models through Taiwan’s Wistron Corp in the southern
tech hub of Bengaluru. Wistron is also set to open a new plant, where it plans to make more Apple devices. Apple manufacturer Wistron will hire 10,000 employees for the local production of iPhone 12. The company has already hired 2000 employees and will function from its plant in Karnataka. The local production of iPhone SE is also slated to begin at the end of this year. The iPhone 12 will be the seventh iPhone model to be manufactured in India. Apple has so far produced several iPhone models locally. Apple started assembling phones in India in 2017. Now, its latest offering, the iPhone SE, is also being assembled at Foxconn's Chennai plant. Apple started assembling phones in India with the original iPhone SE in 2017. The phone was then already a couple of years old, but still popular in India because of its lower price points. In 2018, it moved assembly of the iPhone 6s also to India. This was followed up by the iPhone 7 in 2019. Wistron manufactured all these units in its Bangalore plant. In 2019, Apple’s partner Foxconn started assembling the iPhone XR at its plant in Chennai. This was a more recent phone and showed how Cupertino had started taking the Indian market more seriously.

In 2020, assembly of the latest iPhone 11 stared at Foxconn’s Chennai plant, followed by now the iPhone SE at Wistron’s plant in Karnataka. Both these are the latest offerings from the company. Apple is moving out of China because of pressure from the Donald Trump government as well as the impact of the pandemic. But it is unlikely that Apple will pull out of China entirely given the investment that has gone into setting up its production facilities there. But considering the units assembled in India are also exported to some markets too, there is a possibility Apple will start moving some production out of China to hedge for a situation where its entire

Earlier, in 2019, Apple moved its production of its Mac Pro computers back to the US with a $1 billion campus in Austin, Texas. Apple and its manufacturing partners invested over $200 million in the Mac Pro facility, a release at the time said. Earlier in August, Foxconn, said it was gradually adding more capacity outside of China in India, Southeast Asia and the Americas

Meanwhile, Apple has increasingly been looking to assemble more products in India for multiple reasons. One of these is reduced cost in India sales, and another might be to reduce dependency on China. Apple’s latest compact offering, the iPhone SE 2020 will be assembled locally in India. Local assembly of Apple iPhones began back in 2017 when the first-gen iPhone SE was produced locally in India. The brand has since only taken bigger steps to increase local manufacturing over the years. The Apple iPhone SE 2020 will become the sixth iPhone to be produced locally.

Apple is now set to launch an official first-party presence in India, with the launch of the Apple Online Store beginning September. Apple is finally able to start direct sales in the region as Indian government rules that companies must source 30% of components domestically were relaxed last year. The opening of physical stores, Mumbai, will follow the launch of the Indian Apple Online Store. The Mumbai store is currently in development and is set to open in 2021 and its second India store will be located in
Bangalore. Previously, Apple has had to rely on a network of third-party resellers to sell its products. For a long time, Apple has looked at India as a potential growth market for iPhone sales, having already saturated most other regions. India’s population of 1.3 billion people is tantalizing, however relative earnings remain low and Apple’s premium priced products are out of reach to many. Over the last few years, Apple has kicked off manufacturing of iPhone models in India to avoid foreign tax penalties in an effort to keep prices down. Apple’s share of overall Indian smartphone sales remains small. However, it is beginning to capture the high-end market segments, which inspires potential for long term sales growth as the spending power of Indian consumers gradually rises.\textsuperscript{xciv} Apple's online push follows a long period of development, had originally planned to commence web-based sales of products within a few months of India relaxing related rules in 2019. The pandemic helped lead to a delay in its implementation.

Online sales would be the latest in a string of changes Apple has implemented to grow its business in the country in the last year. In January, it brought the HomePod to India 23 months after launch, and has confirmed plans to produce the iPhone SE in the country for the local market. The manufacturing side has also seen investment and major updates, with Apple seemingly trying to relocate some of its production lines out of China in a bid to strengthen its supply chains. This includes having assembly partners including Foxconn, Pegatron, and Wistron applying to take part in India's $6.6 billion Production-Linked Incentive Scheme, a push by Apple to get Foxconn to invest $1 billion into expanding iPhone production in the country, and Wistron allegedly seeking to hire 10,000 more staff at an iPhone production facility.\textsuperscript{xcv}

The Indian market has a great potential for further growth. US-India commercial relations are poised to strengthen further with more technology collaboration initiatives between the two countries. Undoubtedly, there is also great potential for collaboration beyond security.\textsuperscript{xcvi}

In the aftermath of the recent border standoff between India and China, the Modi Government has been reconsidering all major business engagements with China. Like the US and many allies, India is in the process of gently removing Chinese companies from the race to provide the 5G, rollout, erstwhile dominated by Huawei, the Chinese giant global company. This development will benefit Indian companies especially Jio Platforms, which is already a part of the recent global initiative of the Trump administration called the “Clean Network” to stop the expansion of Chinese companies from the IT sector and other critical infrastructure, deemed threats to national security. Increasing collaboration between US and India business ventures in the area will fill the gap.

The Reliance Industry’s Jio Platforms

Earlier, Reliance Jio was formed in 2016 by Ambani, who ramped up by offering low-cost bundles. At the time, Jio was the only pan-India network offering 4G across the 800MHz, 1800MHz, and 2300MHz spectrum bands.
The Company had 186.6 million subscribers as of March 31 after adding 83 million during the 2017-18 financial year. Reliance also announced investing $180 million in artificial intelligence (AI) education platform Embibe, reported a total net profit of 36,075 crore ($5.5 billion), up 20.6 percent year on year, on revenue of 430,731 crore ($64.7 trillion), up 30.5 percent for the full year.

Jio grew rapidly to take the number one spot late last year. It has attracted almost 400m subscribers and aims to increase that figure to 500m in the next three years. India’s market is rising, and the number of Internet users will reach to more than 850m in 2022, according to consultancy firm PwC.

The Jio Platforms has attracted a lot of American investments recently. In April Facebook signed a $5.7 billion deal with Jio for a 10% stake in the company. Facebook is now largest minority shareholder Google has agreed to pay $4.5 billion for a 7.7% stake in Jio Platforms. Earlier, Google also said the company would invest about $10 billion in India over the next five to seven years. In May, U.S. private equity companies TPG, L. Catterton, Silver Lake, Vista Equity Partners, General Atlantic, and KKR together invested nearly $5 billion into Jio.

In June, Jio collected more than $4 billion from other U.S. tech investors and sovereign wealth funds in Saudi Arabia and the United Arab Emirates. And in July, Intel and Qualcomm, US chipmakers, had also bought smaller stakes in the company. Also, Reliance, which funded Jio from its own balance sheet, raised nearly $7 billion more in a rights offering. By mid-July, Jio had amassed more than $20 billion.
The growth of Jio has been spectacular. When the company was launched in 2016, only about 28 million and within 18 months it had signed 100 million people to its network. Today it had nearly 400 million subscribers. Jio is expanding rapidly and could be the world’s next big tech giant. It is now set to roll out its own 5G technology next year in India, and expand into blockchain, health care platforms, big data, and machine learning, which are readily exportable to, markets across the world. Today, the company is developing a fully homegrown 5G network. This is important for two major reasons. Firstly, it fits the script of Prime Minister Modi's repeated push for a self-reliant India. Secondly, and more importantly, it seriously damages prospects of tech giants like China's Huawei, which was looking to participate in India's 5G trials. 

Energy Sector

The US and India are increasingly collaborating in clean energy development. The US Agency for International Development (USAID) and India’s the Ministry of New and Renewable Energy (MNRE) have announced the launch of a partnership between the USAID-supported South Asia Group for Energy (SAGE) and MNRE's institutions. SAGE is a US government consortium that will provide advanced technical knowledge on clean energy development embedded in the US Department of Energy's National
Laboratories to MNRE's National Technical Institutions and other public institutes under this new partnership.

The SAGE is a consortium consisting of USAID, the US Department of Energy and three of the Department of Energy's National Laboratories -- Lawrence Berkeley National Laboratory, National Renewable Energy Laboratory and the Pacific Northwest National Laboratory.

The SAGE will provide a formal platform for collaboration on clean energy development and will focus on increasing our engagement with the MNRE national institutions so that they act as a powerhouse of science, engineering, and technology for India and the entire South Asia region. This institutional arrangement will result in US and Indian institutions sharing important technical information, including on innovative technologies to their mutual benefit. It will also contribute toward strengthening the broader partnership and friendship between both countries. SAGE will contribute significantly towards achieving the goals of US government's Asia Enhancing Growth and Development through Energy (Asia EDGE) Initiative, a primary pillar of the US government's Indo-Pacific vision in South Asia, and the US-India Strategic Energy Partnership.xcix

Increased US Investments into India

In June 2020, the U.S. International Development Finance Corporation (DFC) Board of Directors had approved $1 billion of investments that will advance development in Africa, Latin America, the Indo-Pacific, and emerging markets across the globe. The investments mark one of the largest tranches approved during a Board meeting under DFC. The approved projects will strengthen health systems, bolster food security, and support other highly impactful development outcomes. Several projects also expand access to financial services for women, small businesses, and other underserved groups at a time when capital is in desperate need. The projects have a focus on development impact, with nearly 60 percent of investments in low- and lower middle-income countries. The share of India was $350 million in the plan. It consists of the following:

- Scaling up high-impact businesses in India: A $50 million loan will help Northern Arc Capital extend loans to businesses that expand access to water, sanitation, and food or advance women’s economic empowerment in India.

- Generating solar power in India: A $27.3 million loan will enable Paryapt Solar Energy Private Ltd. to build and operate a 50-megawatt solar power plant in Gujarat, India.

- Increasing access to education in India: A $14.6 million loan guaranty to World Business Capital will support the expansion of Avanse Financial Services’ student loan program in India.

- Strengthening food security in India: Up to $20 million in equity will help Freshthome deliver high-quality, affordable fish, meat, and produce to homes across India. In addition to strengthening food security, the project will support more than 1,500 farmers and
fishermen throughout the country, where 70 percent of rural households depend primarily on agriculture for their livelihood.

Strengthening energy security in India: A $142 million loan will help ReNew Power develop, construct, and operate a 300-megawatt solar power plant in Rajasthan, India.

Innovating the dairy industry in India: A $2.7 million loan guaranty to Stellapps Technologies will advance innovative solutions that streamline the dairy value chain in India.

Addressing resource scarcity in India: An up to $30 million investment in South Asia Growth Fund II will support businesses in the energy, water, and food sectors across India. The fund aims to promote sustainable access to and the efficient use of these resources, which remain scarce in many regions of India.

Empowering smallholder dairy farmers in India: Up to $371,000 in technical assistance will support Milk Mantra, which sources milk from more than 60,000 smallholder farmers to produce and sell dairy products in eastern India. The technical assistance is intended to enhance the impact of an approved DFC loan to the project by sharing the costs of services including farmer training, cattle health services, and a digital financial services program designed to empower women farmers.

Enhancing the power supply in India: A $50 million loan will enable Sitara Solar Energy Private Ltd. to build and operate a 100-megawatt solar power plant in Rajasthan, India.

Empowering smallholder dairy farmers in India: A $10 million loan will help Milk Mantra, a dairy company committed to ethical sourcing from smallholder farmers, expand its operations in eastern India.

Thus, a substantial sum of money has been given to India, reflecting the new emphasis of the Trump administration to strengthen US-India ties.

Indian FDI in the US

Today, India’s investments in US treasury securities touched $169.9 billion in May, from $156.5 billion in March. The US Foreign Direct Investment to India crossed $40 billion this year. Indian companies are investing in the US. According to a report by the Confederation of Indian Industry (CII), a total of 155 companies have over $22 billion in investments in the US. The CII survey states that investments are in sectors including pharmaceuticals, telecommunications, aerospace and defense, financial services, manufacturing, tourism, and hospitality. The surveyed companies disclosed the highest amounts of FDI were in Texas, New Jersey, New York, Florida, and Massachusetts. Indian investments in 20 US states stand at over $100 million each, showed the survey. The top five states in which Indian companies have generated maximum employment are: Texas (17,578 jobs), California (8,271 jobs), New Jersey (8,057 jobs), New York (6,175 jobs) and Florida (5,454 jobs). Similarly, the top five states in which Indian companies have contributed the highest foreign direct investment are: Texas ($9.5 billion), New
Jersey ($2.4 billion), New York ($1.8 billion), Florida ($915 million), and Massachusetts ($873 million).

The CII survey includes diverse sectors including pharmaceuticals and life sciences, telecommunications, aerospace and defense, financial services, manufacturing, tourism and hospitality, design and engineering, automotive, food and agriculture, energy and mining and materials. Around 77 per cent of the companies plan to make more investments in the world’s largest economy and 83 per cent of the companies plan to hire more employees locally in the next five years. 

The Cooperation Architecture between India and the US

To the credit of both the US and India, a number of mechanisms have been established to strengthen economic ties between the two countries. They include:

Commercial Dialogue

The Commercial Dialogue was created out of the Security and Commercial dialogue in 2017. The first session of the U.S.-India Commercial Dialogue under this new structure was held in Washington DC on 27 October 2017. It was co-chaired by Secretary of Commerce Ross and Commerce and Industry Minister Prabhu focused on promoting joint economic growth, job creation, and prosperity. The US and India was collaborating to advance their commercial relationship, including cooperation in the areas of standards, ease of doing business, and travel and tourism. In standards, they noted positive outcomes from holding best practices exchanges between the National Institute of Standards and Technology (NIST), the Bureau of Indian Standards (BIS), and India’s National Physical Laboratory (NPL). Both sides also committed to strive for meaningful progress in areas such as standards, business climate, investment, travel and tourism. A MoU on standards was signed between CII and American National Standards Institute (ANSI) on the sidelines of the Commercial Dialogue and another MoU between EXIM bank of US with Export Credit Guarantee Corporation of India (ECGC).

Indian and US industry have forged new commercial partnerships on innovative projects and developed a series of policy and regulatory recommendations to support India’s vision of gas-based economy. Several MOUs between Indian and US companies have been incubated under this and have reached a stage of germination. Several initiatives from the sector including South Asia Group for Energy (SAGE). NITI Aayog and USAID have also launched the India Energy Modeling Forum to enhance long-term energy development and plans and strategies through energy data management, and various programs to promote low carbon technologies.

Both the countries have agreed to collaborate in new areas including bioenergy, RE in agriculture and SMEs, high-efficiency coal technologies with low-to-zero emissions through CCUS.

The US-India Strategic Energy Partnership (SEP) established in 2018 has prioritized new areas for cooperation. The SEP has four primary pillars of cooperation: Oil and Gas;
Power and Energy Efficiency; Renewable Energy and Sustainable Growth; and Coal. As a first step, they also announced the establishment of US-India Natural Gas Task Force to support India’s vision for natural gas. The two sides also reaffirmed their strong commitment to early and full implementation of India-US civil nuclear energy partnership, including the Westinghouse civil nuclear project in Kovvada. The two sides launched a public-private Hydrogen Task Force to help scale up technologies to produce hydrogen from renewable energy and fossil fuel sources and to bring down the cost of deployment for enhanced energy security and resiliency. Statement of Intent was signed between the US Department of State and India's Ministry of Power under the Flexible Resources Initiative of the U.S.-India Clean Energy Finance Task Force to enhance the flexibility and robustness of India's grid to support the country's energy transition and mobilize the private investment to deliver reliable, low-cost power for the people of India.

The US Department of Commerce also launched Energy Industry Working Group for India under the Asia EDGE initiative to facilitate private sector connections and energy cooperation. The Federal Energy Regulatory Commission (FERC) and Petroleum Natural Gas Regulatory Board (PNGRB) signed MoU on information exchange in oil and gas regulatory frameworks.

Trade Policy Forum (TPF)

The TPF meets every year. The 13th meeting was held in Washington DC on 26 October 2017. The meeting was co-chaired by Commerce and Industry Minister Prabhu and U.S. Trade Representative Ambassador Lighthizer. Discussions were held on issues related to bilateral trade between the two countries, areas of cooperation, market access in agriculture, non-agricultural goods and services and Intellectual Property Rights (IPR). At the conclusion of TPF, both ministers decided that the two countries would continue to work towards building strong trade and investment ties to realize mutual gains from the partnership. Both sides also expressed the desire to reduce the existing gaps and work towards resolution of the outstanding issues before the next round of the TPF.

The US-India Strategic Partnership Forum (USISP) is an active private business advocacy organization named it holds summits to discuss ways to enhance strategic and economic cooperation between India and the US. The USISP’s third leadership summit to be held virtually from August 31- September 3, 2020. Titled “US-India Week: Navigating New Challenges”, the summit will be a weeklong discussion on enhancing economic and strategic collaboration between the US and India during a transformative period for the global economy. It will be presided by Pence, Vice president of the US. Other high-ranking U.S. and Indian government officials participating at the leadership summit include: Jaishankar, India’s Minister of External Affairs; Goyal, India’s Minister of Commerce & Industry; Juster, U.S. Ambassador to India to the US, Sandhu, Ambassador of India to the US; Kant, CEO, Niti Aayog; Boehler, CEO, U.S. International Development Finance Corporation; Bhushan, CEO, Ayushman Bharat; Chatterjee, Chairman, Federal Energy Regulatory Commission; Mashelkar, Chairman,
The weeklong program will include a range of strategic discussions between USISPF’s board members, which include 21 Fortune 500 CEOs, and senior government officials from both countries. The summit will highlight areas of bilateral cooperation in areas such as: global supply chains, defense, energy, agriculture and, biosecurity, 5G, artificial intelligence, and startups. strategic energy ties; collaboration in fintech, healthcare, and technology, trade and investment relations; and building a fair tax regime to attract FDI.

Lately, the US and India have cooperated to respond to the Covid-19 pandemic. The Indian pharmaceutical companies and US have collaborated to expand global supplies of critical medicines and are cooperating on vaccine development.

Thus, a web of mechanisms promotes mutual cooperation in various fields between the US and India. This web will grow more sophisticated in the future, thereby strengthening ties between the two countries.

What Next in the Future?

India’s border clash with China in June is likely to accelerate a trend where India continues to build and strengthen strategic partnerships with the US to protect its national interests. That includes strengthening ties with the US, Japan and Australia, as part of an informal strategic dialogue known as the Quad. Though, the overall context of the China-US Cold War will shape US ties with India.

India is modernizing its military to narrow the gap with China and shall in the future increasingly turned to the US over traditional supplier, Russia. Defense is now driving the relationship and, as the two countries come closer on the idea of the Indo-Pacific, this aspect will only get stronger. Given the tensions with China, India will most likely cooperate more with the Quad initiative.

India-U.S. defense cooperation has received strong bipartisan support in the US for over two decades due to shared concerns over China’s rising military power. However, Modi’s embrace of Trump and policies targeting India’s Muslim minority could spell trouble for that cooperation under a future Democratic administration.

Meanwhile, Pakistan shall remain as a significant factor in deteriorating Chinese Indian relations. Plus, Kashmir shall remain as the primary factor in tense Pakistan-India relations, as well as a factor in the Chinese Indian confrontation in Ladakh.

The ever growing close relations between China and Pakistan on the one hand, and China and Iran on the other, will further move India towards the US as it wills seek support from it against the new nexus of regional powers seemingly threatening the country.

Ties between the US and India are poised to be strengthened in the future. The US and India have developed an elaborate web of private and government mechanisms to promote their cooperation in various fields. Thus, the architecture and web of
mechanisms promote mutual cooperation in various fields between the US and India. This web will grow more sophisticated in the future, thereby strengthening ties between the two countries. The Indian market has a great potential for further growth. US-India commercial relations are poised to strengthen further with more technology collaboration initiatives between the two countries. Undoubtedly, there is also great potential for collaboration beyond security. Given, the increased assistance given to India and the increased collaboration in different sectors is a clear reflection to the new emphasis of the Trump administration to strengthen US-India ties. Also, the significant Indian FDI in the US also reflects India’s increasing emphasis on its American connections. The future of American Indian ties is further strengthened, resultanty.

Dr. Sohail Mahmood is an Independent Political Analyst based in Chapel Hill NC.

---


iv And India-China border talks: Four things you should know, Aljazeera, August 20, 2020,


& “India-China border talks: Four things you should know”, Aljazeera, August 20, 2020

vi Ibid
India is reportedly phasing out Huawei equipment from its networks

Chinese tech will be quietly removed from Indian networks as border tensions rise, a report says.

Corinne Reichert
Aug. 24, 2020 3:29 p.m. PT

Karan Pradhan  

Ibid


Nicholas Hanson and David “Quadrilateral Quandary: America and Its Asian Allies Must Move Toward Security Cooperation


Ibid


Nicholas Hanson and David “Quadrilateral Quandary: America and Its Asian Allies Must Move Toward Security Cooperation


Indian Embassy, USA, “Brief on India-US Relations”, June 2019


xxxii Indian Embassy, USA, “Brief on India-US Relations”, June 2019


xxxv Aditi Shah, “Boeing expects India to order up to 2,100 aircraft over 20 years”, Reuters, July 31, 2020, https://www.reuters.com/article/us-boeing-india-idUSKBN1AG0MS

xxxvi Andrew McIntosh, “India's Prime Minister Modi set to get 777-300 VIP jets from Boeing”, Puget Sound Business Journal, Aug 17, 2020, 6:22pm EDT

xxxvii Ibid.


xl

Wadhani, “A Frozen Line in the Himalaya”, The Center for Strategic and International Studies,


xiv Ibid


xlviii Jeff Abramson, “US Arms Deals Continue During Pandemic<< Arms Control Association, June 2020,


iii Peter Suciu, “India is Watching: Boeing Testing F/A-18 Super Hornets in Ski Jump Launches”, The National Interest,
August 22, 2020,


ivi Boeing Bid to Sell F-15EX Eagles to India Faces Stiff Competition


lxvi U.S.-India Strategy Energy Partnership Joint Statement, July 17, 2020


lxix PM Narendra Modi makes pitch for US investments in India
July 23, 2020, Asit Ranjan Mishra, Shreya Nandi


makeover-plots-ambitious-ecommerce-push-to-take-on-amazon-reliance/articleshow/77761808.cms, accessed August 26, 2020

lxxviii IBEF- India Brand Equity Foundation, E-Commerce in India, https://www.ibef.org/industry/ecommerce.aspx, accessed August 26, 2020


lxxx IBEF- India Brand Equity Foundation, E-Commerce in India, https://www.ibef.org/industry/ecommerce.aspx, accessed August 26, 2020


lxxxv Prabhjote Gill, “Google eyes India’s ShareChat as Microsoft goes after TikTok in the US — here’s why it makes sense”, Business Insider, August 21, 2020,


Arjun Srinivas, “Why India has become a key battleground for Amazon and Microsoft”, Live Mint, August 11, 2020 Migrating to the cloud: Why India has emerged as important battlefront for Amazon and Microsoft

Manish Singh, “Walmart leads $1.2 billion investment in India’s Flipkart”, July 14, 2020

Sankalp Phartiyal and Yimou Lee, “Exclusive: Apple supplier Foxconn to invest $1 billion in India, sources say”, Reuters, July 10, 2020

Benjamin Mayo, Bloomberg: Apple Online Store for India to launch next month, 9to5mac, August 25, 2020

Apple iPhone SE 2020 to now be assembled locally in India

Corinne Reichert, Reliance acquires Radisys for 5G and IoT

ZD Net, July 2, 2018

Vivienne Walt, “Will India’s Jio be the next tech giant”, Fortune, August 10, 2020

ANI, “USAID, MNRE announce new partnership to expand clean energy development”, Economic Times, July 08, 2020

Atmadip Ray, US Development Bank to invest $350 million in India, The Economic Times

DFC Approves $1 Billion of Investments in Global Development

Atmadip Ray, US Development Bank to approve $1 billion of investments in global development

India’s holdings of US treasuries rise in Apr-May, The Economic Times, July 20, 2020

Amy Kazmin and Stephanie Frindlay, “India moves to cut Huawei gear from telecoms network”, Financial Times,


Indian-US sign MoU to begin cooperation on strategic petroleum reserve


