

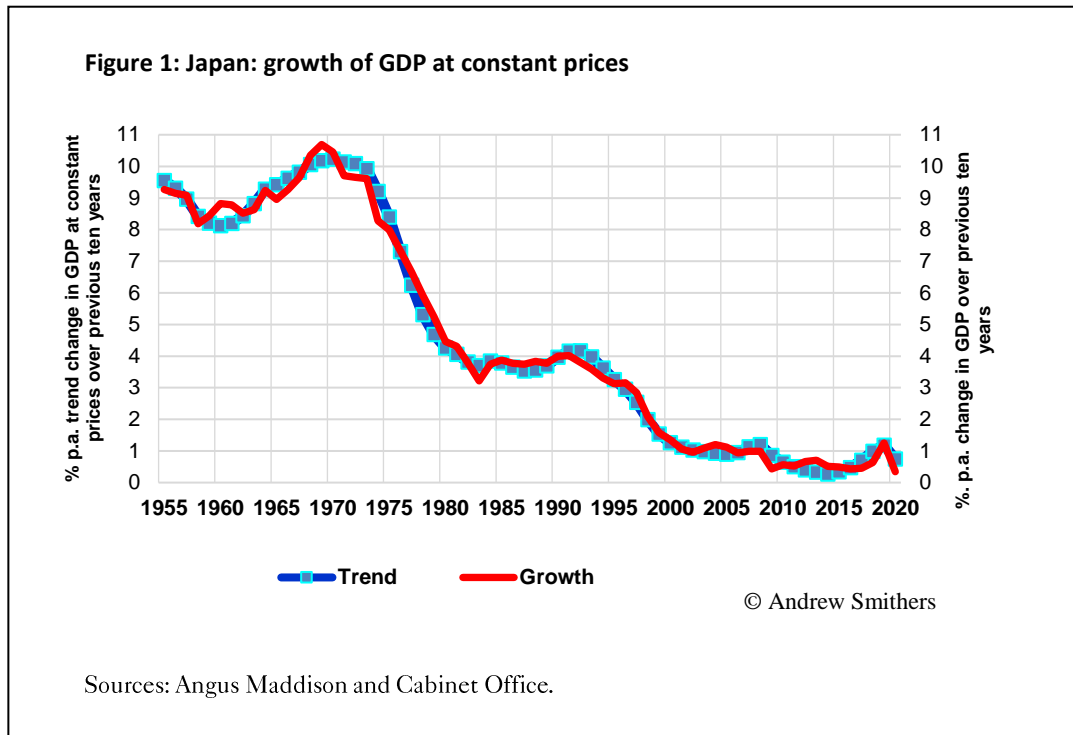
# Japan: Investment and Growth

*Andrew Smithers*

## **Key Points**

- The Japanese economy has been growing at less than 1% over the past 20 years. This is a marked fall from its previous trend.
- This decline cannot be explained by any weakness in business investment, which is little changed as a percentage of GDP.
- I show that the explanation lies in the fall in tangible investment, the decline in which has been often overlooked as it has been offset by a rise in the share of total business investment taken by intangibles.
- The trend growth of economies depends on the speed at which the value of the produced capital stock rises. As intangible assets depreciate much more rapidly than tangibles, growth depends on the value of tangible assets.
- The level of net tangible investment thus determines trend growth.
- The fall in the trend rate of Japanese growth is thus due to the fall in tangible business investment. This mirrors the similar slowdown seen in the USA.

## Introduction

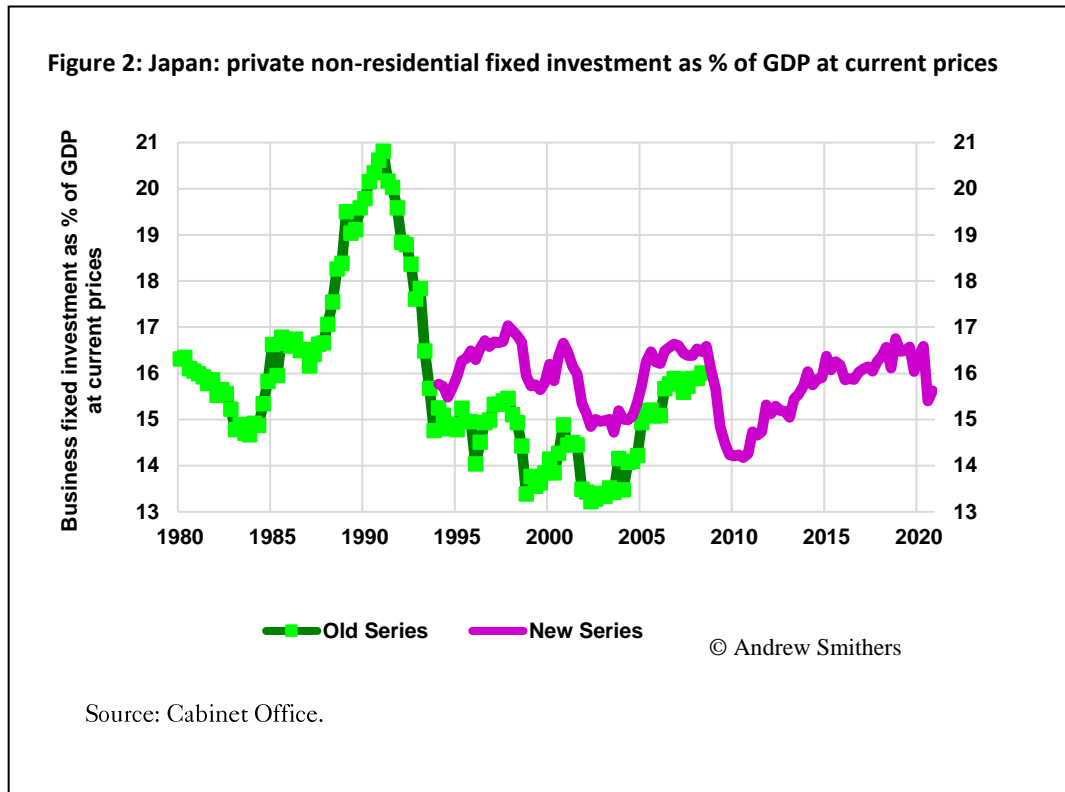


The Japanese economy grew at over 8% p.a. from 1945 to 1975 and then slowed to 4%, a rate which continued until 1990; since 2000 it has grown at less than 0.5% p.a. (0.9% p.a. measured from 2000 to 2019). Even allowing for the severity of the recession in 2008 and the impact of COVID-19 on 2020, its trend rate of growth, as Figure 1 shows, appears to be no more than 1% p.a.<sup>1</sup>

While the previous slowdowns could be readily explained by the fall in business investment this cannot straightforwardly explain the weakness in this century's growth. As Figure 2 shows, business investment has fluctuated since 1995 around a steady average of 15%.

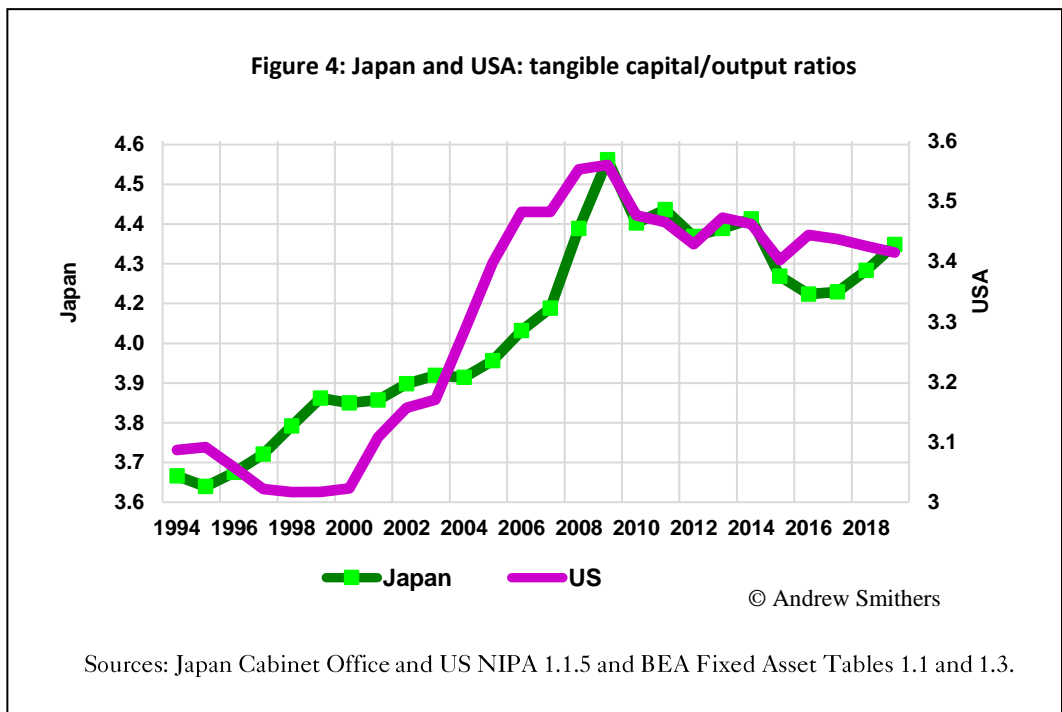
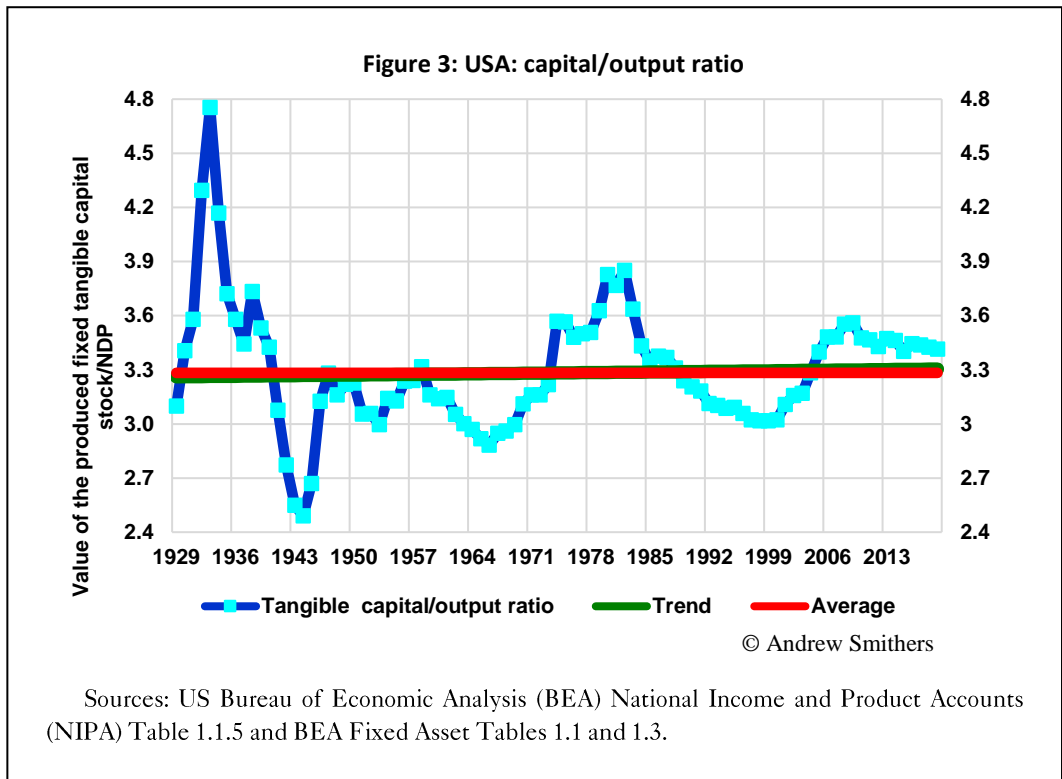
<sup>1</sup> In Figures 1, 6 and 7 and I derive the trend by plotting the linear least squares of annual log changes in GDP at constant prices over ten years.

## Growth, Investment and Capital Stock

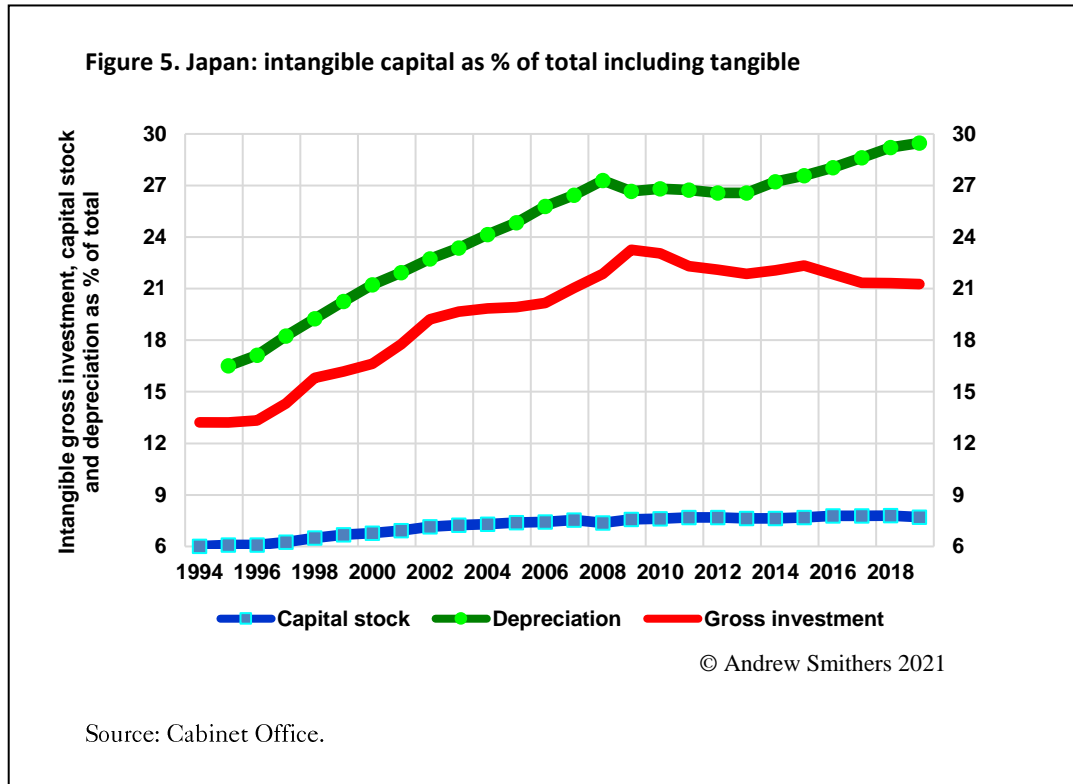


The growth potential of an economy is determined by the growth in the value of its fixed produced capital stock. Long-term data are not available for Japan, so I illustrate this for the USA in Figure 3, which shows that the ratio of output, measured by net domestic output (NDP, i.e. GDP after capital consumption), to the value of fixed produced tangible capital stock fluctuates around a stable, mean-reverting average.<sup>2</sup>

<sup>2</sup> The theoretical explanation why this ratio is stationary is set out in the Appendix.

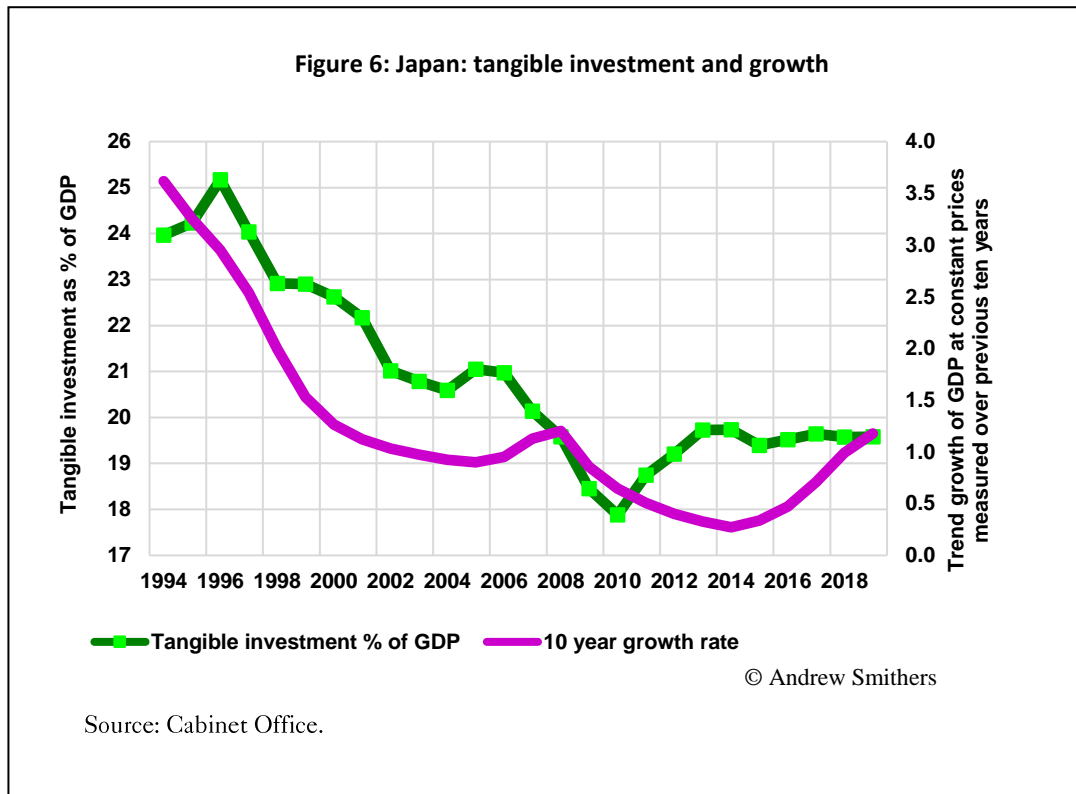


We only have Japanese data since 1994 and I compare these with the USA in Figure 4. Their pattern is strikingly similar ( $R^2 = 0.804$ ), although the Japanese ratio is consistently 20% higher. Despite the limited number of years for which Japanese data are available, the similarity of the Japanese and US patterns since 1994 are consistent with the theory that the tangible capital output ratio is mean-reverting and it is reasonable to assume that, like the USA, in Japan it was close to its long-term level in 2019.



The value of the capital stock falls each year as past investment depreciates and rises through additions from new investment. Annual net changes thus equal gross investment minus capital consumption. As Figure 5 shows, investment in intangible capital makes no significant contribution to the growth of the capital stock despite having amounted since 2008 to over 20% of gross investment.<sup>3</sup>

<sup>3</sup> Depreciation is calculated from the change in the value of tangible and intangible stocks measured at constant prices less the additions from gross investment. ([https://www.esri.cao.go.jp/en/sna/data/kakuhou/files/2019/tables/2019ss4rn\\_en.xlsx](https://www.esri.cao.go.jp/en/sna/data/kakuhou/files/2019/tables/2019ss4rn_en.xlsx) and [https://www.esri.cao.go.jp/en/sna/data/kakuhou/files/2019/tables/2019s14rn\\_en.xlsx](https://www.esri.cao.go.jp/en/sna/data/kakuhou/files/2019/tables/2019s14rn_en.xlsx)).



In my view intangible capital should not be included as part of the productive capital of the economy but because intangibles are depreciated quickly in the published data, in practice doing so has not produced significant distortions in them.<sup>4</sup> As Figure 5 illustrates, 93% of the economy’s produced capital stock is in tangible form because intangible investment is depreciated so rapidly that the growth of produced capital stock depends almost entirely on the level of tangible capital investment.

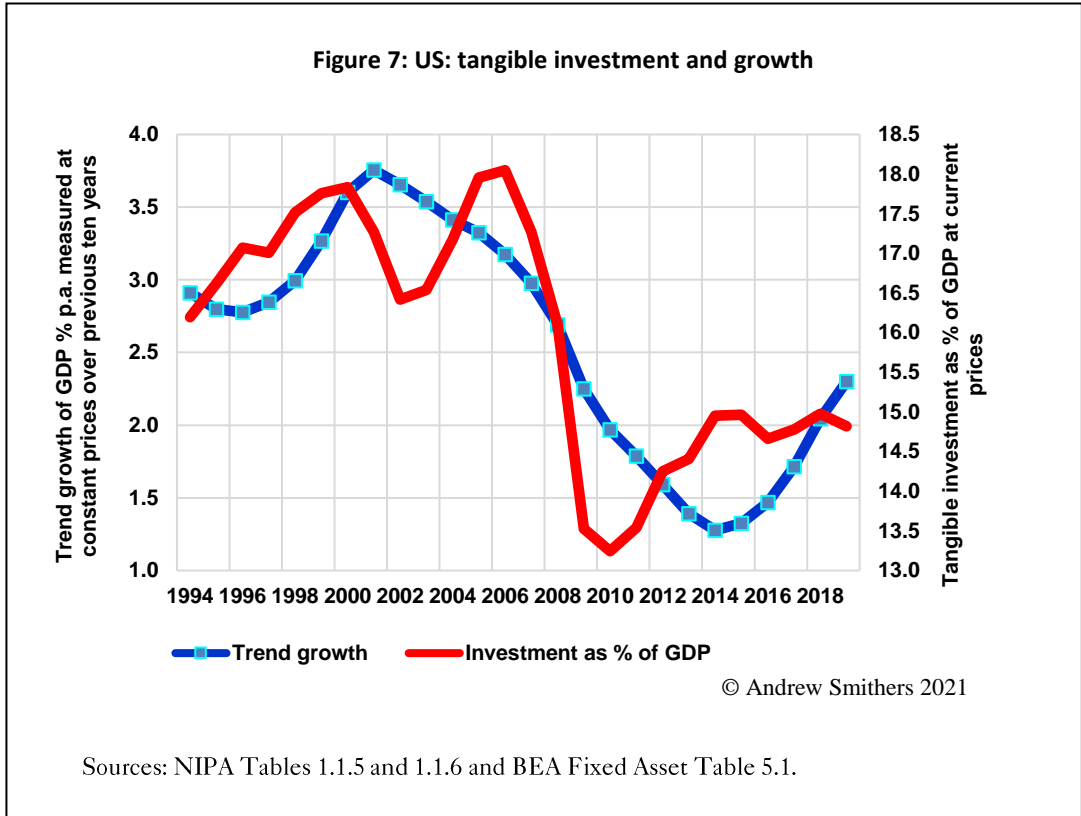
Figure 6, which covers all the years for which the data for tangible investment are available, illustrates how the fall in the ratio of gross tangible investment has been matched by a decline in the trend growth of the economy ( $R^2 = 0.747$ ).

There are several possible causes for the decline in tangible investment, including a slower rate of improvement in technology, slower growth in working hours with a consequential decline in the potential output of new equipment and lower expectations of future growth. Many economists have pointed to the

<sup>4</sup> See ‘The debate over the depreciation of intangible capital’ by Andrew Smithers, *World Economics*, 21, 1 (January–March 2020).

decline in the growth rate of the population of working age, though this has been partly compensated by the increase in the labour participation rate.

**The Slowdown in US Growth Has the Same Cause**



US growth has also slowed in recent years and, as in Japan, the decline has matched the fall in tangible investment, as I illustrate in Figure 7 which covers the same period as Figure 6 ( $R^2 = 0.674$ ).

## Appendix

### The Mean Reversion of the Ratio of Capital/Output Ratio.

The evidence for this, shown in Figure 3, is consistent with the NTV model of growth,<sup>5</sup> in which the value of the capital stock will have a constant ratio to output and, given cyclical fluctuations in the value shown by survey data, the ratio should be mean-reverting. Value (V) equals profits after tax ( $\Pi$ ) at some multiple ( $\theta$ ) of the non-technology variables ('NTVs'), thus  $V = \Pi \times \theta \text{NTV}$ . Profits are the share of output which can be financed at the current level of NTV and are thus the level of output divided by some multiple ( $\varepsilon$ ) of NTV, so  $\Pi = Y / (\varepsilon \text{NTV})$ . Thus  $V = (Y / (\varepsilon \text{NTV})) \times (\theta \text{NTV}) = (\theta / \varepsilon) \times (Y)$ .

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<sup>5</sup> For an account of the NTV model see *Productivity and the Bonus Culture* by Andrew Smithers (Oxford University Press, 2019) and 'The NTV model for total factor productivity' by Andrew Smithers, *World Economics* 20, 2 (April–June 2019).



# USA–India FTA

## Trade and Strategic Considerations

*Siddhartha K. Rastogi*

### Key Points

- Free Trade Agreements have gained momentum in a world with a flailing multilateral system of negotiations. The increased might of China has also pushed the global North including the EU and the USA to fall back on increasing direct trade linkages with the global South to counterbalance Chinese comparative advantages.
- India has emerged as the main contender for considering FTAs, particularly to counterbalance China. India also needs these FTAs for strategic reasons, such as growth, technology transfer and for geostrategic purposes.
- India and the USA have a broad agreement on the need for a FTA; however, some points of divergence remain. For the USA, stricter protection of intellectual property rights and more freedom for US tech firms are the major demands. India, on the other hand, is firm on more regulation for e-commerce firms and local data storage rules and demands greater access to US agricultural markets.
- While both countries have strategic reasons to become a closer trade partner, domestic lobbies or perceptions of national interest hold back the negotiators of both sides.

### Introduction

The push towards more and more Free Trade Agreements (FTA) at bilateral or multilateral levels has been one of the cornerstones of the General Agreement on Tariff and Trade (GATT)—World Trade Organization (WTO) policy objectives for more than half a century. While both GATT and WTO have adopted multilateralism and non-discrimination as core principles, FTAs (or

variants in the form of regional or preferential trade agreements) have been accepted as partial progress towards the ultimate objective of universal free trade. Although FTAs have been only the third-most-effective reason for expanding free trade behind containerisation of merchandise trade and membership of GATT-WTO (Bernhofen et al., 2012), those are the only ones where any policy intervention may work on an ongoing basis. Thus it is no surprise that countries liberalising trade often resort to a spree of FTAs.

Generally, it is the global South that has resorted to FTAs as a means of gaining momentum in trade. Also, they have generally focused on seeking FTAs with the developed countries of the global North owing to colonial legacy as well as the resourcefulness of Northern nations. For example, out of the 350 Regional Trade Agreements (RTAs) notified up till 2021, only four are between a middle-income and a low-income country and not a single FTA between a developed and a low-income country has been notified (WTO, 2021a).

However, since the global financial crisis of 2008/9, the balance has tilted a little. While the developed nations still control the lion's share of world trade, global South–South trade, i.e. trade among developing countries, has shown significant progress. In fact, by 2015 global South–South migration exceeded the global South–North (developing country to developed country) migration (World Bank, 2015). However, global South–South trade is still far behind the Northern hemisphere's share and almost all the leading trading nations are developed ones (see Tables 1 and 2 below).

**Table 1: Leaders in world merchandise trade, 2019**

Rank	Exporters	Value (US\$ bn)	% share	Rank	Importers	Value (US\$ bn)	% share
1	China	2,498.57	13.32	1	USA	2,568.40	13.47
2	USA	1,645.17	8.77	2	China	2,068.95	10.85
3	Germany	1,486.46	7.93	3	Germany	1,236.30	6.48
4	Netherlands	721.30	3.85	4	Japan	720.96	3.78
5	Japan	705.84	3.76	5	UK	692.58	3.63
6	France	555.10	2.96	6	Netherlands	646.75	3.39
7	South Korea	542.33	2.89	7	France	637.95	3.35
8	Hong Kong	535.71	2.86	8	Hong Kong	578.59	3.03
9	Italy	532.68	2.84	9	South Korea	503.26	2.64
10	Mexico	472.27	2.52	10	India	478.88	2.51
18	India	323.25	1.72				
	Top 10	9,695	51.70		Top 10	10,133	53.15
	Top 20	13,491	71.93		Top 20	13,768	72.22
	Top 50	17,539	93.52		Top 50	17,516	91.88
	All	18,755	100		All	19,065	100

Source: WTO, 2020.

**Table 2: Leaders in world services trade, 2019**

Rank	Exporters	Value (US\$ bn)	% share	Rank	Importers	Value (US\$ bn)	% share
1	USA	875.83	14.36	1	USA	588.36	10.24
2	UK	416.31	6.83	2	China	500.68	8.71
3	Germany	340.73	5.59	3	Germany	364.60	6.34
4	France	287.62	4.72	4	Ireland	321.16	5.59
5	China	283.19	4.64	5	UK	283.79	4.94
6	Netherlands	264.13	4.33	6	France	262.85	4.57
7	Ireland	238.96	3.92	7	Netherlands	246.39	4.29
8	India	214.36	3.52	8	Japan	203.59	3.54
9	Japan	205.06	3.36	9	Singapore	199.05	3.46
10	Singapore	204.81	3.36	10	India	179.18	3.12
	Top 10	3,243	54.63		Top 10	3,150	54.81
	Top 40	5,344	89.28		Top 40	5,149	89.59
	World	6,098	100		World	5,747	100

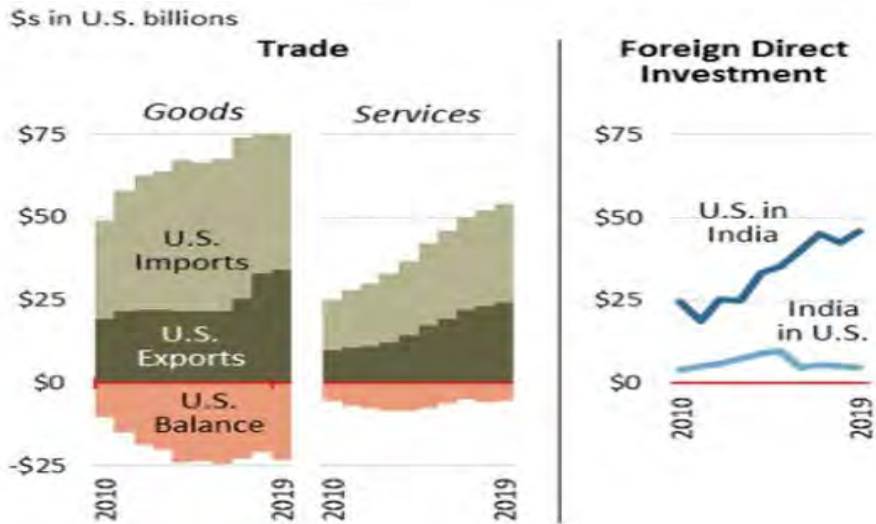
Source: WTO 2020.

Given the overarching trade balances in favour of China, many countries have felt the need to diversify the source of their imports for strategic reasons. When a trade war against China was initiated by mainly European countries in 2014, the Trump administration of the USA made most headlines on the subject. The USA has also tried promoting India as a counterbalance to China in the region. It is no wonder that the Indo-US 2+2 dialogue (joint meeting of defence and external affairs ministers) concluded in October 2020 specifically mentions cooperation in the Indo-Pacific region and the prospects of a formal quadrilateral partnership (India–USA–Japan–Australia) (MEA, 2020). Since Trump started his anti-China rhetoric with trade-related actions, it was obvious that trade talks would be part of the Indo-US bonhomie.

### **Rationale for an Indo-US FTA**

In fact, an Indo-US trade deal has been under discussion for more than two decades now (Lawrence and Chadha, 2004) and became a major focus of diplomatic and trade negotiations from 2018. However, it picked up pace only in the year 2020. Two reasons for this sudden hurry to finalise the long-negotiated deal are believed to be pressures on pandemic-hit economies and the US presidential elections in November 2020. Although the fate of the deal hangs in the balance now, with the change of US government, India needs a serious relook at the deal instead of rushing in quick. Figure 1 below shows US trade and investment with India and the growth over the past decade in these figures.

Figure 1: US trade and investment with India



Source: Congressional Research Service, 2020.

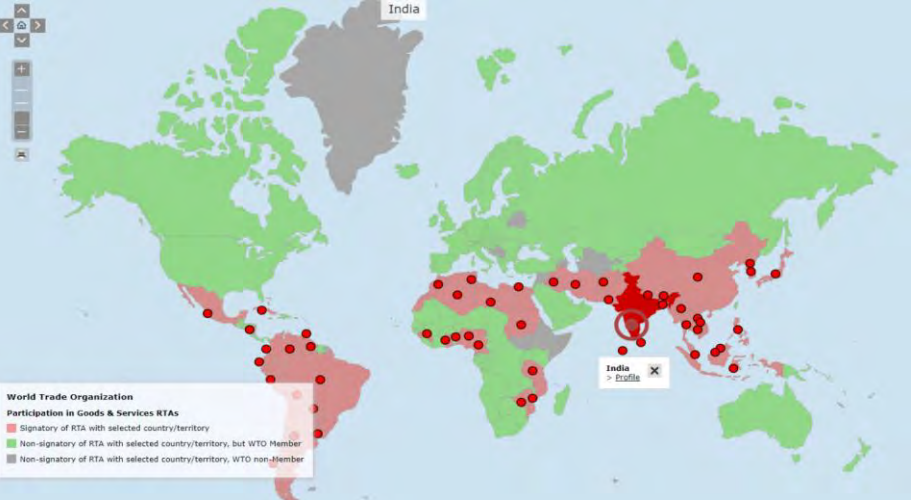
While India ranks ninth among all US merchandise trade partners with 2.2% of trade, the USA is a much more important partner for India. It has been India’s top export destination with about 16% of merchandise exports, and its second-largest source of imports (after China) with 6.5% of merchandise imports. Overall trade numbers-wise, the USA is India’s largest trading partner, accounting for 11.1% of total Indian trade, on a par with the European Union and ahead of China (10.7%) (IANS, 2020). India’s services, as well as remittances, also heavily depend on the USA. At the same time, it would be advantageous for both India and the USA to go ahead with a fast-track FTA given their limited exposure to similar agreements (see Figures 2 and 3 below).

**Figure 2: US Regional Trade Agreements with the world, 2021**



Source: WTO, 2021b.

**Figure 3: India's Regional Trade Agreements with the world, 2021**



Source: WTO, 2021b.

As is clear from Figures 2 and 3, the USA has very few FTAs, all strategic, while India has a presence mainly limited to the global South. Accordingly, both the countries may have a reason to look beyond their usual diplomatic set. If rising tension between India and China is any indicator, US goodwill may become more critical for India. However, to counterbalance China, the USA requires a strategic ally and no other country in Asia seems to fit that role better than India. However, the USA has tried to gain more bargaining chips against India in the recent past. One evidence of that is the US cancellation of India's preferred status under the Generalized System of Preferences (GSP), which occurred in the middle of the ongoing trade negotiations and affected about 2,000 product lines, representing about 14% of Indian exports to the USA worth \$5.7 billion (PTI, 2019).

### **Expectations from an FTA**

Fukase and Martin (2016) suggest that the USA would gain roughly equally from the Trans-Pacific Partnership and the US–EU FTA (from each deal US\$ 6.4 billion) whereas the welfare gains from a potential India–US FTA would be about US\$ 3.7 billion. Conversely, from India's perspective, they estimate its welfare gains from an India–EU FTA and an India–ASEAN FTA to be US\$ 2.1 billion and US\$ 2.5 billion respectively, while the gains from a potential India–USA FTA would reach about US\$ 1.4 billion.

However, before evaluating the macro numbers of an Indo-US trade deal, let us take a look at the demands from each side. The US demands include market access for agricultural goods, mainly dairy and dry fruits. The USA heavily subsidises farm products, which come from politically sensitive areas. Additionally, it wants removal of price controls on medical devices (such as coronary stents and knee-replacement hardware) and reductions in duty on several industrial goods (mainly Harley-Davidson motorcycles, which attract 50% duty now, and recently attracted 100% duty) are also on the US wish list (Pattanayak, 2020).

Further, stronger protection of US intellectual property rights, mainly by removal of section 3(d) and 3(j) of the Indian Patent Act, is also demanded by the US pharma lobby. To make this clear at a technical level, section 3(d) prevents 'evergreening' of medicinal drugs, and under it several patents filed by

US pharmaceutical firms have been rejected; section 3(j) bars patenting of plant varieties, aiming to safeguard traditional Indian knowledge about the medicinal properties or commercial value of plants such as neem, holy basil, turmeric, basmati rice, among others. In the early 2000s, India fought a long battle against US firms that tried to obtain patents on knowledge obtained from traditional Indian sources (Kumar, 1997). The introduction of section 3(j) and the national registry of the plant genetic resources of India were consequences of such patent raids.

The long list of US demands also include non-local storage of Indian data and removal of restrictions on US e-commerce firms. This demand is attributed to the big tech lobby in the USA, which finds it more convenient to abide by US laws than Indian laws. If a requirement for local storage of data were enforced on US tech firms, it might have three simultaneous outcomes—one, losses to US-based storage and server firms; two, a great boost to Indian hardware, data storage and server firms; and three, stricter enforcement of Indian laws, which have largely been ignored by US tech firms thus far. Similarly, the e-commerce giants of the US might face local taxes and more stringent regulation if Indian laws were applied rather than the presently applicable US laws (*Business Line*, 2020).

In fact, the FTA was deemed so critical to the US strategy to counterbalance China that a mini-trade deal was proposed in January 2021 for quicker results. It was expected to cover tariff-related concessions for US farm produce, especially dairy items, pricing of pharmaceutical products such as those mentioned above and information and communication technology products. In return, the USA was expected to restore benefits accorded to Indian exporters under the GSP (Mishra, 2021).

While one might expect a two-way deal, India seems to have a much shorter list of demands. While this may be attributed to the typically ill-prepared Indian negotiators at the trade table, the main Indian stance has been to resist the US demands. Her own short wish list includes more market access to US markets for agricultural goods and reduction of US agricultural subsidies in line with WTO demands. India has also demanded exemption from the ‘Trump tariffs’ on steel and aluminium products. Further, it has long demanded localised storage for Indian data (at present, Indian law requires only financial data to be stored in India). It is interesting to note that most of India’s demands amount to



negating Trump actions of the last two years. In order to extract large leverage from India, an industrially embattled and exhausted USA has offered to restore preferred GSP status to India (PTI, 2020). This may give a slight competitive boost to US\$ 5.46 billion worth of Indian exports, which was lost when India was removed from the GSP beneficiaries list.

Why does India have a short list of demands against the long list of US demands? Primarily because Indian industry has no lobby or close connection with the Indian government; whereas US industry has deep ties with the government, so much so that the US government often negotiates on behalf of its industrial lobby. There lies a strategic lesson for India: to treat Indian industry as a partner in decision-making instead of leaving everything to the bureaucrats, who have no skin in the game. Going forward, the Indian negotiators should definitely keep in mind the following points.

While the USA might have seen the agricultural producer lobby as a great vote bank for Trump, India has no scope to accept hyper-subsidised US agricultural products. As it is, India is one of the largest importers of almonds from the USA, having imported fresh or dried shelled almonds worth US\$615.12 million and fresh apples worth \$145.20 million in 2018–19 (Ghosh, 2020). Dairy produce would be particularly unacceptable owing to the capital-intensive, industrial scale of cattle farms, mechanical milking of cattle and frequent ‘treatments’ of the cattle, such as feeding them chicken and injecting them with hormonal drugs. It ought to be particularly difficult for the Modi government, which expresses a cow-sympathising policy, not to mention the disaster it could spell for millions of small dairy farmers and marginal farmers in India, who cannot meet the US scale or capital and do not enjoy the subsidy. Moreover, India, along with other developing countries, has fought against US agricultural subsidies (more appropriately the OECD’s subsidies) since 1986 at least (the Uruguay round of GATT). Giving agricultural market access to the USA would amount to undoing everything that India fought for through GATT–WTO since 1986.

Further, India accounts for 40% of US generic drug imports, including the now famous anti-malarial hydroxychloroquine. The Indian pharmaceutical industry may become even more critical for the world in the face of the present pandemic. In fact, by allowing generic drugs into the USA, India would do the USA a favour, although this would not please the US pharmaceutical lobby.

Moreover, the US demand that India let go of section 3(d) and 3(j) of the Indian Patent Act are an intervention in the sovereign process of the nation. The Indian negotiators should not forget the long battle fought by the Vajpayee government to save neem, turmeric and holy basil (*tulsi*) from US patents.

## Conclusion

While it is apparent from the discussion above that a mini- or full-blown FTA is important for both the USA and India, the negotiation cart is seemingly stuck between the diplomatic, political and trade channels of the two countries. Given the economic muscle of the USA, India requires the deal; and given the strategic need to counterbalance Chinese aggression, the USA needs the deal. However, neither country seems to accept the urgency, perhaps seeking to hang on to bargaining chips.

The obvious question arises: what can India offer the USA in order to strike a deal, if agricultural entry is out of the question? Some obvious choices may include reducing the tariffs on imported Harley-Davidson motorcycles, which has been on the US list since George W. Bush visited India in 2006. In addition, India may need to repackage a lot of offers to sell them to the USA, such as the cheap pharma supplies mentioned above and the country's superior IT talent, which assimilates better in US society than many other nationalities and ethnicities. Similarly, the USA may have to behave like a nation rather than a representative of the big tech firms negotiating on their behalf. While the existence and influence of the military-industrial complex is still understood and accepted in international negotiations, US corporate advocacy may still be unpalatable to many countries.

However, when the US trade representative Katherine Chi Tai and Indian commerce minister Piyush Goyal sit across the table to draw up the anticipated trade deal, India should not become desperate to strike one. Rather, it should take advantage of the US desperation following a highly contested election year, to strike the deal on its own terms.

## References

Bernhofen, D.M., El-Sahli, Z. and Kneller, R. (2012). Estimating the effects of the container revolution on world trade. *Scandinavian Working Papers in Economics*, Working Paper 2013:4. Available at:

[https://project.nek.lu.se/publications/workpap/papers/WP13\\_4.pdf](https://project.nek.lu.se/publications/workpap/papers/WP13_4.pdf), accessed 7 January 2021.

*Business Line* (2020). India–US FTA not possible as India can't give what US wants. *The Hindu Business Line*, 4 August. Available at:

[www.thehindubusinessline.com/economy/india-us-fta-not-possible-as-india-cant-give-what-us-wants/article32269199.ece](http://www.thehindubusinessline.com/economy/india-us-fta-not-possible-as-india-cant-give-what-us-wants/article32269199.ece), accessed 1 March 2021.

Congressional Research Service (2020). US–Indian trade relations. In *Focus*, 23 December. Available at: <https://crsreports.congress.gov>, accessed 1 March 2021.

Fukase, E. and Martin, W. (2016). The economic potential of an India–US Free Trade Agreement. *Journal of Economic Integration*, 31, 4, pp. 774–816.

Ghosh, K. (2020). Joe Biden may bring back diplomacy in trade negotiations with India. *Money Control*. Available at:

[www.moneycontrol.com/news/business/economy/joe-biden-may-bring-back-diplomacy-in-trade-negotiations-with-india-6376541.html](http://www.moneycontrol.com/news/business/economy/joe-biden-may-bring-back-diplomacy-in-trade-negotiations-with-india-6376541.html), accessed 3 March 2021.

IANS (2020). India set to resume talks on free trade agreements with EU, US. *Business Standard*, 21 November. Available at: [www.business-standard.com/article/economy-policy/india-set-to-resume-talks-on-free-trade-agreements-with-eu-us-120112100594\\_1.html](http://www.business-standard.com/article/economy-policy/india-set-to-resume-talks-on-free-trade-agreements-with-eu-us-120112100594_1.html), accessed 1 March 2021.

Kumar, S. (1997). India wins battle with USA over turmeric patent. *The Lancet*, 350, 9079, p. 724. Available at:

[www.thelancet.com/journals/lancet/article/PIIS0140-6736\(05\)63536-2/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(05)63536-2/fulltext), accessed 1 March 2021.

Lawrence, R.Z. and Chadha, R. (2004). Should a US–India FTA be part of India’s trade strategy? In Suman Bery, Barry Bosworth and Arvind Panagariya (eds), *India Policy Forum 2004*. New Delhi and Washington DC: National Council of Applied Economic Research and Brookings Institution.

Mishra, A.R. (2021). India–US trade deal may be put on the back burner. Live Mint, 22 January. Available at: [www.livemint.com/news/world/indiaus-trade-deal-may-be-put-on-the-back-burner-11611255214085.html](http://www.livemint.com/news/world/indiaus-trade-deal-may-be-put-on-the-back-burner-11611255214085.html), accessed 26 January 2021.

MEA (2020). Joint statement on the third India–US 2+2 ministerial dialogue. Ministry of External Affairs, India. Available at: <https://mea.gov.in/bilateral-documents.htm?dtl/33145/Joint+Statement+on+the+third+IndiaUS+2432+Ministerial+Dialogue>, accessed 27 February 2021.

Pattanayak, B. (2020). Joe Biden as US President may review ‘mini deal’ with India. *Financial Express*, 28 December. Available at: [www.financialexpress.com/economy/joe-biden-as-us-president-may-review-mini-deal-with-india/2158653/](http://www.financialexpress.com/economy/joe-biden-as-us-president-may-review-mini-deal-with-india/2158653/), accessed 27 February 2021.

PTI (2019). Suspension of preferential trade status for India under GSP is ‘done deal’: Trump. *Business Today*, 31 May. Available at: [www.businesstoday.in/current/economy-politics/suspension-of-preferential-trade-status-for-india-under-gsp-is-done-deal-trump/story/352427.html](http://www.businesstoday.in/current/economy-politics/suspension-of-preferential-trade-status-for-india-under-gsp-is-done-deal-trump/story/352427.html), accessed 1 March 2021.

PTI (2020). Restoration of India’s GSP status, a small Indo-US trade deal to send very strong signal: Mukesh Aghi, USISPF. *The Economic Times*, 10 November. Available at: <https://economictimes.indiatimes.com/news/economy/foreign-trade/restoration-of-indias-gsp-status-a-small-indo-us-trade-deal-to-send-very-strong-signal-mukesh-aghi-usispf/articleshow/79145211.cms>, accessed 27 February 2021.

World Bank (2015). International migration at all-time high. *Migration and Remittances Factbook 2016*. Available at: [www.worldbank.org/en/news/press-release/2015/12/18/international-migrants-and-remittances-continue-to-grow-as-people-search-for-better-opportunities-new-report-finds](http://www.worldbank.org/en/news/press-release/2015/12/18/international-migrants-and-remittances-continue-to-grow-as-people-search-for-better-opportunities-new-report-finds), accessed 27 January 2021.

World Trade Organization (WTO) (2020). Highlights of world trade in 2019. In: *World Trade Statistical Review 2020* (Geneva: World Trade Organization). Available at: [www.wto.org/english/res\\_e/statis\\_e/wts2020\\_e/wts2020chapter02\\_e.pdf](http://www.wto.org/english/res_e/statis_e/wts2020_e/wts2020chapter02_e.pdf), accessed 7 January 2021.

WTO (2021a). World Trade Organization preferential trade agreements. Available at: <http://ptadb.wto.org/ptaList.aspx>, accessed 1 March 2021.

WTO (2021b). World Trade Organization regional trade agreements database country profile, RTA Database. Available at: [www.wto.org/english/tratop\\_e/region\\_e/rta\\_participation\\_map\\_e.htm](http://www.wto.org/english/tratop_e/region_e/rta_participation_map_e.htm), accessed 1 March 2021.