JANUARY 21, 2023 Vol LVIII No 3 ₹130

Economic&PoliticalWEEKLY

A SAMEEKSHA TRUST PUBLICATION www.epw.in

Media of the Movement

The *Trolley Times* helped the farmers' movement establish a network of open in-group communication by giving protesters and supporters a platform to speak and express their concerns, when they were less represented in the mainstream media. page 58

Coal and Energy Security

Though a switch from coal to natural gas reduces emission intensity to half, India's prime objective should be the energy security, and the climate change goals can be weaved into the strategy further. page 51

The Court on Demonetisation

The judgment feels like an academic exercise without much bearing on the development of the law or in defining boundaries within which institutions may act. page 10

Musings on FIFA World Cup

The politics of the Qatar world cup was framed by the fact that this was the first time the event was held in West Asia and the Arab world. page 22

Incongruities of Logistics Policy

The proposed unified logistics interface platform in the National Logistics Policy, 2022 does not include all the stakeholders in the Indian trade supply chain. page 13

The 'What,' 'Why,' and 'How' of a Widening Current Account Deficit

NILANJAN BANIK, S RAMAKRISHNA VELAMURI

The reason for the increase in the current account deficit during first quarter of fiscal year 2022–23 is analysed. One reason for the widening of CAD has to do with India's growing dependence on fossil fuels. There is also an element of lack of price competitiveness that is hurting exports. India is exporting low-valued technology-intensive goods whereas importing high-valued technology-advanced goods. The Government of India and the Reserve Bank of India are taking adequate measures to control the widening trade deficit. While some of these measures are yielding results in reducing CAD, external factors such as geopolitical tensions and the United States Federal Reserve System's move of quantitative tightening are making CAD difficult to control.

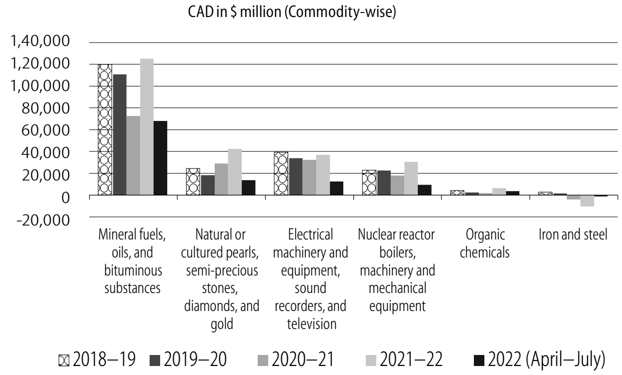
The authors acknowledge the support provided by the National Research Foundation of Korea Grant funded by the Korean government.

Nilanjan Banik (*nilbanik@gmail.com*) and S Ramakrishna Velamuri (*rvelamuri@mahindrauniversity.edu.in*) teach at the School of Management, Mahindra University, Hyderabad.

In recent times, an increase in India's current account deficit (CAD) has caught media attention.[1] According to India Ratings and Research (Fitch Rating Services), during the first quarter of the current fiscal year 2022–23, India's CAD widened to a nine-year high of 3.4% of gross domestic product (GDP) (Jasrai 2022). In this paper, we analyse the reasons for the widening CAD, and fiscal and monetary policy interventions to counter the same.[2] CAD comprises trade account (imports and exports of merchandise goods), services account (imports and exports of services), and net income from abroad (such as remittances). Out of these three components, trade account is the largest. As per the latest data, surplus in the services account and net income from abroad are smaller in comparison to deficit in the trade account. According to estimates from the Ministry of Commerce, Government of India (GoI), the trade deficit for the first quarter of the current fiscal year (April–July 2022) is $96.5 billion (GoI 2022a). Data on services trade are collated from the Reserve Bank of India (RBI). The trade surplus on account of services during the same period is $35.8 billion (RBI 2022). Services trade refers to exports and imports on account of travel, transportation, insurance, and miscellaneous services, such as software, business, financial, and communication services (RBI 2022). The quarterly data on the remittances account is not available. We take as a proxy the quarterly average figures for remittances over the last two years. During 2020 and 2021, India received $83.15 billion and $87 billion, respectively, as remittances from abroad; roughly translating to $21.2 billion per quarter (World Bank 2022). Adding the surplus figures on account of services trade and remittances, we still have a scenario of a CAD of nearly $40 billion.

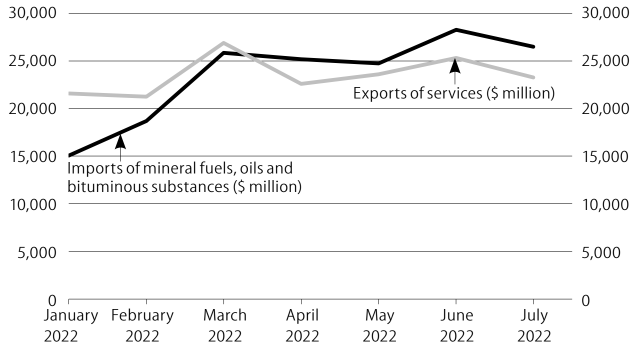
A search on items using the harmonised system (HS) at the 2-digit level reveals that there are six items (among the top 10 merchandise tradable items) that are of intra-industry types[3] and contribute more than 50% of India's total trade share (GoI 2022a). As Figure 1 and Table 1 (p 39) show, these six items of interest are mineral fuels, oils, and bituminous substances (HS Code 27); natural or cultured pearls, semi-precious stones, diamonds, and gold (HS Code 71); electrical machinery and equipment, sound recorders, and television (HS Code 85); nuclear reactor boilers, machinery, and mechanical equipment (HS Code 84); organic chemicals (HS Code 29); and iron and steel (HS Code 72). A few other items fall in the category of inter-industry trade, which features among the top 10 merchandise exports and imports. For example, India typically exports vehicles other than railway or tramway rolling stock

Figure 1: Sector-wise Contribution to CAD



Source: GoI (2022a) and authors' calculation.

Figure 2: Comparing Services Exports and Imports of Mineral Fuels, Oils, and Bituminous Substances



Source: GoI (2022a) and *RBI Bulletin* (2022).

(HS Code 87), and articles of apparel and clothing accessories, not knitted or crocheted (HS Codes 61 and 62), whereas imports plastics and articles thereof (HS Code 39), and animal and vegetable fats and oils (HS Code 15). Controlling CAD would call for understanding the nature of the deficit and demand management policy response (both fiscal and monetary) to counter this growing deficit.

Intra-industry Trade and CAD

India began its reform of the external sector in July 1991 by devaluing its currency by almost 19% (Banik 2001). This was followed by an explicit dual exchange rate regime in March 1992, where exporters received the free market rate. Finally, the exchange rate was unified in March 1993 with the public announcement that it is left to be determined by market forces. Peak tariffs came down from the high of 150% to 10% during early 2000 (Singh 2017). The newly ushered globalisation (through a reduction in tariffs and phasing out of quotas) led to increase in trade, most of which took the form of intra-industry trade.[4] Few other factors, such as India's entry into several regional trading agreements (RTAs), trade facilitation measures such as harmonisation of "rules of origin," and participation into global value chain network complemented the growth of intra-industry trade. India signed six different RTAs between 2006 and 2010. These are (i) South Asian Free Trade Area in 2006; (ii) India Bhutan Trade Agreement in 2006; (iii) India Chile Preferential Trade Agreement (PTA) in 2007; (iv) India MERCOSUR PTA in 2009; (v) India–ASEAN FTA in 2010; and (vi) India South Korea Comprehensive Economic Partnership Agreement in 2010. Theoretically, the occurrence of intra-industry trade has to do with the presence of increasing returns (Krugman 1981) and product diversity argument (Dixit and Stiglitz 1977). The prevalence of majority of trade items (six out of 10 most valuable items in terms of share in total trade) in the intra-industry trade category is therefore not surprising.

Table 1: Share of Top Six Items (Value-wise) in Total Trade (%)

HS Code	Commodity	2021–22 Share in Total Imports	2022–23 (April–July) Share in Total Imports	2021–22 Share in Total Exports	2022–23 (April–July) Share in Total Exports
27	Mineral fuels, oils, and bituminous substances	31.8	40.9	16.5	22.96
71	Natural or cultured pearls, semi-precious stones, diamonds, and gold	13.3	10.7	9.3	8.4
85	Electrical machinery and equipment, sound recorders, and television	10.2	8.3	4.8	5.2
84	Nuclear reactor, boilers, machinery and mechanical equipment	8.2	6.9	6.0	5.6
29	Organic chemicals	4.6	4.4	5.2	4.8
72	Iron and steel	2.0	1.8	5.4	3.8
Total % share in merchandise trade		70.1	73.0	47.2	50.8

Source: GoI (2022a) and authors' calculation.

A conspicuous feature of this intra-industry trade is that among the top six items that India trades in, there is a deficit for most of the items. The exception is iron and steel (HS Code 72) recording both trade deficits and surpluses over the last five years. However, incurring total trade deficit is not a new phenomenon. Since 2004–05, India never had a current account surplus. India had current account surpluses for three consecutive years: 2001–02, 2002–03, and 2003–04. Prior to 2000, India had a current account surplus in only two years: 1972–73 and 1976–77. In fact, current account surpluses during the early part of the 2000s prompted India to join several RTAs. However, this step has backfired as India's trade deficit has widened from $40.5 billion in 2005 to $155.6 billion in 2019. Trade deficit as a percentage of GDP increased from 3.7% in 2005 to 5.7% in 2019 (World Bank 2022). To prevent a further rise in trade deficit, India's pulled out of several RTAs and raised simple average tariff rates from 8.9% in 2010 to 16.3% in 2020 (WTO 2022). However, trade deficit continued to widen. In fact, just looking at the largest component of India's imports, which is mineral fuels, oils, and bituminous substances (HS Code 27), we find that during the first seven months of 2022, the deficit has outweighed the proceedings from total services exports.[5]

Over the last four years, on average, items under HS Code 27 were contributing around $93.31 billion, annually to the trade deficit (GoI 2022a). However, during the current fiscal, in the first quarter alone, items under HS Code 27 have contributed a deficit of $68.03 billion (GoI 2022a). This sudden rise in import bills on account of mineral fuels has to do with a rise in the price of crude oil in the international market and a stronger

United States (US) dollar. For instance, oil prices went up from around $84 per barrel in January 2022, to around $118 in June 2022.[6] Additionally, starting this year, the value of the Indian rupee depreciated by more than 7%, breaching a historic low of ₹80 to a dollar on 19 July 2022.

In the first quarter of the current fiscal, the share of HS Code 27 in India's total imports was 40.9%, whereas its share in India's total exports was 23.0% (Table 2). India mainly imports crude oil and thermal coal. Corporations then convert imported crude oil into refined petroleum products such as motor gasoline, diesel fuels, liquefied petroleum gas, etc, which are meant for domestic consumption and exports. A growing economy means more demand for transport and energy (met primarily by bituminous substances such as thermal coal).

Items falling under HS Code 27 are income-elastic, that is, the imports are likely to increase when any economy is growing. India is one of the fastest growing large economies, with GDP projected to grow around 7% in 2022–23 (Table 2). During the first quarter of 2022–23, real GDP grew by 13.5% on a year-on-year basis, which is higher by 3.8% in comparison to pre-pandemic levels. Therefore, it is not surprising that India will need more mineral fuels such as coal, petroleum, and natural gas to sustain growth.[7]

Apart from mineral fuels, another product category that has contributed to the rising CAD is natural or cultured pearls, semi-precious stones, diamonds, and gold (HS Code 71). This category, namely pearl, diamonds, and semi-precious stones suffered because of the Russia–Ukraine war. Due to a shortage in supply of rough diamonds and semi-precious stones from Russia, India had to import similar items from high-cost supplying countries in Africa and the United Arab Emirates. India is a diamond-polishing hub, importing rough diamonds and semiprecious stones, polishes and designs them into jewellery, and thereafter re-exports it. The case for gold is a little different. During 2021, India imported 1,067 tonnes of gold which was the highest during the last 10 years (PTI 2022). Gold is seen as a hedge against inflation. Import of gold touched a low during 2020, a year which was marked by the pandemic, with a lower growth and inflation number. Moreover, a disruption in international shipments, lack of livelihood, and marriages at the time of the pandemic lowered the demand for gold. The economy bounced back with a higher GDP number and demand for gold went up in 2021. As most of the gold imported is meant for domestic consumption, with a little element of intra-industry trade, an increase in gold imports is going to increase trade deficit.

Another item, namely organic chemicals (HS Code 29) contributed sporadically to widen the trade deficit. During COVID-19 times, India was heavily dependent on raw materials or active pharmaceutical imports (APIs) used for manufacturing medicines, from China. The percentage share of APIs from China increased from a tiny 1% in 1991 to 70% in 2019 (PwC 2020). Organic chemicals also find usage in the making of personal protective equipment kits and other dyes used during COVID-19 times. Although India is a leading exporter of generic drugs, the trade deficit for this category widened since the start of the pandemic.

Table 2: Summary Statistics of Macroeconomic Data

Parameters	2019	2020	2021
GDP growth rate, % year	3.7	-6.6	8.7
Inflation, % year	4.8	6.2	5.5
Current account balance, % of GDP	-0.9	0.9	-1.2
Yearly average currency exchange rate	70.39	74.10	73.93

Source: ADB (2022) and IRS (2022).

Possible Reasons for a Widening CAD

The above line of argument is that intra-industry trade leads to a higher trade deficit because of higher absorption in the domestic economy. The absorption approach to CAD states that a country will be able to reduce its trade deficit if its production of output increases more than what it consumes or absorbs in the domestic economy. In addition to the absorption approach, another reason for an increment in CAD could be that the country is exporting low-technology-intensive goods while importing high-technology-intensive goods. There are two ways to capture a country's export competitiveness. First is through price-competitiveness, which means for similar technology-intensive items, a lower price in the international market will fetch more demand. Second is that a more technology-intensive product will have more demand. Therefore, a country can be export-competitive due to a cost or productivity advantage (for example, China in textiles during the 1990s and the first two decades of the 21st century) or through technology-driven product differentiation (as is the case with Germany). In Table 3 we compare the price competitiveness of India's major exports in comparison to some of its competitors.

Results from Table 3 indicate that India is not price-competitive in the world market. The average annual three years data between 2019 and 2021 suggests that China, Thailand, South Korea, and Russia are more competitive in selling products than India. For identifying India's competitors with respect to the top five tradable items, we use the commodity trade data sourced from International Trade Centre (ITC 2022). A lower price competitiveness may affect some of India's price-sensitive exports such as articles of apparel and clothing accessories, knitted or crocheted (HS Codes 61 and 62), cotton (HS Code 52), and footwear, gaiters and the like (HS Code 64). In 2021–22, the share of these items in India's exports basket was 3.72% for HS Codes 61 and 62; 2.55% for HS Code 52; and 1.63% for HS Code 64 (GoI 2022a). Another reason for an increase in trade deficit has to do with the low-technology-intensive nature of

Table 3: India and Competitors—Export Competitiveness

	India	China	Thailand	South Korea	Russia
Inflation rates					
2019	4.8	2.5	0.7	0.4	4.47
2020	6.2	2.9	-0.8	0.5	3.38
2021	5.5	0.5	1.2	2.5	6.69
Exchange rates (% change)					
2019	2.9	4.4	-4.0	5.9	2.9
2020	5.3	-0.1	0.8	1.2	11.8
2021	-0.2	-6.5	2.3	-2.9	1.9
External competitiveness (Inflation—percentage change in nominal exchange rate. A lower value indicates a rise in competitiveness)					
2019	1.9	-1.9	4.7	-5.5	1.5
2020	0.9	3.0	-1.6	-0.7	-8.4
2021	5.7	7.0	-1.1	5.4	4.8
Three years' average	2.9	2.7	0.7	-0.3	-0.7

Source: ADB (2022) and IRS (2022).

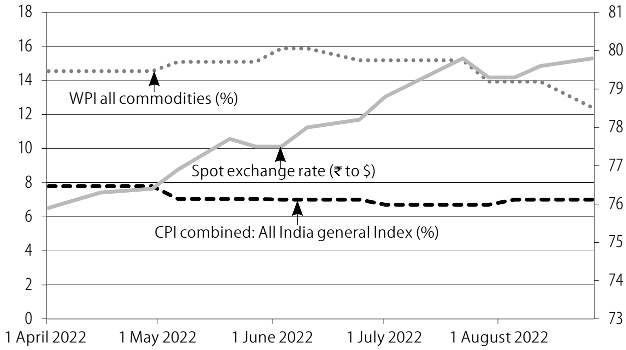
exports. India's aggregate bilateral intra-industry trade data with 25 major trade partners indicate a divergence in technology embodied in exports, with India exporting low-value technology-intensive items (Aggarwal et al 2022). Under such a condition, a depreciating currency does not help. During the 1970s and 1980s, India's currency lost half of its value in real terms against the US dollar. However, this did not translate to higher exports, with India's trade share in world trade falling from 0.75% to 0.5% (IMF 2008). On the contrary, during early part of 2000, South Korea, Japan, Indonesia, Thailand, and China, all witnessed a growth in their exports, in spite the exchange rates appreciating in real terms against the US dollar (IMF 2008). As per the Marshall Lerner condition, a depreciating (or, devaluation) currency will help to improve a country's trade balance with the rest of the world, only if the sum of the price elasticity of exports and imports is greater than one. For India, the Marshall Lerner condition may not hold for low-technology-intensive-items such as edible vegetables and certain roots and tubers (HS Code 07), cereals (HS Code 10), and fish, crustaceans, molluscs and other aquatic invertebrates (HS Code 03).

Demand Management Policies to Reduce CAD

Controlling CAD is important as it has significant implications for growth, due to its close relationship with national investment and saving. Following national income accounts identity, the total investment in a country has to be financed from savings arising out of the private sector, public sector, and the rest of the world. In a closed-economy framework, when savings equal investment, a rise in fiscal deficit implies a rise in CAD. To control CAD, it is essential to control fiscal deficit and inflation rates. The fiscal deficit in 2022–23 is estimated at 6.4% of GDP (GoI 2022a). CAD may also affect exchange rates with an implication on foreign exchange reserves, as may happen when the RBI intervenes in the foreign exchange market to prevent rupee's value from falling. A way to control the widening CAD is through increasing exports, in particular, merchandise exports. A targeted reduction in imports (category-wise) may help.

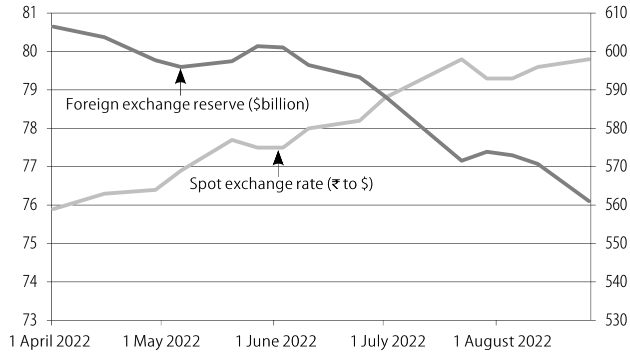
Fiscal policy measures: To reduce the dependence on foreign imports and increase export competitiveness, the GoI launched programmes such as the National Manufacturing Policy in 2011. Subsequently, schemes such as Make in India (2014) and the Atmanirbhar Bharat Abhiyan (2020) were also launched. Additionally, several policy instruments were introduced, such as the focus market scheme (FMS) and production-linked incentives (PLI). Under FMS, the government is providing incentives on exports that can be used later to settle against future import duties on raw material to be used for exports. PLIs were given in the form of tax rebates, import and export duty concessions, and easier land acquisition terms such as a cut in the land registration tax. PLI scheme was meant for increasing competitiveness of 14 items under manufacturing sectors such as mobile phones and components; bulk drugs and active pharmaceutical ingredients; autos and auto parts; white goods; textiles; specialty steels; high-efficiency solar modules; telecom and networking products; and electronic components. The idea is to enable foreign and domestic firms to invest in greenfield and brownfield projects. To facilitate

Figure 3: Nominal (Spot) Exchange Rate and Inflation Rates



Source: GoI (2022b) and Federal Bank of St Louis (2022).

Figure 4: Foreign Exchange Reserve and Spot Exchange Rate



Source: *RBI Bulletin* (2022) and Federal Bank of St Louis (2022).

technology transfer from developed countries, foreign direct investment (FDI) in the pharma and medical-equipment sectors has been allowed up to 100% through the automatic route. The move has already proved beneficial to some sectors. In the case of high value-added pharmaceutical exports such as formulation and vaccines, India is performing well because of FDI and government's support in the form of various schemes such as FMS and PLI (Banik and Chakraborty 2021). The PLI scheme has seen foreign smartphone manufacturers showing interest in investing in India (Pandey 2022). To lower trade and logistics costs, in the Union Budget 2022–23, the GoI has offered a 50-year interest-free loan of ₹1 lakh crore to various states government in India to enable them to spend on capital investments, especially in infrastructure. Such allocation of funds is expected to provide impetus to the Gati Shakti project, a master plan to improve multimodal connectivity in India. All these government initiatives are expected to enhance competitiveness and productivity growth for the Indian manufacturing firms.

Policymakers are also trying few other micro measures to reduce the widening CAD. For instance, India continues to buy cheap oil from Russia. Between April and May 2022, India imported $3.2 billion worth of crude oil from Russia, compared to zero imports during April and May 2021 (Ray 2022). Between February and May 2022, the total mineral fuel imports (of which crude oil is a part) from Russia stood at $5.3 billion, a fivefold jump over the corresponding period in 2021. The share of Russian mineral fuel imports (HS Code 72) in India's trade basket went up from 1% in February 2022 to 18% by June 2022.[8] During May 2022, India was getting Russian crude oil at a price that was $16 less than the average price of $110 per barrel. Additionally, on 9 September 2022 India banned export of 100% broken rice. Broken rice can be used for producing ethanol, an alternative source of fuel (*Hindu* 2022). To reduce gold imports, another item responsible for increasing trade deficit, on 1 July 2022, India increased customs tariffs on gold imports from 7.5% to 12.5%.

Monetary policy measures: A depreciating currency increases import costs and widens CAD. A way to control a fall in the value of the rupee is to control domestic inflation. Following the definition of real exchange rate which is nominal exchange rate $(e) \times$ foreign price (p^*)/domestic price (p); and law of one price (LOOP) that states $e \times p^*/p = 1$; we have a situation where a higher domestic inflation rate will lead to the depreciation of national currency. Following LOOP, there is evidence of an inverse relationship between the wholesale price index (WPI, all commodities) and the nominal spot exchange rate. However, there is no such relationship between the consumer price index (CPI, combined) and the nominal spot exchange rate (Figure 3).

To control inflation numbers, the RBI is following the policy of quantitative tightening. In 2022, the RBI increased the repo rate four times. The repo rate increased from 4.4% in May 2022 to 5.9% in September 2022. The RBI also intervened aggressively in the foreign exchange market, buying dollars, to prevent a further fall in the value of the rupee. However, as Figure 4 suggests, the depreciation of the rupee is continuing at the cost of a fall in India's foreign exchange reserves.

During this fiscal year 2022–23, the foreign exchange reserve fell from a high of $606 billion recorded on 1 April 2022 to $545.6 billion on 16 September 2022 (RBI 2022). The INR–dollar spot exchange rate fell from ₹75.9 to a dollar, to ₹79.8 during the same period. With the US Federal Reserve System (Fed) on the path of monetary tightening, and with the expectation that this monetary tightening is going to continue until the first quarter of 2023, there is a small likelihood that the rupee will appreciate. A more aggressive monetary tightening, with the Fed increasing the policy rate by 75 basis points as opposed to the RBI's increment by 50 basis points, the yield on one-year US treasury security increased from 1.56% on 1 August 2020 to 4.12% on 9 September 2022. Since March 2022, the Fed has raised interest rates by 300 basis points, as against 190 basis points raised by the RBI. With another round of 75 basis points Fed rate hike expected in November 2022, the US treasury yield is going to increase further, making the situation even more challenging for the RBI. In addition to raising the repo rate further, the RBI may take a few steps that may help get foreign currency reserves. For example, the RBI temporarily permitted commercial banks to open foreign currency non-resident (FCNR) accounts (held in foreign currency) and non-resident external (NRE) deposits from Indian residing outside India without any cap on the interest rate (Das 2022). Usually, commercial banks cannot charge a differential rate between domestic deposit rates vis-à-vis FCNR and NRE deposit rates. The RBI can also open a special dollar window for the oil marketing companies, so that these companies can buy dollars in exchange for rupees for a fixed period directly from the RBI rather than buying dollars from the foreign exchange market.[9]

This will not increase demand for the dollar in the foreign exchange market and prevent the value of the rupee from falling further. Additionally, an attempt to include Indian government bonds listed in the J P Morgan Emerging Markets Government Bond Index and FTSE Emerging Markets Government Bond Index, if successful, will ease the inflow of foreign currency, thereby improving foreign exchange reserves and curtailing a continued fall in the value of the rupee.

Conclusions

In this paper we discussed the definitional aspect of CAD, the factors that have led to the widening of CAD in recent times, and how policymakers both at the government and RBI are formulating policies to control this widening CAD. The data show a bulk of the reason for a widening trade deficit originates from India's dependency on energy and fossil fuel imports. An exogenous shock in the form of political tension arising out of the Russia–Ukraine war has led to an increase in the price of crude oil, with a negative fallout on the trade balance and a falling value of the rupee. To reduce CAD, there is a need to improve the productivity of India's exports. India has a comparative advantage in services trade such as telecommunications, computer and information services, other business services, and insurance and pension services. At a multilateral level, there is a need for negotiations to include extra-trade issues, for example, giving market access to the services trade in which India has comparative advantage.

NOTES

1 A quick search on Google about India's CAD is yielding close to 32,50,000 search items.

2 The objective of this commentary is not to examine the sustainability of CAD. Literature on CAD suggests against sustainability of CAD prior to 1991, and in favour of sustainability of CAD starting in the late 1990s. CAD is sustainable if the sum of discounted future values of current account surpluses is equal to the external borrowing. For the literature on sustainability of CAD in the context of India, refer to Chitgupi (2019).

3 Balassa (1966) used the term, "intra-industry trade," which means simultaneous exports and imports of merchandise items within the same sectors.

4 Intra-industry trade can be horizontal intra-industry type, which is trading in products that are similar in quality, for instance, Republic of Korea exporting and importing automobiles from India. Intra-industry can also be of vertical intra-industry type where trade in high and low-quality technology-intensive items happens (Krugman 1981).

5 We are not able to comment on the per-unit price. Trade volume data is not available at a 2- or 4-digit level. At a 6-digit level data become highly disaggregated which is outside the scope of this analysis.

6 Oil price refers to Brent Oil price per barrel. Oil price is reported real time. For this analysis we report the moving average price for the month of January and June 2022. Data is sourced from https://in.investing.com/commodities/brent-oil.

7 A proxy for growth in national income can be gauged from credit growth. Between April and August 2022, overall bank credit expanded by 16.2%, in comparison to 6.7% observed during corresponding period, in 2021. For HDFC Bank, India's largest private sector bank, there was a credit growth expansion by over 23.5% during Q2 2022 (Saproo 2022).

8 Finance minister Nirmala Sitharaman while addressing a business event said, "I respect the PM for his courage to get it (crude oil) from Russia because they are willing to give on discount … our entire import had 2 per cent of Russian component, it was ramped up to 12–13 per cent within a couple of months," https://economictimes.indiatimes.com/news/economy/foreign-trade/from-2-to-13-fm-nirmala-sitharaman-on-indias-russian-crude-oil-import/articleshow/94070802.cms.

9 At the end of the fixed period there will be a swap with the oil marketing returning back the dollars and in turn getting back the rupees. There is precedence of RBI opening forex swap windows to arrest the fall in the value of the rupee during 2013 and 2017.

REFERENCES

ADB (2022): "Asian Development Outlook 2022 UPDATE: Entrepreneurship in the Digital Age," Asian Development Bank, https://www.adb.org/outlook.

Aggarwal, S, D Chakraborty and N Banik (2022): "Does Difference in Environmental Standard Influence India's Bilateral IIT Flows? Evidence from GMM Results," *Journal of Emerging Market Finance*, https://journals.sagepub.com/doi/abs/10.1177/09726527221088412.

Balassa, B (1966): "Tariff Reductions and Trade in Manufacturers Among the Industrial Countries," *American Economic Review*, Vol 56, No 3, pp 466–73.

Banik, N (2001): "An Analysis of Indian Exports during the Nineties," *Economic & Political Weekly,* Vol 36, No 44, pp 4222–30.

Banik, N and D Chakraborty (2021): "Putting India's IPR Waiver for COVID-19 Vaccines into Perspective," *Economic & Political Weekly*, Vol 56, No 35, pp 19–22.

Chitgupi, A (2019): "Sustainability of India's Current Account Deficit: Role of Remittance Inflows and Software Services Exports," Institute for Social and Economic Change Working Paper No 469, pp 1–24, http://www.isec.ac.in/WP%20469%20-%20Aneesha%20Chitgupi%20-%20Final.pdf.

Das, V (2022): "Interest Rate Cap on FCNR(B), NRE Deposits Temporary Lifted," *Mint*, https://www.livemint.com/news/india/interest-rate-cap-on-fcnr-b-nre-deposits-temporarily-lifted-11657109505124.html.

Dixit, A and J Stiglitz (1977): "Monopolistic Competition and Optimum Product Diversity," *American Economic Review*, Vol 67, No 3, pp 297–308.

Federal Bank of St Louis (2022): "FRED Economic Data," https://fred.stlouisfed.org/series/DEXINUS.

GoI (2022a): "Trade Statistics," Ministry of Commerce, Government of India, https://commerce.gov.in/trade-statistics/.

— (2022b): "Price Statistics," Office of the Economic Adviser, Government of India, https://eaindustry.nic.in/key_economic_indicators.asp.

Hindu (2022): "Centre Bans Export of Broken Rice Due to Domestic Demand," Hindu Bureau, https://www.thehindu.com/news/national/india-bans-export-of-broken-rice/article65869447.ece.

IMF (2008): "India Selected Issues," IMF Country Report No 08/52, India: Selected Issues; International Monetary Fund Country Report 08/52; 4 January.

IRS (2022): "Yearly Average Currency Exchange Rates," Internal Revenue Service, https://www.irs.gov/individuals/international-taxpayers/yearly-average-currency-exchange-rates.

ITC (2022): "Trade Statistics," https://intracen.org/resources/trade-statistics.

Jasrai, P (2022): "External Trade Monitor: CAD Likely to Escalated to a 36-quarter High of 3.4% of GDP in 1QF23," External Trade Monitor, India Ratings and Research, https://www.indiaratings.co.in/rating-details/2/59527.

Krugman, P R (1981): "Intraindustry Specialization and the Gains from Trade," *Journal of Political Economy*, Vol 89, No 5, pp 959–73.

Pandey, P (2022): "With PLI Scheme, India Seeks to Wean Some Investments from China," Money Control, https://www.moneycontrol.com/news/business/with-pli-scheme-india-seeks-to-wean-some-investments-from-china-5721751.html.

PwC (2020): "Reviving India's API Industry," PricewaterhouseCoopers, https://www.pwc.in/assets/pdfs/industries/pharmaceuticals-and-life-sciences/reviving-indias-api-industry.pdf.

PTI (2022): "Gold Imports Bounced Back to 1,067 Tons in 2021: Report," *Times of India*, https://timesofindia.indiatimes.com/business/wealth/commodities/gold-imports-bounced-back-to-1067-tons-in-2021-report/articleshow/90133994.cms.

Ray, S (2022): "How India Fights Inflation: Buying Cheap Russian Oil Despite Western Criticism," *Forbes*, https://www.forbes.com/sites/siladityaray/2022/07/28/how-india-fights-inflation-buying-cheap-russian-oil-despite-western-criticism/?sh=7e55ab6234d6.

RBI (2022): "International Trade in Services," Reserve Bank of India, https://m.rbi.org.in/Scripts/Pr_DataRelease.aspx?SectionID=352&DateFilter=Year.

RBI Bulletin (2022): "Foreign Exchange Reserves," Reserve Bank of India, https://rbi.org.in/Scripts/BS_ViewBulletin.aspx.

Saproo, A (2022): "HDFC Bank's Strong Q2 Loan Growth Tells the Story of India's Revival Amid Rising Rates," *Economic Times*, https://economictimes.indiatimes.com/topic/hdfc-bank-ltd-q2-results.

Singh, V H (2017): "Trade Policy Reforms in India Since 1991," Brookings Working Paper 02, https://www.brookings.edu/wp-content/uploads/2017/03/workingpaper_reformshvs_march2017.pdf.

Times News Network (2022): "Centre Raises Customs Duty on Gold to 12.5% from 7.5%," *Times of India*, https://timesofindia.indiatimes.com/business/india-business/centre-raises-customs-duty-on-gold-to-12-5-from-7-5/articleshow/92609241.cms#:~:text=NEW%20DELHI%3A%20The%20government%20has,)%20adds%20up%20to%2015%25.

World Bank (2022): "World Development Indicators," Data Bank, https://databank.worldbank.org/source/world-development-indicators.

WTO (2022): "Tariff Download Facility," World Trade Organization, http://tariffdata.wto.org/.