

IB Economics - Commentary 1

Title of the article	Germany readies subsidies for satellite internet providers such as Starlink
Source of the article	https://www.channelnewsasia.com/news/business/germany-readies-subsidies-for-satellite-internet-providers-such-as-starlink-14922172
Date the article was published	June 1, 2021
Date the commentary was written	November 17, 2021
Word count (800 words maximum)	787
Section of the syllabus the article relates to	Section 1: Microeconomics
Central concept being used	Efficiency

Germany readies subsidies for satellite internet providers such as Starlink

BERLIN: Germany wants to help citizens in rural areas get better access to the world wide web by supporting the purchase of hardware for satellite internet services such as Elon Musk's Starlink, the transport ministry said on Monday.

The planned subsidy scheme will be open to all providers who offer wireless internet connections in rural areas, for example through satellites or directional radio links, the ministry said.

Coalition talks about the details of the voucher scheme are still ongoing and the aim is to subsidize the purchase of the technical equipment, it added.

"The monthly costs for using the internet connection will not be covered by the grant," the ministry said.

The government will subsidize the purchase of Starlink satellite dishes and similar providers of wireless internet connections with grants to households worth 500 euros (US\$611), business daily Handelsblatt reported.

The decision came after Transport Minister Andreas Scheuer met SpaceX founder Musk at the construction site of Tesla's first European factory near Berlin in mid-May, the newspaper reported.

Starlink is offering satellite internet for a monthly fee of 99 euros.

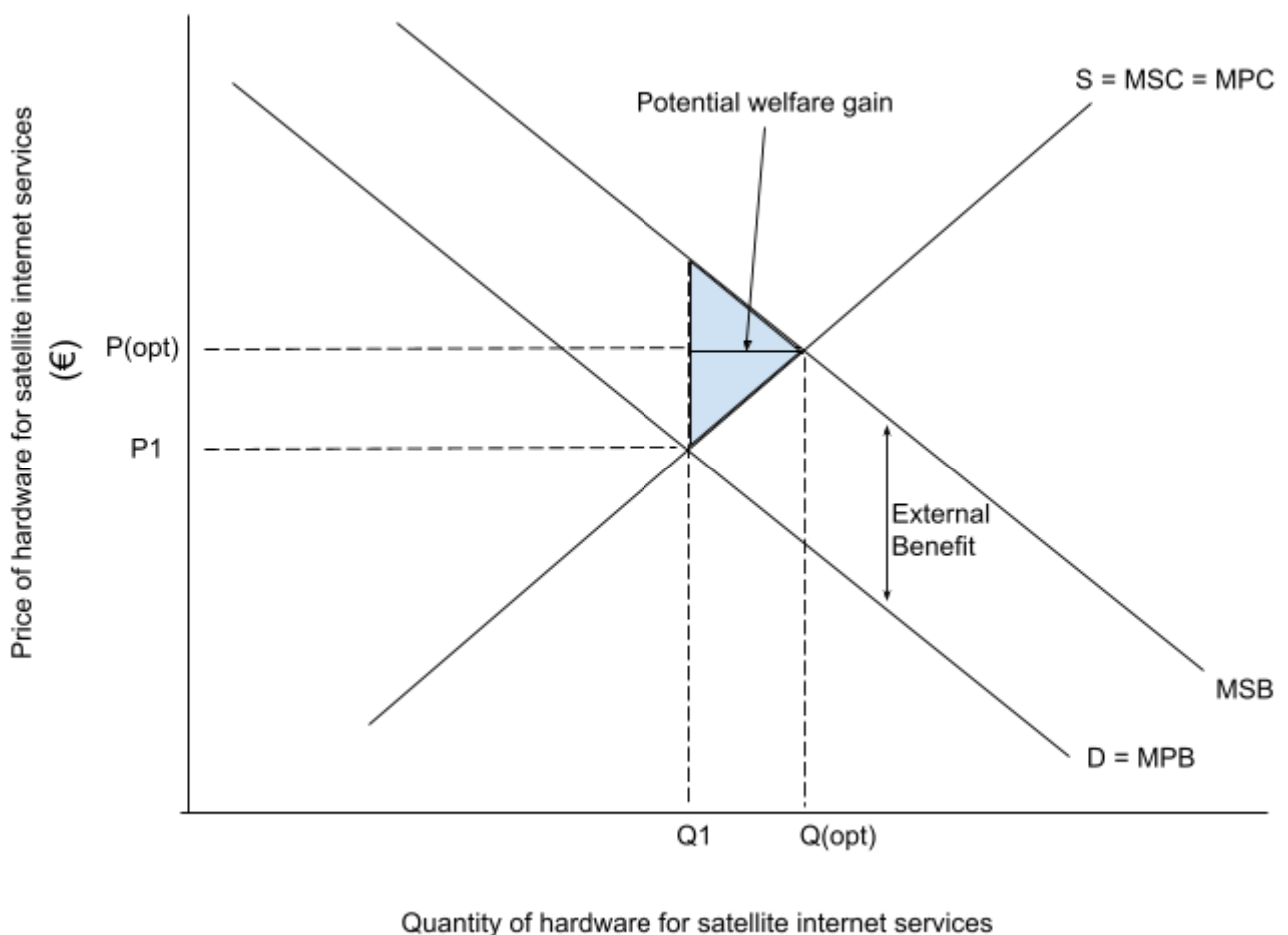
Musk said earlier this month that SpaceX had received more than 500,000 preorders for its Starlink satellite internet service.

The company plans to eventually deploy 12,000 satellites in total and has said the Starlink constellation will cost it roughly US\$10 billion.

Building and sending rockets to outer space is a capital-intensive business, but two of the world's richest men, Amazon founder Jeff Bezos and Musk, who is also the chief of automaker Tesla Inc, have invested billions of dollars over the years to make inroads in this market.

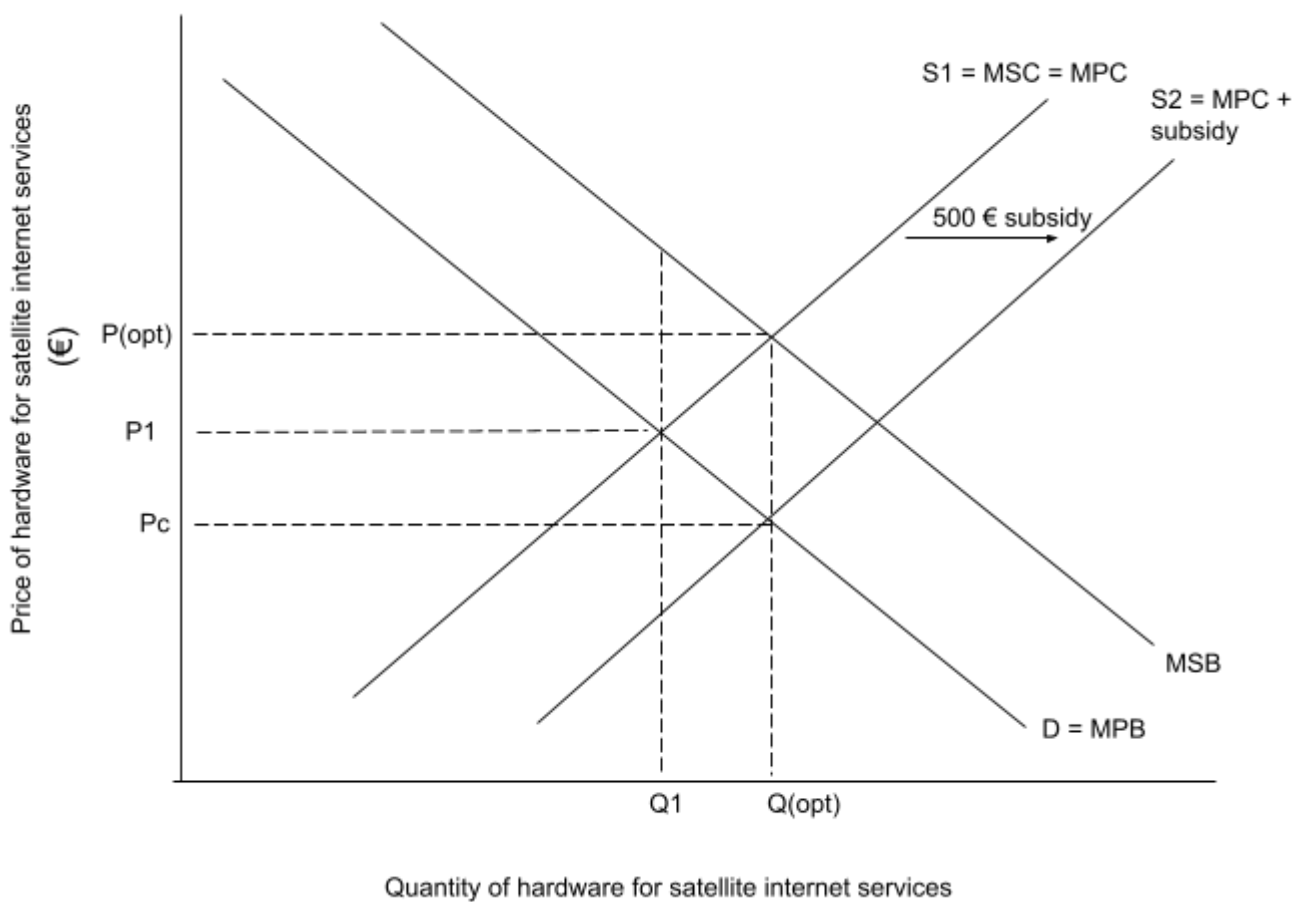
Germany wants to help people in rural areas “get better access to the world wide web”. To achieve this, Germany opened the subsidy scheme “to all providers who offer wireless internet connections in rural areas”. A subsidy is a per unit payment that is used to lower production costs, thus increasing output. A positive externality of consumption is a positive effect on a third party or on society as a whole due to the consumption of a good or service. Access to the internet creates a positive externality because if more people have the internet in rural areas, more of them will have access to educational resources, which may result in more skilled workers for Germany which is beneficial to future employers. This essay discusses how the subsidy will help the market of hardware for satellite internet services correct market failure, through the lens of the concept, efficiency.

Diagram 1: Positive externality of consumption of hardware for satellite internet services **before** subsidy



When there is a positive externality of consumption, external benefits are created by consumers. The consumption of hardware for satellite internet services benefits consumers as they will gain access to the internet for educational purposes, but in addition could give rise to social benefits, including a more efficient workforce. In diagram 1, the marginal social benefit (MSB) curve lies above the marginal private benefit (MPB) curve, with the difference being the external benefits to society. The socially optimal quantity, $Q(\text{opt})$, is where marginal social benefit (MSB) = marginal social cost (MSC), and the quantity produced by the market, Q_1 , is given where marginal private benefit (MPB) = marginal private cost (MPC). Since $Q(\text{opt}) > Q_1$, the market underallocated resources, and thus, producers are allocatively inefficient.

Diagram 2: Positive externality of consumption of hardware for satellite internet services **after** subsidy



To correct the market failure, Germany subsidised the production of the hardware. This shifted MPC to the right. This is because the subsidy lowers the cost of production, thus allowing producers to supply more. The price the producers earn increases from P_1 to $P(\text{opt})$ as they earn the price the consumers pay plus the subsidy. The subsidy resulted in the price consumers pay dropping from P_1 to P_c . The quantity consumed increases from Q_1 to $Q(\text{opt})$ as a decrease in price for consumers leads to an extension in demand. This resulted in market failure being solved as allocative efficiency has been reached since the market is now producing and consuming at the socially optimal level, $Q(\text{opt})$.

Although economic theory states that the subsidy given to the producers will reach the consumers through a reduction in price of the hardware for satellite internet services, this is not always true. Producers might be inefficient and not use the money correctly, resulting in no change in price. Economic theory also states that by giving a subsidy equal to the positive externality, the market failure of underconsumption can be fixed. However, in the real world it is impossible to quantify the positive externality of consuming the internet and so it is impossible to know whether the market for hardware for satellite internet services has reached allocative efficiency.

This policy works best for children in rural areas as it gives them access to better and more useful learning resources, thus benefiting their learning. However, this policy is not beneficial for people who live in the city because they cannot access the benefits of this policy as the subsidy is only given to increase consumption of hardware for satellite internet services in rural areas. In the long term, the subsidy could create inefficiency in the private sector as producers of hardware for satellite internet services could start relying on government funding. However, if they invest some of the subsidy in R&D or training, they could become highly efficient in the future.

Consumers in rural areas are better off with the subsidy because the subsidy has decreased the price of the hardware for satellite internet services. Producers are also better off as they earn more revenue due to the subsidy being given from the government, plus the extra demand for their products due to the lower prices which is shown by SpaceX, who received more than 500,000 preorders for their hardware after the subsidy was announced. In the short term, the government may be worse off. This is because the government bears an opportunity cost and could use the funds more efficiently somewhere else like healthcare or building schools/infrastructure for rural people. In the long term, the government may be better off because providing internet services in the rural areas allows children to learn, providing more opportunities for labour to become more efficient.

In conclusion, the subsidy provided for the consumption of hardware for satellite internet services is beneficial to society as, in theory, it should help the market correct market failure and reach allocative efficiency.

IB Economics - Commentary 2

Title of the article	India's economy likely picked up in Sept quarter before Omicron spread
Source of the article	https://www.reuters.com/markets/asia/indias-economy-likely-picked-up-sept-quarter-before-omicron-spread-2021-11-30/
Date the article was published	November 30, 2021
Date the commentary was written	February 14, 2022
Word count (800 words maximum)	799
Section of the syllabus the article relates to	Section 2: Macroeconomics
Central concept being used	Intervention

India's economy likely picked up in Sept quarter before Omicron spread

By Manoj Kumar

Summary

- July-Sept growth forecast at 8.4% y/y vs 20.1% in April-June
- Vaccination, consumer spending seen propelling recovery
- Economists fear new COVID-19 variant, inflation pose new risks
- India to release GDP data at 1200 GMT

NEW DELHI, Nov 30 (Reuters) - Data was expected to show that India's economic recovery strengthened in the July-September quarter, helped by a pick-up in consumer spending, though the spread of the Omicron coronavirus variant raised fears for the future.

Asia's third-largest economy has been seeing a rebound from last year's deep slump, boosted by rising vaccination rates and a pick-up in government spending.

A Reuters survey of 44 economists projected GDP data - due out at 1200 GMT on Tuesday - will show 8.4% year-on-year growth in the September quarter, the fastest pace among major economies, vs a 7.5% contraction in the same quarter last year. [read more](#)

But as the market awaited the figures, health authorities said they were tightening testing at airports, in the wake of the spread of the Omicron variant. Prime Minister Narendra Modi on Saturday ordered a review of plans to ease travel curbs. [read more](#)

Fast-moving indicators including exports, electricity generation, rail freight and bank deposits showed improving signs of growth momentum in October while vehicle sales, fuel sales and tax collection showed slower growth.

Private economists have said economy is on the cusp of recovery helped by a resilient farm sector growth, but risks included slowing global growth, rising manufacturing prices as well as new variants of COVID-19.

"COVID risks have resurfaced globally and (these need to be watched) for implications for the timing of monetary policy normalization," Shubhada Rao, economist at Mumbai-based QuantEco Research, said.

The Reserve Bank of India (RBI), which has cut key interest rates to record lows and infused massive liquidity to shore up economy, is widely expected to suck out liquidity before normalising rates amid growing inflationary concerns.

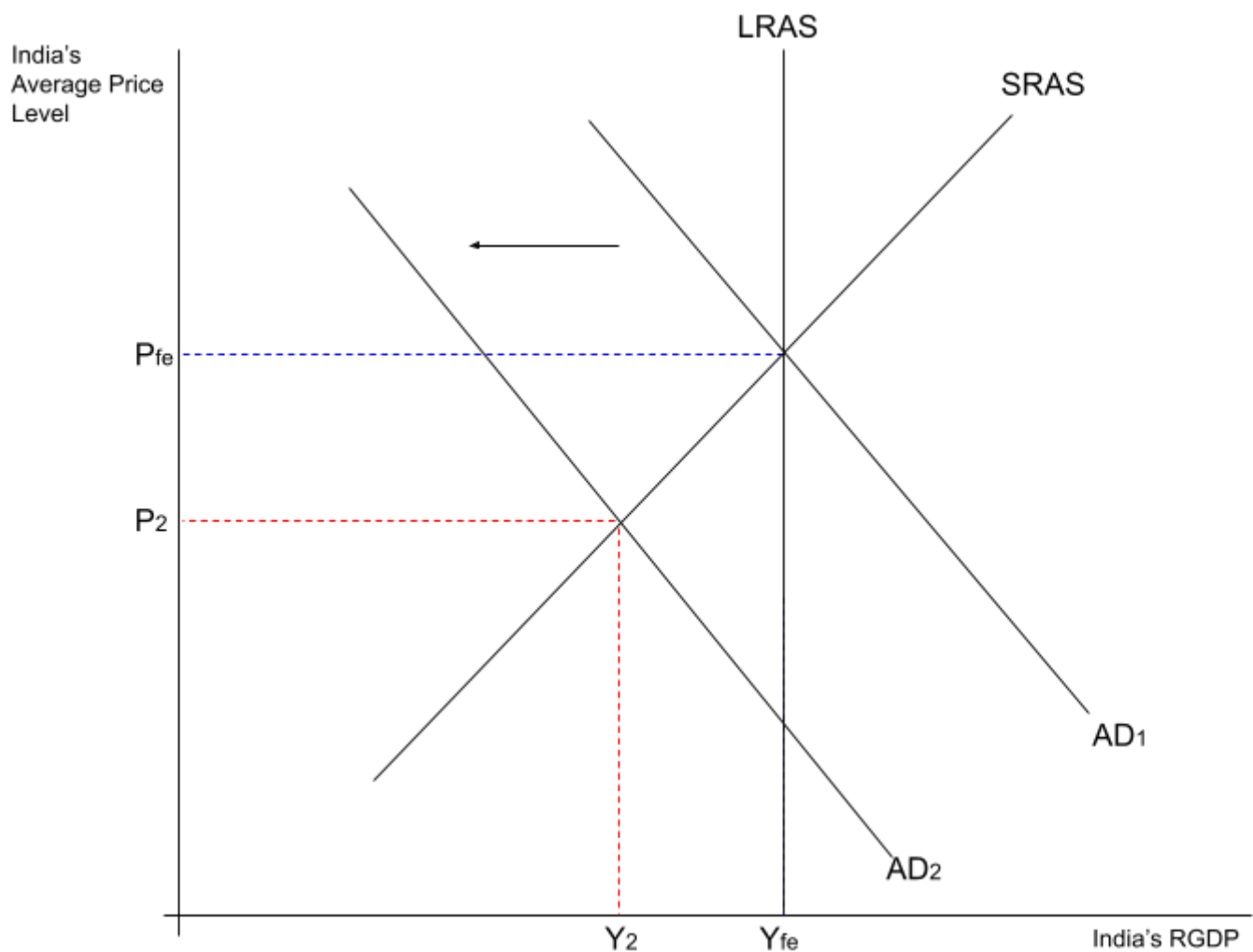
RBI has forecast annual growth of 9.5% in the current fiscal year.

Reporting by Manoj Kumar; Editing by Andrew Heavens

The article discusses the pick up in the Indian economy following the economic slowdown due to COVID-19. It illustrates how the Indian government and central bank intervened by raising government spending and cutting “key interest rates to record lows” respectively to support the COVID hit economy. Through the prism of the concept of intervention, this commentary will showcase how India “rebound from last year's deep slump”.

Due to COVID-19, aggregate demand (AD) decreased. Aggregate demand is the total demand for final goods and services in an economy at a given time and is calculated by taking the sum of government expenditure, consumer spending, investment, and net exports. Because of COVID-19, cyclical unemployment increased and hence household income decreased which led to lower consumer spending. Due to countries closing borders, net exports decreased and low confidence in the Indian economy also deterred investment away from the country. This resulted in AD falling and because of this, there was an increase in the amount of unused resources including unutilized capital and unemployed workers, which decreased real gross domestic product (RGDP). These effects are illustrated in Figure 1.

Figure 1: India's economic slump due to COVID-19

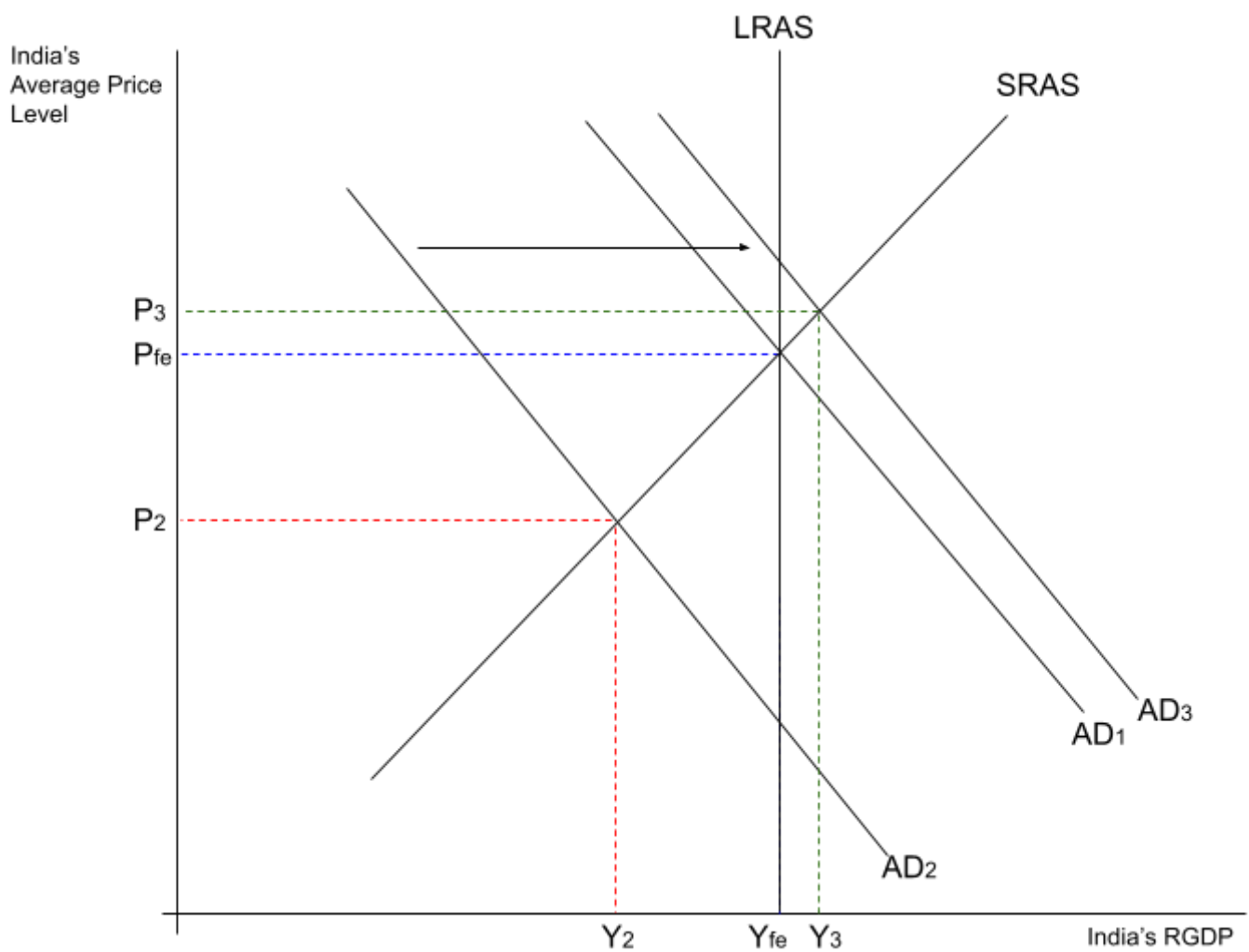


Y_{fe} represents India's RGDP at full employment and I will make the assumption that it represents India's RGDP before COVID-19 too. As mentioned previously, AD fell, illustrated by AD_1 shifting left to AD_2 and India's RGDP decreased from Y_{fe} to Y_2 . India's average price level would drop from P_{fe} to P_2 due to the decrease in AD and resultant contraction in short run aggregate supply (SRAS).

To help India recover from this economic "deep slump", the government and central bank intervened by increasing government spending, and cutting "key interest rates" respectively. Cutting "key interest rates" encourages consumers and firms to borrow more, thus increasing consumer spending and investment. "Rising vaccination rates" leading to more confidence in the economy would also encourage more investment. There was also a "pick up in government spending" and "exports ... showed improving signs of growth momentum in October". All this

would result in AD increasing. India's RGDP would also increase, because the total, and thus value of, output of goods and services would increase due to an increase in borrowing and government spending. "8.4% year-on-year growth in the September quarter ... vs a 7.5% contraction in the same quarter last year" illustrates that the economy's recovery was too extreme, perhaps due to the government overshooting their spending. Therefore, India's new RGDP would exceed the RGDP at full employment. These consequences are illustrated in Figure 2.

Figure 2: India's economic rebound due to the government's and central bank's intervention



As mentioned before, AD will increase, illustrated by AD_2 shifting to the right to AD_3 (AD_1 and AD_2 being the same as shown in Figure 1). India's RGDP would then increase from Y_2 to Y_3 , showing economic growth. Due to the increase in AD and resultant extension in SRAS, India's average price level would also increase from P_2 to P_3 . This explains India's central bank's "growing inflationary concerns".

However, the model assumes that most of the consumer spending was on domestic products. If it was on imports instead then net exports, and therefore AD, could decrease instead of increasing. The effectiveness of the government's and central bank's intervention is also reliant on the assumption that AD decreasing is the only cause of the economic slump. There may be other factors overlooked, such as SRAS decreasing. This could be due to less raw materials being imported because of lockdowns, or workers being less productive due to working from home. The decrease in SRAS would have caused stagflation, which is inflation with falling RGDP. In this scenario, although it would solve the recessionary gap, the policies used to intervene in the market would not work as it would result in even higher inflation.

In the long run, consumers may be worse off because the government intervening by increasing government spending is likely to result in an increase in tax rates, as the government would need to balance the budget. Due to inflation, consumers might also not be able to afford as many goods and services in the long run due to high prices.

Producers would gain the most from India's central bank's and government's intervention. Due to exports and consumer expenditure increasing, producers' revenues and profits would increase. In the long run, this would help producers invest more into research and development or train and recruit more workers. This also helps workers as employment would increase and possibly make workers more productive and efficient in the long run. It favors the government too as higher employment would result in the government paying less unemployment benefits, and would increase income tax revenue.

Overall, India's central bank and government intervention was a success as it resulted in an increase in economic growth and brought India out of the economic slump they were experiencing due to COVID-19.

IB Economics - Commentary 3

Title of the article	Pakistan to Reduce Some Import Taxes in Bid to Boost Growth
Source of the article	https://www.bloomberg.com/news/articles/2021-06-06/pakistan-to-reduce-some-import-taxes-in-bid-to-boost-growth
Date the article was published	June 7, 2021
Date the commentary was written	April 20, 2022
Word count (800 words maximum)	798
Section of the syllabus the article relates to	Section 3: The Global Economy
Central concept being used	Interdependence

Pakistan to Reduce Some Import Taxes in Bid to Boost Growth

- Dawood estimates more than \$25 billion exports in next FY
- Exporters will be given access to financing at low rate

By Kamran Haider

June 7, 2021, 5:30 AM GMT+8 *Updated on* June 7, 2021, 5:16 PM GMT+8

Pakistan will cut taxes on imports of raw materials to spur manufacturing and overall economic growth, according to Prime Minister Imran Khan's trade adviser.

Customs duties on input items needed by pharmaceutical, chemical, engineering and food processing industries will be reduced by 3% to 10%, Abdul Razzak Dawood, Khan's adviser on commerce, said in an interview by telephone. That will help lower the import of finished goods, encourage local production and put the nation in a position to boost exports, he said.

"Pakistan had ridiculously high duties," Dawood said. The objective is to put Pakistan on par with other countries on trade taxes, he said.

The proposal will find mention in the federal government's annual budget for the year starting July 1, by when it targets to achieve a growth rate of 4.8%. The nation forecast growth to be 3.9% this year after a rare contraction last year. The new budget is scheduled to be presented in the lower house of the parliament on June 11.

Paring import taxes will be a huge policy shift for Pakistan, given more than 40% of its total tax revenue is generated from levies on inbound shipments. Khan's government is seeking to end the nation's reliance in recent years on foreign loans and bailouts, and instead boost industrial productivity and the share of exports in the economy.

To that end, the administration will extend concessional long-term financing for exports as well as working capital financing to businesses in the next fiscal year, Dawood said. The nation's exports haven't grown significantly in the past decade, averaging \$23 billion annually. For the next financial year, the government hopes it would be higher than \$25 billion.

Pakistan's economy survived through the global Covid-19 pandemic with support of international lenders and debt repayments reliefs by G-20 nations.

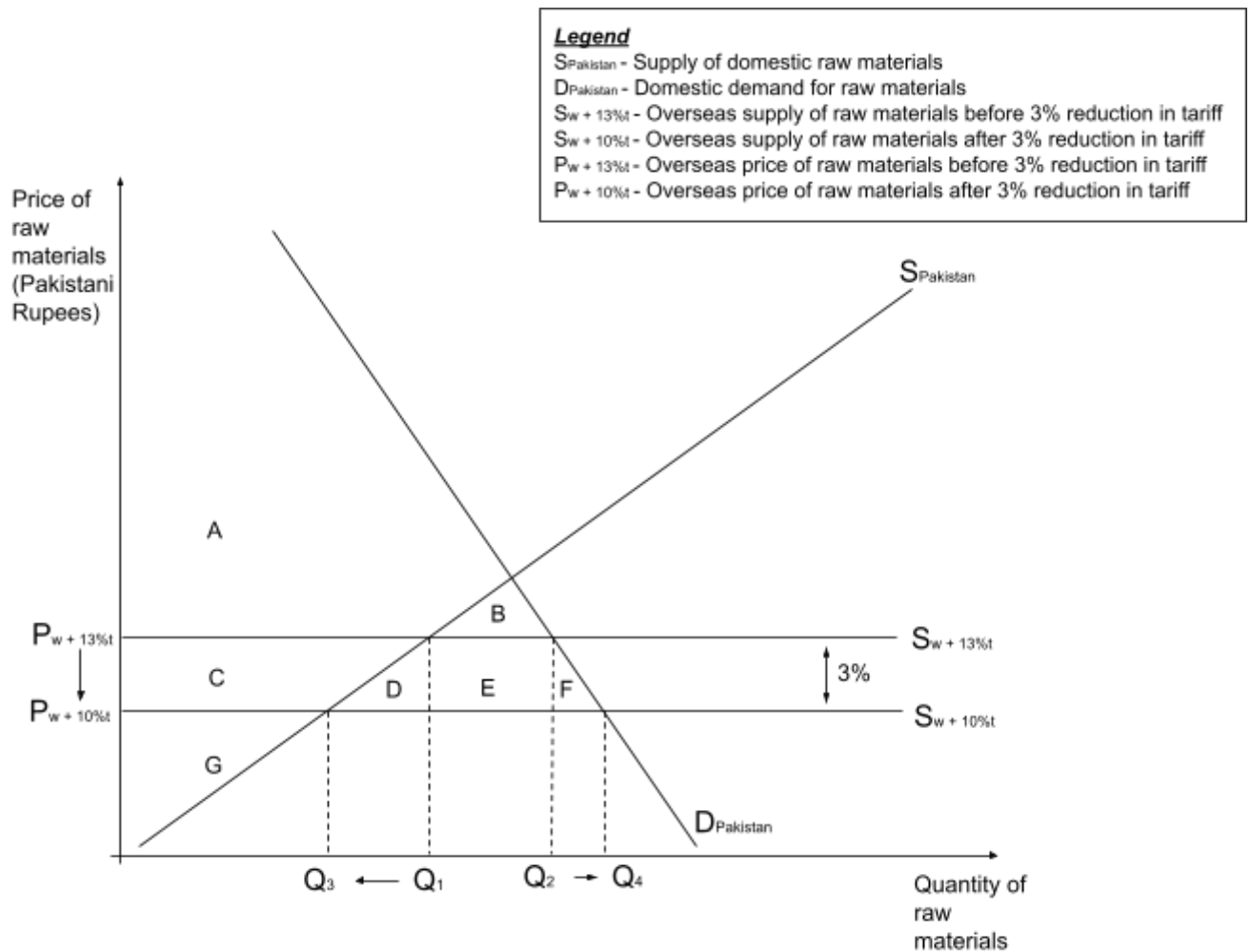
The slow pace of tariff liberalization thus far has hurt Pakistan's competitiveness, compared with regional nations like Bangladesh, Malaysia and Vietnam, whose total exports consist of 40% imported components, said Manzoor Ahmad, Pakistan's former ambassador to the World Trade Organisation.

"We take imports as an evil. This misperception must go away," he said. Without "imports, there will be no increase in exports," he said.

This article explores the Pakistan government's decision to "cut taxes on imports of raw materials" by 3% to "spur manufacturing and overall economic growth". Whilst focusing on the concept of interdependence, this commentary aims to investigate the effects of reducing the tariff, also known as taxes on imports. I have chosen interdependence because the decisions taken by each stakeholder affects other stakeholders and thus, through these interdependent relationships, I can evaluate the possible effects of the tariff reduction on Pakistan's economy and its primary stakeholders.

I make the assumption that Pakistan has a comparative disadvantage in the production of raw materials, as otherwise, it would be irrational to import raw materials. Pakistan reducing tariffs for raw materials will make imported raw materials cheaper. Thus, to compete with imported raw materials, domestic producers of raw materials will lower their prices. Hence, the quantity of raw materials demanded will increase, as consumers are more willing and able to buy raw materials at lower prices. The quantity of raw materials supplied in Pakistan will decrease, as domestic producers are less able and willing to produce raw materials at lower prices. This increase in quantity demanded and decrease in domestic quantity supplied will increase the shortage of raw materials in the domestic market. Hence, Pakistan will import more raw materials. This is illustrated in Figure 1.

Figure 1: Effect of reducing the tariff on raw materials coming into Pakistan by 3%



As mentioned previously, the price of raw materials will decrease, highlighted by $P_w + 13\%t$ moving down to $P_w + 10\%t$. Thus, the quantity of domestic raw materials supplied will decrease from Q_1 to Q_3 and the quantity of raw materials demanded will increase from Q_2 to Q_4 . Therefore, the gap between the domestic quantity demanded and supplied will increase from $(Q_2 - Q_1)$ to $(Q_4 - Q_3)$, representing an increase in imports of raw materials.

The tariff reduction will be beneficial to consumers, as seen by the consumer surplus increasing from AB to $ABCDEF$. Consumers of raw materials are likely to be domestic firms who are dependent on raw materials in the production process and a decrease in tariffs for raw materials will decrease the cost of production for these firms. This will “encourage local production”, thus increasing domestic supply of finished goods, which will create jobs, as output and employment are interdependent, and decrease prices for finished goods in Pakistan which will benefit households.

Increasing domestic supply of finished goods should also “lower the import of finished goods”, thus decreasing Pakistan’s dependence on other countries. Furthermore, lowering costs of production for finished goods can “put the nation in a position to boost exports”, thus helping domestic producers earn more profit and decrease dependence on Pakistan’s domestic market by expanding into different markets.

However, in the short term, domestic producers of raw materials will suffer due to the tariff reduction, seen by the domestic producer surplus decreasing from CG to G. This is due to the interdependent relationship between tariff policies and domestic producers, as governments implement policies based on domestic producers’ output, and domestic producers are impacted by changes in tariffs. In Pakistan’s case, tariffs have decreased, which will increase competition and reduce profit for domestic raw material producers, which could increase structural unemployment due to interdependence between workers and producers. However, more competition could help in the long run if these domestic firms become more efficient and less dependent on government protection.

The government both benefits and loses out due to the tariff reduction. Demand for raw materials is price inelastic as it is a necessity for producers. Thus, the percentage increase in quantity demanded will be lower than the percentage decrease in price. Hence, the reduction in the tariff for raw materials will decrease the government’s tariff revenue. This is bad for the Pakistan government due to its dependence on tariffs as “more than 40% of its total tax revenue is generated from levies on inbound shipments”. The opportunity cost of this loss in revenue, such as spending less on healthcare or education, could have a negative knock on effect on Pakistan’s economy. However, decreasing tariffs should improve political ties between Pakistan and other countries, and could see retaliatory barriers being removed, which helps Pakistan’s exports and increases interdependence between the countries.

In conclusion, the reduction of tariffs on raw materials is a good short term policy to help decrease Pakistan's dependence on other countries as it will lead to a decrease in imports of finished goods, whilst increasing economic growth by increasing exports for finished goods. However, Pakistan will still be dependent on overseas producers of raw materials, which could hurt Pakistan's economy if overseas producers of raw materials experience a negative supply shock. Therefore, in the long run, it is important that domestic producers of raw materials are more efficient and can compete with overseas firms for Pakistan to be completely independent.