
UNIT 12 ELECTRONICS COMMODITIES

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12.0 OBJECTIVES

After studying this unit, you should be able to:

- describe the export scenario of electronics commodities
- explain the avenues and prospects
- evaluate India's competitive advantages and disadvantages
- explain the policies and strategies to boost exports
- identify the problems
- suggests measures to promote export

12.1 INTRODUCTION

Electronic items constitute a meagre portion of more than 2% of India's total export. Despite India's vast potential in manufacturing electronic items, the growth in the export has not been encouraging. India has been facing severe competition from the New Industrialised nations. Suitable export promotion strategies coupled with adequate infrastructural support are needed to boost the export of electronic items from India. In this unit, you will learn the export trends, avenues and prospects, India's competitive advantages and disadvantages and policies and strategies to boost export of electronic commodities. You will be further acquainted with the problems and suggestions to boost the export.

12.2 EXPORT SCENARIO

India's exports of electronics goods reached to Rs 2822.9 crore during 1997-98. The decade of 90 in fact experienced an uninterrupted increase in the exports of electronic items from India. But the trend line reveals that the pace of growth of exports of electronic items from India has not been uninterrupted.

The annual percentage change in the exports of electronic items from India has been fluctuating during the period 1992-93 to 1997-98. An annual percentage increase of 54.8 per cent in

1993-94 over 1992-93 was followed by an increase of 35.9 per cent in the next financial year. The year 1995-96 experienced a massive increase in the annual percentage change in the exports — an increase of 73.2 per cent. The last two years again experienced a downward trend in the annual percentage change, 1997-98 experiencing an increase of only 1.5 per cent.

Electronic Items constitute 2.17 per cent of India's total exports as of 1997-98. However, the percentage share is on the rise during the period 1992-93 to 1997-98. In the next place, we have a look at the region-wise export destinations of the electronic items from India. India's main market is Asia. 34.9 per cent of India's exports of electronic items goes to Asian countries, which however excluded Middle East countries. Including Middle East, the share increases roughly to 40 per cent. Next comes America, followed by Western Europe, Africa and Eastern Europe. Look at Table 12.1 which shows India's export of electronic goods to top 10 markets.

Table 12.1: India's Exports to Top Ten Markets

(Rs. crores)

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
World	614.9	952.1	1294.2	2241.5	2782.0	2822.9
USA	92.9	157.6	210.3	377.6	789.0	880.3
Bangladesh	12.0	27.4	47.9	64.9	59.5	65.7
Hong Kong	31.1	65.8	86.3	105.3	189.4	247.7
Malaysia	10.9	13.5	36.5	158.7	220.7	175.4
Singapore	102.7	168.2	275.0	467.2	349.3	327.1
Taiwan (Taipei)	2.0	8.2	3.8	13.26	21.6	43.1
UAE	49.5	105.8	73.1	80.9	104.0	63.8
Germany	20.8	37.9	71.0	118.1	93.2	90.0
Netherlands	13.9	11.0	10.6	25.1	82.8	79.0
Russia	103.3	66.8	117.9	60.7	16.8	74.6

Going to the country level, USA is India's largest market of electronic commodities as of 1997-98. The top ten markets for India's electronic items include Singapore, Hongkong, Malaysia, Bangladesh and UAE among the Asian countries, UK, Germany and Netherlands in Western Europe and finally Russia among the East European countries. Looking at the shares of these markets in India's total exports of electronic items, some interesting facts come out. One is that the major share of India's exports of electronic item to America is directed towards USA. Similar positions are held by Russia in East Europe and UAE in Middle East.

From the above discussion it becomes quite clear that in terms of the shares of the different export destinations in India's global exports of electronic commodities, the distribution is quite skewed. Apart from the top ten markets, very few have a share of more than one percent. The markets having a percentage share of more than one in India's exports of electronic items include Taiwan, France, Spain, Canada and Japan.

So, it is quite clear that India's performance in the global market is more or less dependent on the top ten export destinations. Any shock in those markets will adversely affect India's exports of electronic items. This urges us to have a deeper look at India's performance in these markets over a time period.

India's exports to these markets have not registered an uninterrupted increase. A look at the annual percentage change in exports in these markets reconfirms this fact. If India's export behaviour in this major markets reveal this trend, then it is a matter of worry as this will surely affect India's total exports of electronic items.

12.3 Avenues and Prospects

India being a labour intensive country, is in an advantageous condition in producing electronic goods for world markets. Let us discuss the avenues and prospects of electronic items in detail.

12.3.1 India's Potential in Electronics Items in the International Competitive Scenario

Now, India's export basket of electronic products does not consist of a large number of items. The main items in the basket are Colour Television, Black and White Television and Video-cassettes. Previous studies on export trend indicate that Indian exports in the short and medium term will be confined to only a select range of products. Sharpening of the competitive edge in these products is sure to reap results, as this international competitiveness is likely to persist in future. Strengths and opportunities favouring exports in these items tend to outweigh weaknesses and threats for these items. For low-medium technology products, new opportunities are opening up with leading international players shifting to new advanced consumer electronics products. For instance, wide screen, high definition CTV, multimedia and laser technology based audio and video products (compact disk systems) have been targeted by international players as high growth areas in the world market. Consequently, the focus of world leaders is now on the new range of products. This has led to the existing production facilities of MNCs for low-medium technology products being phased out or shifted to developing countries which are seen as attractive locations for operations.

12.3.2 Avenues and Prospects for India's Potential Export Items

Colour Television occupies a significant position in India's exports basket of electronic item. Its further success in the international market possess the biggest challenge for the Indian consumer electronic industry. Videocassettes and particularly B/W TV are the other products where Indian exports are likely to witness a quantum jump in exports. There has been a natural advantage in the international market for B/W TV set after 1996-97, since other competitors are phasing out production. In case of Video cassettes, it would take longer to capture a significant share of the international market. This needs further capacity expansion, cost reduction and quality upgradation. While JVC, Japan - the world's largest video-cassette company - plans to make India as its major production base, this is yet to set the trend within the industry and for several other exporting companies. Let us discuss the avenues and prospects for major electronic items export.

Colour Television: Future export prospects for Indian consumer electronics critically depend on the ability of Indian companies to achieve a major breakthrough in the international CTV market. However, to achieve this certain problems have to be tackled.

International comparison of critical cost parameters for 21" CTV reveals that there are several areas where Indian exporters fall behind major competitors. For almost all the 7 parameters considered, Indian products have disadvantages, vis-à-vis competitors. It can be observed that small plant size is the major disadvantage of Indian CTV industry. Other areas where the Indian CTV lags behind competitors are material cost, field defects and financial cost.

All these hindrances are unlikely to be eliminated in the short to medium run. However, majority of these problems are expected to be mitigated. While the price difference is likely to come down, high rising import content for new range of CTV is likely to put an upward pressure on prices. The underlying reason is the anticipated depreciation of the Indian rupee. The depreciation of the rupee by around 10 per cent from end-October 1995, have already pushed up prices of 20"/21" CTV by Rs. 500-700. Material Cost is expected to decline with rationalisation of import duties on inputs. A switch to high volume production will reduce cost due to economies of scale. The problem of high financial cost can be somewhat mitigated through equity financing by MNCs which have acquired stake in Indian companies or have set up subsidiaries in India. Besides, foreign companies can borrow cheap capital at

international interest rates. Improved production scales will also bring down financial cost. All these factors are expected to have a favourable effect on prices provided import content is kept under check and brought down quickly with the growth and modernisation of domestic component of industry. The induction of high quality products by MNCs and the intense competition in the domestic market is expected to bring down the field defect rates very soon.

It can be observed that material input is a significant element of CTV cost followed by selling and distribution. In the Indian case, the share of labour cost in total selling price will be lower but the other components will have comparatively higher shares. So, the advantage in labour cost is offset by other cost elements. Most crucial factor is the finance cost which is far higher in India. This implies that given the current international price for 21" CTV, Indian exporters need to reduce their finance cost and material cost which will enable them to spend more resources for selling and distribution. In the short to medium terms, the profit margins have to be sacrificed in view of long term gains after capturing larger share of the export market. There is scope for further cost reduction by developing a robust domestic supply base for components (this comes under material cost) and lower per unit distribution cost which include freight, procurement and finance. Similar studies can also be carried out for the other products.

B/W TV: B/W TV has a very low import content and indigenisation process is almost complete. There is a large unorganised sector and small scale units which at times engage in subcontracting jobs for bigger companies which undertake export operations. Five major companies, Philips, Videocon, BPL, Crown, Onida account for a nearly 44 per cent of the domestic market. These companies are also among the largest exporters of B/W TV and are gaining substantial shares in the export market.

Audio Products: Audio industry has moved away rapidly from radio receivers to radio-cum-cassette recorders, public address systems, amplifiers, hi-fi music systems, audio cassettes, CD systems, digital audio tape recorders, digital compact-cassettes, audio/video integrated amplifiers, combi-players etc. Advancement in VLSI technology has given a new impetus to the development of entertainment audio electronics. Also rapidly increasing power and decreasing cost of digital electronic circuits is bringing about rapid transformation by replacing traditional analogue system with digital operations which offer far more superior features.

The unorganised sector making poor quality products and usually avoiding taxes account for as much as 35 per cent of the audio market. This acts as a major constraint on the growth of the organised sector in the past. However, poor quality and small export surplus continue to plague export operations. This segment is expected to take off only in small way. At present, only audio cassettes can be readily pushed in the export market.

Electronic Watches: While Titan, HMT and Allwyn are the major producers, Titan and Sakura Seimitsu are the leading Indian exporters. Titan International — the marketing arm of Titan based in Amsterdam — has played a crucial role in expanding sales to Europe. Besides, Titan has showrooms in the Middle East to push up sales. Titan has well integrated manufacturing facility comprising of movement components, watch cases, movement assembly and casing assembly. Presently, Titan is the most promising Indian exporter for electronic watches. Among the three watch segments — mechanical, analogue and digital — the share of digital is rising both in the international and domestic market at the expense of other two segments. Although only two companies have succeeded in making some breakthrough in the export market, the overall export of electronics watches is likely to remain low unless more companies expand export operations like Titan. Further capacity expansion, improved designing capabilities and entry into the jewellery segment could improve export prospects.

12.4 INDIA'S COMPETITIVE ADVANTAGES AND DISADVANTAGES

You have learnt the avenues and prospects of Indian electronic goods. Let us now evaluate the advantages and disadvantages of Indian electronic goods.

To fight and survive in the present international scenario, any industry needs to be competitive, both price and quality wise. India enjoys certain advantages that make the electronic commodities price-competitive, the main being the low labour cost compared to international standards having a favourable impact on assembly cost, and thus price. But the small domestic market leading to low scale production has come in the way of enjoying the economies of scale. This coupled with the high tax regime kept the prices a bit on the higher side. However, the potential domestic market is quite large and a rapid growth of the same is also expected. FDI is also trickling in and this can help in providing necessary resources for expansion and large-scale operation. Moreover, the tax regime is also getting rationalised. Coming to the quality aspect, the product design capabilities, R&D and technology development have been poor. However, the domestic consumers becoming more and more quality conscious will induce for quality upgradation. The Indian Electronic industry is quite matured in case of conventional TV and audio products. Large exportable surplus is available primarily in the B/W segment and India is expected to emerge as a major international player. Production is being geared up in CTV while such efforts are underway in other segments of consumer electronics (i.e., audio/video cassettes, audio systems and electronic watches). Colour picture tube units are also undergoing expansion and upgradation to cater to domestic CTV companies. Recently, new technologies and products are being inducted in the industry. Laser technology based products are still at a nascent stage. However, it has to be kept in mind that Indian brand for consumer electronics is unknown in the international market and price competition is severe in the unbranded world consumer electronics market.

In the area of advanced technology products like large screen high definition CTV, VCP/VCR, compact Disk Systems and latest hi-fi Systems, India is not having large production base and modern technology to become competitive in the world market. The taste and preferences of electronic items have been changing very fast. The demand for the advanced technology products have been growing fast. Hence, India requires to develop adequate infrastructure and expertise to enhance the production base for the advanced technology products to cater to the growing world market. A proper policy and strategy framework should take into consideration all these factors.

Check Your Progress A

- 1) Enumerate four export items of electronics commodities.

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- 2) Enumerate five major markets for electronics export.

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- 3) Enumerate four strengths and weaknesses of Indian electronic commodities.

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- 4) State whether following statements are True or False.
- i) Electronics commodities constitute 10% of India's total exports.
 - ii) USA is the leading market for Indian electronic commodities.
 - iii) India's basket of electronics products consist of large number of items.
 - iv) 35% of Indian audio market falls under unorganised sector.
 - v) Laser technology based products are in an advanced stage in India.

12.5 POLICIES AND STRATEGIES TO BOOST EXPORTS

Conducive Policies and acumen strategies are required to boost the export of electronic goods from India. Let us analyse these policies and strategies in detail.

12.5.1 Competitors in the International Market

Indian Electronic Industry, though catering to major markets like USA, Western European Countries Japan, etc. has still far to go to establish itself strongly in the international arena. One has to establish the brand and fight against the strongly existent competitors there. India's main competitors are Asian NICs. They are strong rivals of India in the export market as well as in attracting large scale MNC investment in consumer electronics. Barring China, which till recently relied heavily on its large domestic market, rest of the NICs (Korea, Taiwan, Singapore, Malaysia and Thailand) depended on massive export operations to develop their consumer electronics industry. Export had been the engine of growth in these countries. More recently, China shifted its focus on the export market and encouraged joint ventures with global majors to expand export operations. MNCs were also attracted by China to upgrade products and catch up with latest technology in consumer electronics. More crucially, the development of a strong component base providing cheap and high quality inputs contributed significantly to enable these countries to make a breakthrough in the international market. Apart from FDI, the use of reputed foreign brands was another critical factor which helped them to expand market shares and enhance export earnings in the high value branded segments of the world consumer electronics market.

In contrast, Indian consumer electronics, as a whole, shows a very low level of export orientation. Traditionally, exports did not constitute a major activity for Indian companies apart from short term profitability consideration to take advantage of export incentives announced by the government from time to time. Proactive government policy on consumer electronics as compared to Asian NICs was not witnessed in the past. In this context, benchmarking of operation between India and the NICs will enable us to formulate a proper strategy to boost the exports, keeping track of present and future competitors and identifying deficiencies for improving our industry performance.

The difference between the operational features of the electronic industry in India and the Asian NICs are given in Table 12.2. From the Table, it is clear that India stands much behind the Asian NICs in competing in the global market.

12.5.2 Policy Issues on Export

Comparing the policies bring out some of the major disadvantages of India vis-à-vis competitors. The extent of policy lacunae can be found to be severe in terms of domestic taxes, customs tariff of critical inputs and overall tariff structure, procedural delays in matters related to export and providing a strong infrastructure. While targeting product as well as companies were discretely used by several NICs to succeed in the international market, this could only be a country specific strategy. In the Indian context, conscious targeting of companies for large scale international operations (as in Japan, Korea and now China) has been absent. However, from time to time, thrust export products have been identified but no

concerned effort has been made to take an integrated approach (taking into account production scale, cost, export barriers) to make these products internationally competitive.

Table 12.2: Benchmarking India and the NICs Operational Features

India	NICs
Low production volumes	Large production volumes. Average operational volume of companies nearly 2.5 times than India.
Fragmented capacities (mostly unviable) with numerous units selling in the domestic market protected in the past.	Capacity well consolidated with large units having capacities of international standards.
Production locations of companies are scattered and often far away from component suppliers.	Production is often integrated with component manufacturing facilities. Locations are well planned. Special export zones/parks have also enhanced locational advantages.
Diffusion of latest products had been slow in past.	Conscious attempt to diffuse latest products and technology.
Backward integration by companies had been sluggish.	All leading export companies have gone in for backward integration to have greater control over operations, quality and keep costs low.
Weak linkage with component suppliers.	Presence of domestic component suppliers a major factor for success in export market and attracting MNCs.
Technology imports have been in bits and pieces which led to assembly oriented units.	Outright purchase of technology for establishing integrated production base.
Low labour cost is still a major advantage but is outweighed by several other factors (i.e., production scale, finance cost and infrastructure).	Low labour cost was a major advantage in the initial stages of developing the industry.
High prices as the industry is crippled by low level of production, high infrastructure and finance cost.	Prices are competitive primarily due to high volume production.

In terms of urgency, government action needs to be directed towards rationalising domestic taxes and import duty structure, providing infrastructure support and expediting procedures (customs and other clearances, releasing incentives, approval of new projects for production and other export related activities). Future strategies for export development can be evolved against the background of these policy issues along with existing operational constraints faced by Indian companies to counter the international competition.

Large domestic market to encourage high production volumes and attempts by companies to rationalise production capacity are seen as favourable to exports. While few international giants are planning to shift production base to India, this is not evident in case of most MNCs. It is critical that the existing component base is revamped and new capacities are added to strengthen the Indian industry. Also intense price competition and quality consciousness in the domestic market is expected to enhance international competitiveness of Indian exporters. While favourable government policies and sound infrastructure are precondition for large-scale FDI inflows, the shifting of manufacturing base is usually conditioned by the presence of robust component industry. This is clear from the experience of other successful countries.

12.5.3 Strategies to Enhance Export

The current market for consumer electronics is estimated to grow at a compounded annual rate of 15-20 per cent. Penetration rate of TV is extremely low in India. It is about 45 sets to 1000 persons as compared to China's more than 140 per 1000 persons.

Whereas, the penetration is over 95 per cent in the USA. The anticipated growth in domestic market is presently the major attraction of MNCs which have started operations in India. CTV — the largest segment has a huge demand potential in the domestic market. This large domestic market and the growing competition opens up the possibility for Indian companies to scale up production, enhance quality and emerge competitive in the international market. This strategy was also adopted by China, which capitalised on the domestic boom to grow stronger over time and then enter the international market in a big way.

Almost 70 per cent of the Indian consumer electronics market (organised branded market) is dominated by four companies — BPL, Videocon, Onida and Philips. The leaders in the domestic market are usually the major exporters of consumer electronics from India. Apart from these companies, MNCs either on their own or through joint ventures are expected to start large scale operations, induct latest products and later initiate export operations.

Products and Markets

Presently, B/W TV has maximum export potential as India has emerged as the largest producer in the world after 1997. Other products which export potential are 14" CTV, radio-cum-tape recorders, video cassettes, audio cassettes and electronic watches. In the near future competitiveness in 20"/21" CTV, hi-fi music systems, car stereo/radio and other audio products are likely to pave the way for further expansion in exports. For this purpose, production volume as well as quality and product features are to be upgraded. Present production base in more futuristic products like digital micro tape recorder, video camera, hi-fi VCR, compact disk system LCD colour TV is virtually non-existent and Indian competitiveness is unlikely to develop by the end of this decade.

We have already seen that in 1997-98, USA is the most important export destination for Indian electronic item. However, only a limited range of products is exported to the market and this needs to be widened. Traditionally, Europe has been the most attractive market in terms of size and prices offered. Apart from USA, the emerging markets of Asia can be explored more. Besides, the distribution centres of Hong Kong and Singapore can be tapped for re-routing exports to Far East. For low end products, exports can be expanded in the African market and Indian companies can set up production facilities there (recently Videocon has shown interest in setting up a plant in Africa). The demand in India's traditional markets in East Europe is also on the rise where medium technology products can be sold. For more advanced products, customers in East Europe have shown strong preference for MNC brands.

Some of success factors of latecomers in the world consumer electronics industry suggests that presence of foreign manufacturers with FDI and international brand name have been critical. Besides, production base set up by leading international component manufacturers with efficient capacity had provided the necessary competitive strength to industry. Proactive government policy and high quality infrastructure were crucial for attracting FDI and large scale shift in production base.

Thus, the Indian Electronic Industry needs quite a lot of revamping to get out of the already existing problems. So, to complete the suggestion to improve our export scenario, a detailed discussion of the problems is needed.

12.6 PROBLEMS OF THE INDIAN ELECTRONICS INDUSTRY

The problems of Indian electronic industry may be analysed in terms of internal and external problems. Let us learn them in detail.

12.6.1 Internal Problems

Internal Problems refer to internal operations of the company, which are seen as major impediments to export. So, for these the responsibility lies on the company to overcome

these barriers to improve its export performance. The major internal problems are listed below, and the detailed discussion of the problems is made after that.

Small capacity as compared to international standards: Large capacity and high scale of operation is the prime factor contributing to low cost. High volume of production had been the pivotal strategy of emerging competitors in the international market. This mode of operation enabled them to quote competitive prices to enter large markets of West Europe and USA and subsequently expand their shares in these markets. Since Indian companies will continue to operate in the low-end international market for consumer electronics for some time, competitive pricing can be the only means to sustain exports.

High degree of protection in the domestic market during the past did not necessitate setting up of global capacity and the focus of Indian companies was mainly in local sales at prices which resulted in maintaining sizeable profit margins. The numerous small scale units particularly in B/W TV and audio products preferred to continue with small scale operations to benefit from tax concessions. There is also a large unorganised sector for these products which avoid taxes leading to unfair competition with established companies. This had also led to fragmentation of capacity in several product segments.

While there had been restriction on capacity expansion by large companies in consumer electronics in the past, the move towards capacity expansion has been slow even after policies were liberalised. The capacity expansion drive which started recently can somewhat mitigate the problem but the proposed capacities remain well below international standards. Small capacities are prevalent in all sectors of consumer electronics including B/W TV, CTV, audio products, VCP/VCR, audio/video cassettes and electronic watches.

Locational disadvantages and highly dispersed production facilities: Locational disadvantages for the consumer electronics industry arise from two factors. Firstly, the plant for a single product manufactured by the company may be scattered over two to three regions. Normally, they are spread over more than one state, to take advantage of lower sales tax in any particular State. Relatively lower sales tax has often motivated companies to start a new plant for the same product in another region instead of capacity expansion in the existing plant. This dispersion of production facilities inevitably led to high cost of operation due to low production volume, lack of operational synergy and other logistic problems.

Secondly, the lack of effective coordination of consumer electronics companies with component manufacturers have also led to locational incompatibility. Component manufacturing companies are often located far away from the consumer electronics companies which primarily assemble components that are outsourced. Most companies have refrained from backward integration relying on component suppliers who may not be readily accessible. There is often a substantial build-in transport cost for the procurement of components. In addition, quality checks for components, conformation to approved designs and technical specifications become all the more difficult.

No concerted effort on technology development and product upgradation: One major consequence of low scale operation had been the tendency of companies to import technology in bits and pieces rather than go for outright purchase of technology and absorb it. Technology can be absorbed and upgraded only with large scale operations. Low production scale inevitably leads to cost escalation making it difficult for companies to invest in R&D and product upgradation. It also poses a constraint on the development of designing capabilities.

Usually, both equipment and component manufacturers go for separate technical tie-ups to import designs and know-how. The lack of coordination between the two, has also led to incompatibility of products designs and quality. While the equipment manufacturers focus on assembly technology and the production of few accessories, the component manufacturers have to keep up with the latest technology changes. Besides, most consumer electronics plants are saddled with old depreciated facilities.

On the whole, technology upgradation in consumer electronics had not been a continuous process. While the protected domestic market resulted in slow diffusion of latest international products, low scale operation hardly provided the incentive to upgrade quality.

No effort towards backward integration and weak linkages with component producers: At present, no CTV company manufactures its own picture tube—the most critical component for televisions (comprising over 40 per cent of the bill of material of any standard TV). This is unlike major Japanese and Korean companies which always had their in-house supply of critical components including picture tubes. Companies in Malaysia, China, Thailand and Singapore had also moved towards an integrated production system. This ensures swift and efficient procurement of components keeping costs low. Besides, it provides greater control over the company's operations and product quality.

The component industry is highly fragmented and there are numerous small units. Small size and slow expansion of equipment units pose a severe constraint on the growth of component producers. Very often, component units are found to be unviable since component production is more capital intensive and risky with a higher payback period. Subcontracting arrangement by equipment companies with component suppliers is generally absent and the co-ordination between the two had been poor. The equipment companies prefer imported components which are now cheaper with the sharp reduction in import duties.

Indiscreet horizontal diversification: With the setting in of recession after 1989, there had been a rush for white goods like refrigerator, air conditioners, washing machines, kitchen and other home appliances. Almost all the leading Indian consumer electronics companies entered the white good sector. Consequently, the existing resources of these companies were spread thinly over a wide range of products. This also shifted the company's focus away from investment in higher capacity in their existing consumer electronics products like TV and audio systems. These companies continue to be plagued by the problem of low production capacity. As a result, despite being leaders in the domestic market, these Indian companies are faced with tough competition against their foreign counterparts which have a typical production volume of 2.5 times.

Lack of financial resources for international marketing: Large expenditure on international marketing which entail tapping the right distribution channel and finally moving closer to the consumer is totally absent. Advertising and promotional campaign are absolutely necessary to push consumer electronics product in the international market. Here again, the budget for export promotion is usually far lower than selling expenses in the domestic market. Promoting Indian brands in the export market has also found to be too costly and time consuming. There is hardly any after service network for Indian consumer electronics products sold abroad. Indiscreet horizontal diversification had also dried up substantial funds of many companies.

For consumer electronics products, dearth of finance for marketing is a serious handicap and will continue to be so in future. Many companies propose to enter into a marketing tie-ups with international giants allowing them to have an equity stake in their companies.

Brand name: With the top 11 consumer electronics companies using their own brand names dominating over 70 per cent of the world market, the prospect of pushing Indian brand which are widely unfamiliar could be futile. Such attempts can be made in B/W TV, low-end audio products and 14" CTV. This was also successfully attempted in case in electronic watches exported under the Titan brand name.

Undoubtedly, absence of brand name would imply weak bargaining power of the Indian exporter in the international market. The prices of unbranded products are substantially low. Besides, price cutting is severe in the unbranded segment of world consumer electronics market. Against this scenario, using the brand name of the distributor or OEM buyer remains the only option. Recently foreign brand names (particularly Japanese and Korean brands), are being used with through several tie-up arrangements to increase the domestic market share. A similar effort in the international market is yet to be witnessed.

Quality problem with high rejection rate: High rejection rate could be a major setback on the quality of products exported by Indian companies. This problem poses a serious concern in an era where international suppliers are targeting zero defect products. For Indian CTV, the rejection rate has at times been as high as 10 per cent per batch of products tested. Whereas, in Taiwan, Malaysia and Korea the rejection rate has been close to 1 per cent. Both the emerging competitors – Thailand and China – have a rejection rate well below 5 per cent. This aspect is, however, expected to be taken care of by Indian companies very soon. Growing competition in the domestic market has compelled Indian companies to upgrade quality and target for zero defect products.

12.6.2 External Problems

Factors which are seen as serious impediments to operations but the company has no control over them, have been classified as external barriers. They are as follow:

MNC domination in world consumer electronics market: While the top 11 MNCs account for over 70 per cent of the world consumer electronics market, it is estimated that the total share of all major MNCs would exceed 75 per cent. Apart from production, MNCs also dominate distribution and after sales service of consumer electronics products through their global network. Considering the strong preference of consumers worldwide to opt for MNC brands, the entry of Indian companies in the high value branded segment would be extremely difficult without marketing and distribution tie-ups with major MNCs. Niche areas for Indian exporters will remain confined to the unbranded market where the importer's brand name is used.

Growing competition from emerging competitors in NICs: Price competition from emerging competitors in NICs is a reality and this will become more intense in future. The main plank of the competitors strategy had been high production volume and low prices. Indian companies are yet to catch up with these standards. Despite the move towards capacity expansion by several companies, the proposed volume of operation will continue to remain well below that of competitors. The domestic component industry and its scale of operation also lags behind that of competitors and needs to be geared up soon.

Negative government policies in the past: The government's perception on the role of consumer electronics had been ambiguous in the past. There were divergent views on whether or not to consider consumer electronics products as "luxury items" and taxing it heavily. This led to the lopsided growth of the industry. High taxes and other disincentives have often choked the expansion of the industry providing negative signals to companies.

Nevertheless, the government had been the driving force which led to the take off of Indian consumer electronics industry. In 1982, import of kits were allowed to assemble CTV which had a large pent up demand. Several units were also licenced to undertake production to ride on the consumer electronics boom which started thereafter. However, there was no focus on large volume operations and policy measures in this direction was totally absent. Licensing and other relevant policies on investment and production lacked this vision of operational scale.

High domestic taxes: Despite gradual reduction in excise and sales tax, the present level continues to be considerably high than competing nations. This had a negative impact on demand and production. Studies by the Department of Electronics (DOE) and the Operations Research Group have found that high excise and sales tax actually reduces government's revenue earning potential from the consumer electronics sector particularly CTV. Past experience has also confirmed this. The slashing of excise duty on CTV and few other consumer electronics items during 1995 had a positive impact on the industry and government revenues.

Apart from excise duty, sales tax and octroi duty have a cascading impact on the final price of consumer electronics products crippling growth. Recent decision by several states to abolish octroi duty will to an extent lower this cascading effect of taxes on the final price of the product. Large domestic demand will encourage Indian companies to gear up operations

to reap economies of scale and also compete internationally. Considering India's large domestic market, it would be advantageous for companies to ride on the boom in the domestic market to emerge stronger in the international market.

Indiscreet protection and high duties on critical input: Late comers in world consumer electronics like Korea and China encouraged the growth and competitiveness of domestic companies in the initial stages under a protective tariff barrier. Foreign companies were discouraged to enter the domestic consumer electronics market. This had been rather indiscreet in the Indian context. Later, from 1991 onwards, a sharp reduction in tariff on consumer electronics was initiated, which caught the industry totally unaware. This form of indiscreet protection had an adverse impact on the industry. Moreover, present import duties on critical inputs for consumer electronics products were found to be higher than comparable developing nations like China, Thailand and Indonesia.

Poor Infrastructure and export logistics: Ports, transport, warehousing and cargo handling facilities are the major impediments to consumer electronics exports. These will continue to pose problems for sometime and are seen as negative factors for Indian exporters since comparable infrastructure facilities in competing nations are superior. While the potentially large Indian consumer electronics market has attracted FDI and several leading MNCs are already selling in the domestic market, large scale operations and shifting of production base for export activities have not started. Poor infrastructure is stated to be one of the prime reasons for this lackluster effort of MNCs.

Higher interest cost than all Asian competitors: Interest is an important element of the cost of consumer electronics production. What affects the companies most adversely is the project cost and other capital expenditure. There is automatically a built-in high cost for setting up of new plants or capacity expansion. However, Indian exporters make use of pre- and post-shipment credit facilities which offer export credit at rates close to international level which keeps a check on working capital cost.

12.6.3 Suggestions

After achieving a breakthrough in the export market, the following strategies are critical to develop dynamic comparative advantage in consumer electronics:

- i) High rate of innovation and constant product upgradation
- ii) Major presence in home market
- iii) Economies of scale by operating at much higher levels of production and timely expansion
- iv) Export sales under Indian brand and setting up production facilities for capturing markets in developing countries
- v) Attract foreign companies to set up offshore manufacturing base and induct latest technology
- vi) Focus on B/W TV production to emerge as the largest exporter in the world
- vii) Incentives for R&D is necessary. Such incentives exist in other competing nations
- viii) Moving close to consumers is critical for expanding shares in the international market. For this purpose, participation in international trade fairs and exhibition, advertising and publicity campaign, setting up distribution and servicing centres in major export markets would be necessary.

There are positive indications that with new capacities added in CTV, electronic watches, audio systems and audio/video cassettes coupled with shift in MNC production base, India's export potential is expected to improve over time. Rapid product upgradation is also underway so that a much wider range of products can be sold in the international market. At the same time, new export avenues are being explored. The biggest challenge lies in transforming companies from low volume-high price operations in the domestic market to high volume-low price strategy for the export market. This process can be enhanced by converting existing

exporting companies into EHTP which has the advantage of financial and marketing strength of the parent company coupled with duty free import facility for inputs to keep cost and prices low.

Check Your Progress B

1) Enumerate four problems of Indian electronic industry.

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2) Enumerate four suggestions to boost the export of electronic goods.

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3) State whether following statements are **True** or **False**.

- i) Penetration rate of TV is extremely low in India.
- ii) 70% of Indian consumer electronic market is dominated by 20 companies.
- iii) Small capacities are prevalent in all sectors of consumer electronics in India.
- iv) Companies in Malaysia, China, Thailand and Singapore have not moved towards an integrated production system.
- v) The rejection rate of electronic items in Taiwan, Malaysia and Korea had been close to 1%.

12.7 LET US SUM UP

India's export of electronic goods has been increasing but it constitutes only more than 2% of India's total exports. The major items of electronic goods include: colour television, B/W TV, audio products and electronic watches. India has competitive advantages in low and medium technology electronic products but the country has been facing severe competition from the new industrialised countries. In depth products and markets analysis, followed by adequate infrastructure and conducive export environment are required to boost the export of electronic items from India.

There are several problems which impedes the growth of electronic exports in India. The internal problems include: small capacity, locational disadvantages, less effort on technology development and product upgradation, weak linkages, indiscreet diversification, lack of financial resources, brand names and quality problems. The external problems are MNCs domination, growing competition, negative policies, high taxes, indiscreet protection, poor infrastructure and higher costs. The suggestions include: upgradation of technology products and production base, conducive export environment, aggressive marketing strategies and consumer focus.

12.8 ANSWERS TO CHECK YOUR PROGRESS

A 4 i) False ii) True iii) False iv) True v) False

B 3 i) True ii) False iii) True iv) False v) True

12.9 TERMINAL QUESTIONS

1. Describe the export scenario of Indian electronics commodities.
2. Analyse the avenues and prospects of India's electronics items for the global market.
3. Evaluate the advantages and disadvantages of Indian electronics commodities. How can you make them competitive in the global market.
4. Analyse the competitive scenario of Indian electronics goods in the international markets. Suggest suitable policies and strategies to boost export of electronics goods from India.
5. Identify the problems of Indian electronics industry. What suggestions can you prescribe for removing these problems.