Export-Oriented Industrialization (EOI): Arguments for and Against What Have Been Experienced of Developing Countries With Regard to EOI

By
Choen Krainara
Ph.D. Candidate

Regional and Rural Development Planning Field of Study
School of Environment, Resources and Development
Asian Institute of Technology
Bangkok, Thailand
2007

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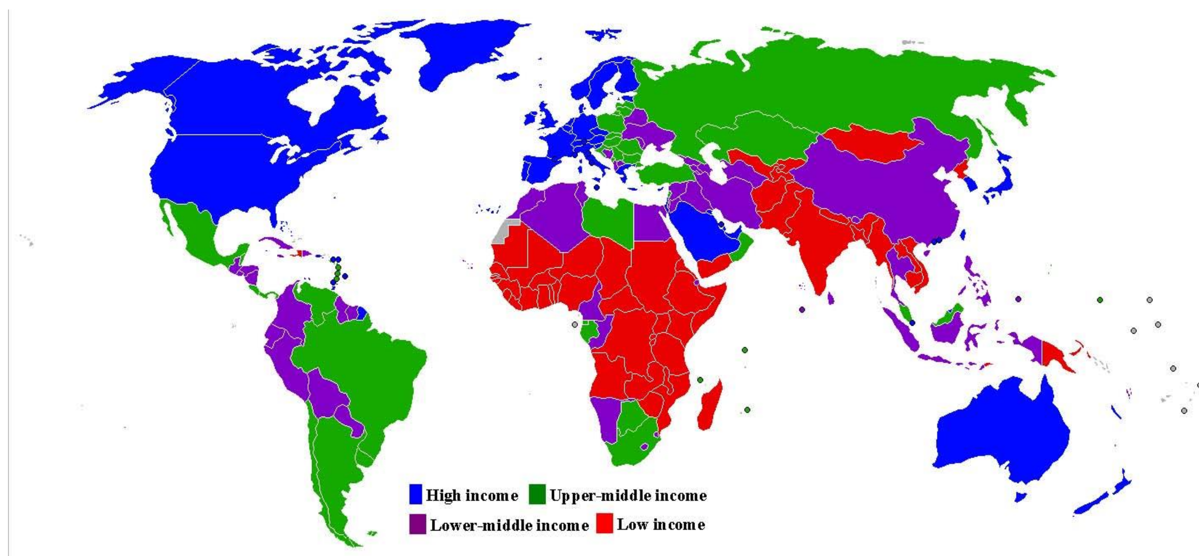
1. Introduction

The world economic development encourages both globalization and regionalization; as a result, the world is divided into economic blocs with have brought about economic divergences resulting from different economic policies and performances. This phenomenon has caused different level of advancement of countries into roughly 2 groups so called Developed and Developing countries. *Within Developing countries*, it comprises of approximately 101 countries, out 209 of world economies. They mainly consist countries measuring by Gross National Income (GNI) of *low income* (ranging from $ 905 or less), *lower middle income* (ranging from $ 906-$ 3,595) and parts of *upper middle income* (ranging from $ 3,596-$ 11,115), (World Bank, 2007).



Source: The World Bank, 2007

Figure 1: World Map displaying country income groups

Please see world country income groups in Figure1. As a result of these divergences, Incidence of extreme poverty was still existed in some parts of the World. In 2001, It was strikingly found incidence of poverty highest in Sub-Saharan Africa where economic performance is poor at about 45 % of its population and it is likely to steadily increase. Whereas, other parts of the world have been declining except Middle East, North Africa, Europe and Central Asia which were slightly escalated. Please see specific lists of world country income group in Figure 2. At present trends, most of the developing world will continue to converge with the developed world where there were rather successful in moving country development further by means of sustained industrialization.

In the world economy, competition and cooperation exist side by side. That is why the export-oriented industrialization strategy becomes a common trend, especially among developing countries. EOI was also regarded as useful trade and economic strategies in helping countries improve industrial performance as well as generating massive employment. The objective of this paper was therefore to study and highlight role, essence and impacts of Export-Oriented Industrialization strategies in developing countries. It firstly presents the state

of world industrialization and status of industrial development in developing countries. Secondly, it will further raise the arguments for and against in adopting Export-Oriented Industrialization as an important means to promote external trade. Thirdly, it will present problems for increasing exports, proposed some guiding policies/government intervention measures as well as identifying challenges and opportunities for enhancing export promotion industrialization. Finally, it ends with experiences, impacts, achievements in applying EOI strategies in developing countries and conclusion.

2. State of World Industrialization

2.1 Definitions of Export-Oriented Industrialization

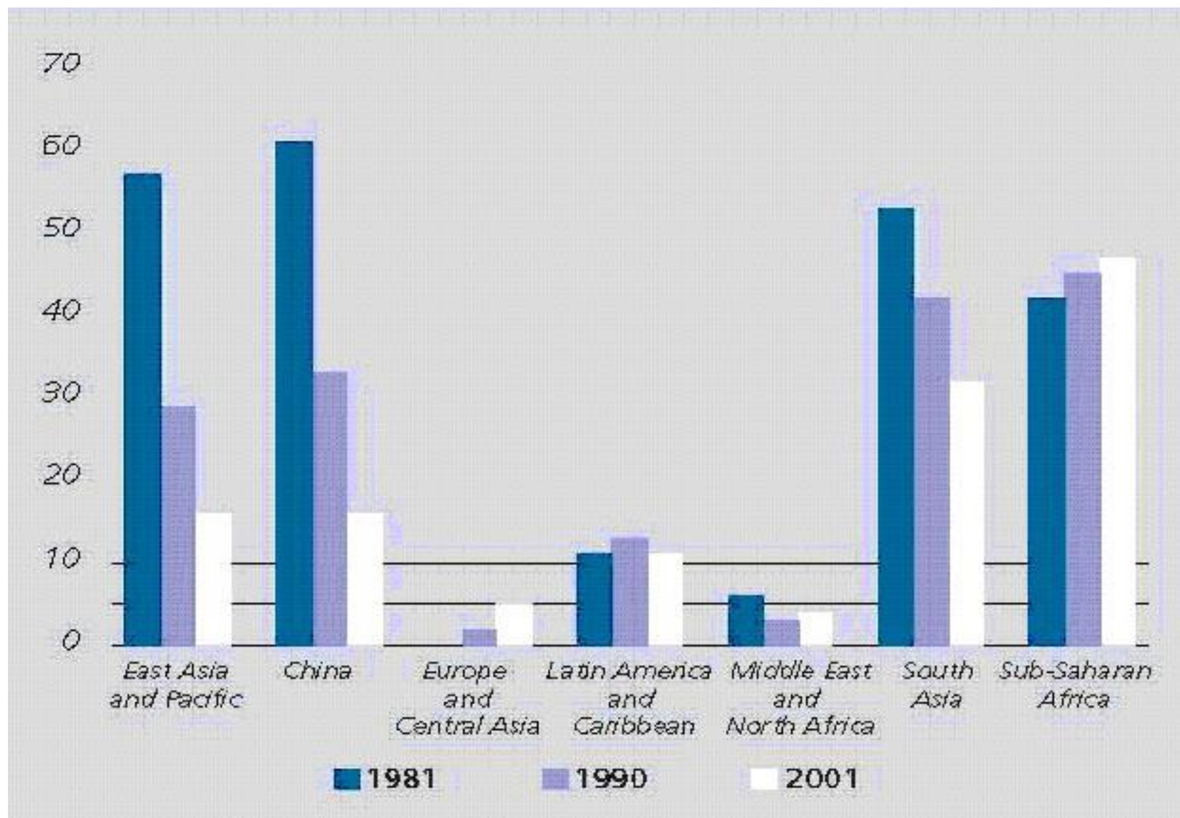
Wikipedia Encyclopedia termed "*Export-Oriented Industrialization (EOI)* " is a trade and economic policy aiming to speed-up the industrialization process of a country through exporting goods for which the nation has a comparative advantage. *Export-led growth* implies opening domestic markets to foreign competition in exchange for market access in other countries.

Export-Oriented Industrialization was particularly characteristic of the development of the national economies of Japan, South Korea, Taiwan and Singapore in the post World War II period. The purpose of international institutions such as the World Trade Organization, work in favor of such trade strategies and promote multilateral trade policy rules to put every nation on the same playing field.

2.2 World Incidence of Poverty

As shown in Figure 3, incidence of extreme poverty was strikingly found highest prevalence in Sub-Saharan Africa in 2001 at about 45 % of population and it is likely to steadily increase. Whereas, other parts of the world have been declining except Middle East, North Africa, Europe and Central Asia which were slightly escalated. The economies of Sub-Saharan Africa (SSA) have been in decline for a quarter of a century, although with notable exceptions. Consequently, SSA has become the development challenge: while, on present trends most of the developing world will continue to converge with the developed world. SSA's poverty rise has not just been relative but also absolute as shown in Figure 3. Unless this disturbing trend is reversed, the Millennium Development Goals (MDGs) will be unattainable for SSA. Therefore, the phenomena calls for careful attention in designing and implementing measure for economic development. Among others, appropriate industrialization strategies, viz. Export-Oriented Industrialization could progressively help tackle such poverty in order to uplift quality of life of the people.

Figure 3: Incidence of Extreme Poverty by Region



Source: World Development Indicators, 2004, cited in Industrial Development Report 2004, UNIDO

2.3 Global Industrial Trend

UNIDO (2004) reported that the most notable trend in global industrial performance between 1980 and 2000 is the increase in the developing world's share of MVA, from 14 percent to 24 percent. Within this broad trend, though, the performance of regions and countries has varied significantly. Transition economies suffered a large decline in industrial activity in the early 1990s, a result of the shock of rapid liberalization. On the other hand, the 53 Least Developed Countries (LDCs) improved their industrial growth rates marginally since the mid-1980s, though from a low starting point.

The distribution of manufacturing production in the developing world is becoming less unequal overall, but this has been happening mainly through the success of a few large successful economies, with China in the lead. The bottom half of the developing world's population continues to account for a tiny share of global MVA. The gap between the industrially richest and poorest countries has been widening; for the world as a whole in the second half of the 1990s, and for developing countries over the last two decades.

East Asia, excluding China, is now the most industrialized region in the developing world. It has been the engine of recent overall industrial growth, doubling its share of the developing world's MVA from 29 percent in 1980 to 54 percent in 2000. Latin America and the Caribbean (LAC) has been the largest loser: from being the leading region in 1980, with a 47 percent share, it ended the period a poor second with a 22 percent share. Sub-Saharan Africa also lost share, from 1 percent to 0.8 percent. South Asia and the Middle East and North Africa (MENA) increased their shares slightly.

Over the last 20 years, there has been a *shift in the technology composition* of manufacturing from resource-based (RB) and low-technology (LT) activities to medium- and high-technology (MHT) ones in both industrialized and developing economies. Transition economies exhibit (in the midst of their industrial decline) a growing share of resource-based activities. LT activities grew slowest in both industrial and developing countries. Developing country exports have grown faster than those of industrial ones in all technological categories and periods except for RB products in the early 1980s. The developing countries' lead is greatest in high-technology (HT) products, followed by medium-technologies (MT) ones. Export performance is highly uneven in the developing world, more so than MVA. East Asia, including China, accounts for nearly 70 percent of the developing world's manufactured exports in 2000, up from 52 percent in 1981.

2.4 Progress of Industrial Development in Least Developed Countries (LDCs)

The LDCs accounted for 53 countries of world countries. Its progress of industrial development is rather lagging behind other country groups. Therefore it is necessary to give particular emphasis on their economic development pattern as well as looking into its structural production, strength and weakness posed.

1) Pattern of Economic Growth

UNIDO (2001) indicated output growth in LDCs accelerated modestly during the 1990s, averaging 3.2 per cent annually (1990-98) compared with 2.5 per cent a year in the 1980s. Income *per capita* increased by a mere 0.9 per cent a year between 1990 and 1998 and, if Bangladesh is excluded, by only 0.4 per cent. In 22 of the 49 LDCs, *per capita* incomes actually declined, while in 32 growth rates were highly variable. Terms-of-trade effects had the most decisive influence on LDC growth during the 1990s. Between 1988 and 1993, LDC terms-of-trade deteriorated 12 per cent, but in 1994-1995 there was an upturn that lasted until 1997. However, between 1997 and 1999, non-oil commodity prices fell by over 30 per cent, followed by a steep rise in oil prices which increased more than threefold between March 1999 and August 2000.

The vulnerability of LDCs to such shocks is illustrated by the close correlation between changes in the terms-of-trade and in the rate of LDC growth. Countries, such as Bangladesh and Lesotho, where manufactured exports increased substantially have largely protected themselves from terms-of-trade shocks. Industrial growth plays a crucial role in cushioning income fluctuations, reducing vulnerability to external shocks and enhancing aggregate productivity. Most Asian LDCs are among the group of 12 countries that have achieved *per capita* income growth of more than 2 per cent a year between the periods 1990 to 1998. If war-ravaged Afghanistan and Yemen are excluded, the average GDP growth rate for Asian LDCs during the 1995–1998 periods exceeded 5 per cent annually. These countries benefited from the dynamism of the East and South-East Asian region and their close ties with neighbors and with regional economic groupings, Association of South-East Asian Nations (ASEAN) and, to a lesser extent, South Asian Associations for Regional Cooperation (SAARC).

The relative success of Asian LDCs reflects higher levels of industrial performance. The share of the agricultural sector in GDP declined in seven of the nine Asian LDCs during the 1980–1998 periods. Manufacturing sector growth has been typically high; 8 per cent annually during the 1990s in Bangladesh and Cambodia, 12 per cent per annum in Lao People's Democratic Republic 8 and 7 per cent in the Maldives. Manufactured exports have also grown robustly. *In particular, export success is attributable to linkages with the dynamic*

developing economies of East and South-East Asia, which stimulated intra-regional trade and cross-border regional investment.

Asian LDCs grew faster too because of higher investment rates, supported by external financing, including growing foreign remittances by non-residents. In Bangladesh, this average half of export earnings and their share is also rising in Nepal.
Features common to relatively successful LDCs - those with *per capita* income growth rate above 2 per cent annually during the 1990s - include:

- relatively favorable international trading conditions;
- positive spillovers from neighbors, against a background of closer economic ties;
- diversified exports so that they were not heavily dependent on primary commodities; relatively rapid growth of manufactured exports - notably clothing, leather goods, processed fish products and processed minerals;
- significant inflows of foreign remittances from migrant workers;
- Significant flows of official development assistance (ODA).

Because of this, investment and import growth were maintained at relatively high levels. For these countries and many other LDCs the coming decade is likely to offer many opportunities. There are three preconditions for these opportunities to be realized. □The redesigning of the international investment and trading system that is taking place must continue to provide support for LDCs productivity growth.

2) Industrial Marginalization

Global advances in economic development and overall progress of developing countries have largely bypassed economic advantages of LDCs, which are struggling to overcome chronic poverty but lack productive capacities to move out of the poverty trap of low income, low investment and low growth. *With 10.4 per cent of the world's population, the 53 LDCs account for only 0.4 percent of global manufacturing value added.* With a few exceptions, there has been little or no progress over recent decades and many Low Income Countries have been faced with industrial decline. GDP growth in Low Income Countries accelerated during the 1990s, but annual average per capita growth still remained only about one per cent reflecting a significant divergence in performance within the Low Income Countries group.

Fluctuations in growth rates reflect vulnerability to external shocks and dependence on primary commodity markets. The manufacturing sector has been an important contributor to aggregate GDP growth in the relatively successful LDCs, especially in Asia. Manufactured exports have grown rapidly in these LDCs, which benefited from even faster industrial sector growth than their developing country neighbors. However, for LDCs as a whole, the manufacturing sector's share of GDP has typically remained less than 10 per cent and their share of global MVA is below 0.4 per cent. Productivity growth within manufacturing has been low and gross margins modest. Agro-industries typically account for more than 50 per cent of national MVA in LDCs. The manufacturing performance of Asian LDCs is clearly superior to that of African LDCs. Asian industry is more diversified and its export performance is significantly superior to other LDCs. Bangladesh, Myanmar and Nepal have

made considerable progress in this respect especially in clothing and food manufacturing. Many African LDCs have faced industrial stagnation or decline.

3) Major Industries

A number of major industries based on comparative advantage are still promising in LDCs. Food manufacturing is the most important industry in many African LDCs. Emphasis could be placed on increased processing of coarse grain, such as maize, millet, sorghum and cassava, both as a means for enhancing food security and expanding employment. High value export-oriented processed-food products also hold significant potential. Storage and transportation facilities for food crops could be expanded to counter vulnerability to shortages. The increased substitution of imported for locally produced grain in urban centers constitutes a major drain on foreign exchange resources. Meanwhile, increased dependence on food aid has an adverse impact on employment and weakens rural-urban linkages. Improvements in local grain milling technology and an effort to stimulate demand for coarse grain-based food products in urban areas are urgently required.

Increased fish processing is feasible in many African and Asian LDCs and can make an effective contribution to both poverty reduction and export growth. Improvements in riverine boating technology and significant increases in LDC landings of deep water fishing supplemented by assistance for technical upgrading of processing and storage facilities can contribute to foreign exchange earnings and employment. Likewise, there is scope for rehabilitation of the sugar industry and greater utilization of its by-products, especially bagasse and molasses, in several industries ranging from energy to animal feed. Adopting small-scale milling technology in the oil-seeds branch can increase employment opportunities. There are opportunities for effective integration into the global value chain of the fruit processing industries provided adequate canning and marketing capacities are developed. Expanding food processing and exports also require a rapid expansion in the biotechnological capabilities of the LDCs.

There is an urgent need for major rehabilitation and restructuring of the agricultural tools and machinery industries. Without this, increases in agricultural productivity cannot be sustained, water resources cannot be conserved and repair and maintenance of imported machinery becomes impossible. Ensuring food security in LDCs depends crucially on the rehabilitation of the agricultural tool and machinery industry. Some Asian LDCs - most importantly Bangladesh - have made considerable progress in the clothing industry. The phasing out of the Multi-Fiber Arrangement and the new conditions facing the global textile and clothing industry will benefit mainly China and India.

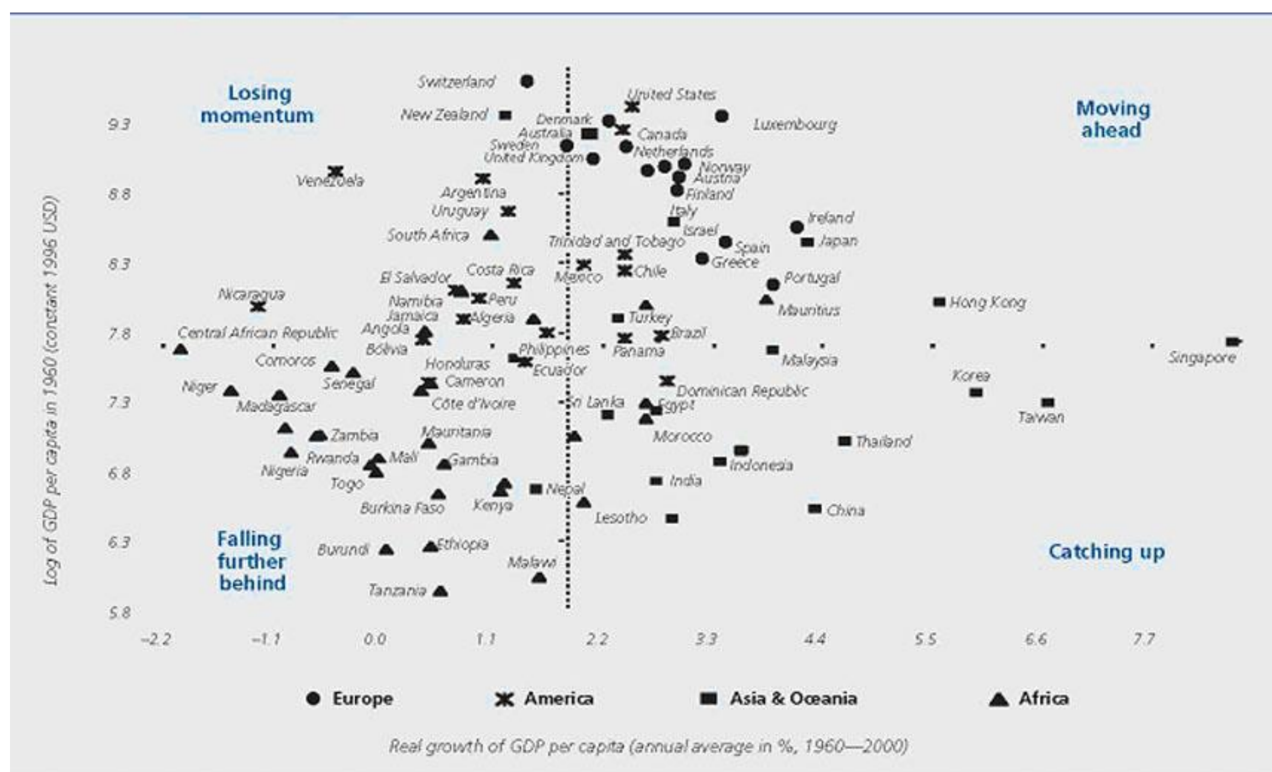
Nevertheless, the global apparel value chain is buyer-driven and, hence, technology and skill diffusion is widespread. There are opportunities for many LDCs to benefit from linkages to global activities of textile manufactures and marketers based in neighboring countries. Equally important is the prospect for developing a domestic demand-oriented textile and clothing industry that caters to the needs of growing populations in LDCs. Furthermore, opportunities exist for development of the footwear industry, both for domestic and the export markets and for its effective integration in the global value chain.

2.5 Holding-up and lagging behind: accounting for success and failure over time

UNIDO (2005) revealed that at the extremes, the long-run trend since the Industrial

Revolution seems to be towards divergence, not convergence, in productivity and income. But, in accordance with the empirical evidence provided below, what history shows is that in the few countries that have managed to catch-up with, even overtake, the leaders at different points in time, the key driving forces were technology and the environment that fosters it.

Figure 4: Convergence vs. divergence in GDP per capita over 1960s – 1990s



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Data on per capita income across countries and regions since 1820 shows a long-run tendency towards divergence in the global economy. Not only have high-income countries grown faster on average than those with low income, but the distribution has also widened, so the gaps between the richest and poorest have grown. While the period between 1820 and 1950 was one of divergence in economic performance between the leading advanced countries, the decades that followed were characterized by *'club convergence'* in income and GDP per capita among the industrialized economies, and further divergence between them and the lower-income economies. In particular, this tendency seems to have gained momentum after 1980.

Probably the most striking feature of the long-run evidence is the great variation in performance between countries with comparable initial levels of productivity and income. That said, the data helps to distinguish clearly between four groups of countries in Figure 4.

- countries that, having started with high level of initial income, are still *moving ahead* with high growth rates,
- high-income countries that have started to *lose momentum*,
- countries that, having started with low levels of income, enjoy high growth rates and are in the process of *catching-up,* and

- countries that are *falling further behind*.

Productivity catch-up requires higher-than-average growth for a sufficiently long time. How long this period must be depends on the size of the initial gap with respect to the target level. However, the aim of catching-up efforts cannot be expressed solely as that of achieving higher-than-average levels of GDP per capita. In order to better account for patterns of convergence and divergence, it is necessary to undertake a historical assessment of institutional developments that have influenced the accumulation of technological and social capabilities in catching-up countries.

3. Features of Export-Oriented Industrialization (EOI)

3.1 Why Do Developing Countries Need EOI Strategies

1) Arguments for EOI Strategies

As we have partly realized the crucial role of industrial development in sustaining national prosperity as well as being a means to reduce poverty and bridge the gap of widening disparities between developed countries and developing countries or among world nations. It is now necessary to deepen our understanding on the underlying rationales for adopting EOI strategies relating to developing countries.

Chandra (1992) argued that Import-Substitution Industrialization (ISI) led to rapid increases in industrial production in most developing countries as both local and foreign entrepreneurs took advantage of government financial incentives and market protection. However, ISI led to the creation of high-cost industries because small domestic markets meant full economies of scale could not be realized. Initially, this was not a major problem because basic food and consumer goods had large markets, but it became a major problem as countries tried to proceed to the second round of import substitution involving more specialized goods which needed large markets for efficient production.

Costs also increased because of the absence of competition both from local producers and imports. Entrepreneurs did not therefore strive to reduce costs and improve the quality of their products. In addition, ISI was seen to have failed to reduce external dependence, since in many instances raw materials were imported. More importantly, firms in developing countries had bought or licensed technology from developed countries. Finally, the heavy involvement of the state, particularly through State Owned Enterprise (SOEs), was proving to be a major drain on resources.

Historically, European colonialism helped many Asian and African economies make the best use of their labor and natural resources, thereby escaping from the state of leaving their potentials untapped. Consequently, export values of many developing countries largely accounted for some 60% of their receipts and import value and some two-thirds of their payments, while foreign aid and investment represent some 10% of the value of inflow capital, and interest payments and remitted profit account for 11–13% of the outflow. These analyses show that the growth of foreign trade has encouraged a fast and sustainable economic development, especially in developing countries.

As a result, the need to earn foreign exchange, and pressure from international agencies, particularly the World Bank and the International Monetary Fund, have led to the adoption of export-oriented industrial policies, particularly since the 1960s. Led by Singapore, Taiwan and South Korea, most developing countries began to orientate their policies to produce for the world market rather than for the often small domestic market. Although,

countries did not embrace global production fully, they however modified their policies and encouraged exports.

For this reason, EOI strategies are believed to possess significant advantages to developing countries as follows:

- Greater capacity utilization
- Resource allocation according to comparative advantage
- Exploitation of economies of scale
- Generate technological progress in response to consumption abroad
- Increased employment in labor surplus developing countries like India, Thailand
- Increasing state revenue by taxing exports
- Learning by doing effect and skill formation in managerial and marketing practices, thus high labor productivity
- Enlarged size of the market
- Successful export program would overcome BOP problems
- Overall accelerated growth of the developing countries economies
- The production of exports is a necessary precondition for increases in import, especially import of new technologies needed for the industrialization process.
- Domestic labor division will be coupled with international specialization and local market with international one, therefore the labor force will be employed more effectively because the competition on the world market is always keener than on the local market.
- The export value will increase and help to bridge the trade gap.
- New dynamic will be created to produce multiplier effects.
- Proportion of unfinished products to exports will decrease because the supply of them tends to exceed the demand on the world market.

2) Export Processing Zones (EPZs)

A key element in the promotion of export oriented industrialization has been the use of export processing zones. The establishment of export processing zones is a fairly recent phenomenon, in a way being an extension of the industrial estate. Export processing zones comprise not only a spatial entity, movement to and from which is closely monitored but also a package of incentives. In some countries, such as Mauritius, the whole country is deemed to be an EPZ; that is, firms are not required to locate in a special zone to benefit from incentives. However, to be allowed into an EPZ, firms have to export a high proportion of their output.

There has been a dramatic expansion of EPZs in the world since their introduction in Costa Rica and India in mid-1960. In 1986, forty-eight countries in Africa, Asia, Latin America and the Caribbean operated 180 EPZs; and a further eighteen countries offered similar conditions without formal EPZs. Furthermore, twenty-two countries had EPZs under construction. *Workers in EPZs and offshore factories comprise about 5 per cent of the manufacturing labor force of developing countries*. In terms of regional distribution, Africa stands out with the fewest EPZs. Asia and the Pacific region, particularly South-East Asia, contains the largest numbers of EPZs; this region has also experienced dramatic success in export-led industrialization.

Export processing zones represent the most dramatic manner in which developing countries are competing for foreign investment and trying to induce local manufacturers to produce for exports. A wide range of incentives are offered as part of an EPZ package. Although details of incentives often vary from country to country, the general types of incentives offered are extensive. Export processing zones engage in a wide range of manufacturing, but they have typically concentrated on the textile and garment industries and electronics, largely because cheap labor is important in these industries since mechanization has not been feasible.

On the whole, the Epps have employed young female laborers. Although, EPZs have led to an increase in exports, they have generated controversy as a development strategy. *Activities in these zones have generally not developed strong links with the rest of the economy; the economy becomes more dependent on overseas markets; wages are low; women are 'retired' at a very early age (sometimes by 25 years); and there is hardly any transfer of technology.* On the other hand, these zones are seen as attracting additional investment, earning foreign exchange and providing employment.

3.2 **Arguments Against to EOI**

There are some arguments against to EOI as follows:

- *Comparative advantages in each period must be defined clearly and they should be employed effectively, because comparative advantage is dynamic.*
- Local companies are forced to select and replace technologies in use, and improve their managerial skills.
- *It also requires new macroeconomic policies that are flexible enough to deal with changes on the world market.*
- *The economy should ensure conditions for enhancing the quality of development, and more exactly, enhancing the international competitiveness.*

4. Problems/Constraints for Increasing Exports from Developing Countries

There are some problems/constraints for increasing exports from Developing Countries as follows:

- Limited exports opportunities due to overvalued exchange rates, as exports would be costly

- In spite of export subsidies, due to dominance of import substituting protectionist regimes, which were more attractive, export promotion did not achieve much impetus-thus Home Market Bias

- Export risky and involve fixed costs due to investment in packaging, Research and Development, advertising, tedious relation building with prospective importers, higher technological standards and quality control

- Early reversal of export promoting policies discourages exporters to promote exports

- High tariffs in Developed Countries against Least Developed Countries

- High cost of export incentives including subsidies and tax concessions

- Capital goods and equipments are selling with higher price in Africa Region causing low industrial investment

- The manufacturing value added (MVA) performance of Sub-Saharan Africa (SSA) in the last two decades has shown an uneven growth trend, largely driven by small export-platform countries.

5. Guiding Policies / Government Intervention Measures to Promote Exports in Developing Countries

In the last few years, as countries have become highly indebted and experienced debt-servicing difficulties, they have also become more vulnerable to the pressure of the IMF and the World Bank to pursue export-oriented policies. Chandra (1992) and Chahda (2007) recommended the changes towards export oriented manufacturing have been achieved with the policy changes as follows:

- Devaluation and depreciation of LDCs currencies

- Provision of foreign exchange risk protection

- Cut protective duties in the range of protective rates for different industries

- Remission of tariffs on imports of inputs and capitals equipment if used for boosting exports

- Reduction/exemption in indirect taxes for exports

- Import replenishment and priority allocation of foreign exchange for exporters

- Income taxes concessions for exporters on their export earnings

- Preferential credit to exporters

- Export subsidies, as South Korea gave 12 % export subsidy on the value added in exports of manufactures; Brazil gave 6-38 % subsidy of value of exports and Argentina gave 20 % of value of exports.

- Dilution/elimination of quantitative restrictions and tariff reduction as under WTO

- Diversification of LDCs exports

- Quality consciousness and product specification

- Create a niche based on competitive advantage usually "competitive spatial economic advantage" in the case of Sub-Saharan countries.

- Formulate pro-poor industrialization with labor-intensive industrialization strategy in low income countries in order to raise their income levels.

- Using financial instruments (taxation, interest rate, etc.) to discourage the production aiming at local market demand. This measure requires the Governments to remove protectionist tariffs and quota on imports in order to encourage competition in the domestic market and force companies to concentrate their efforts on export.

- Giving tax reduction or exemption to products that are exported for the first time with a view to making them more competitive. This measure can encourage local companies to try their best to produce exports by innovating technology, improving labor productivity and product quality as well as reducing production cost.
- Making business information and advisory services available to all companies. Looking for new foreign markets must be central to the Government's foreign trade policy.

- *Developing industrial and agricultural zones specializing in production of exports (or raw materials for producing exports) and making them pace-setters for export business.*

- Allowing market prices (of consumer goods and factor inputs as well) to fluctuate according to changes on the world market in order to force local companies to enhance their competitiveness.

- Creating a cooperation relation between the Ministry of Trade, Ministry of Industry, customs authority and local companies and removing all regulations and rules unfavorable for the export- oriented strategy.

- *Keeping foreign exchange reserves big enough to deal with sudden fluctuations and protect the international competitiveness of the economy.*

- Active search for markets, including conclusion of trade and aid agreements, organization of overseas trade exhibitions, and market intelligence

- State intervention in the labor market to ensure the supply of dutiful, nonunionized, cheap labor for export production

- Provision of export processing zones, which cover a package of financial benefits and streamlined bureaucracy
- Relaxation of laws regarding ownership and local borrowing Relaxation of laws regarding ownership and local borrowing
- Privatization of state activities to reduce the role of the state in direct
- production and generally to increase the role of the market in the economy

To sum up, the export- oriented industrialization strategy is the best way to increase capital accumulation, investment and production. As a strategy, it also involves challenges and dangers. That is why appropriate policies at macroeconomic level are much needed

6. Challenges/Opportunities for Enhancing Export Promoting Industrialization

There are broad challenges governing industrial development in developing countries as follows:

6.1 Spreading the equitable benefits of globalization

The economic stagnation and decline in many developing countries is linked to the insufficient attention paid to the potential development contribution of industry and, in particular, manufacturing. Without enhancing the role of industry, a sustainable path of economic development will not be achieved. It is industry – more than any other productive sector–that drives the economic growth process, provides a breeding ground for entrepreneurship, fosters technological dynamism and associated productivity growth, creates skilled jobs and, through inter-sectoral linkages, establishes the foundation for both agriculture and services to expand.

Furthermore, prices of manufactured exports are both less volatile and less susceptible to long term deterioration than those of primary goods, thus, providing the potential for sustainable export growth and integration into the global industrial economy. Developing countries will be able to benefit from liberalized trade flows and become integrated into the global industrial economy only if existing supply-side constraints for industrial growth are removed and competitive productive capacities are developed. In this, full advantage should be taken of World Trade Organization (WTO) regulations that permit promotional policy measures for low-income developing countries such as a majority of those in Sub-Saharan Africa. Macro-economic stabilization and institutional reforms are necessary and have been carried out in many developing countries. By themselves, however, they do not trigger a growth process unless followed up by *building capacities* for the mobilization of information, knowledge, skills and technology required to equip industry with the means to compete effectively in global markets.

6.2 How to promote industrial growth and at the same time directed toward poverty alleviation

Building productive capacities for industrial growth is crucial for alleviating poverty. Industry is a driver of economic growth in the development process and is essential for enhancing the kind of productivity that stimulates growth throughout the economy, especially through industries linked to *agriculture* including food security. Productivity enhancing

measures–skills, knowledge, information, technology and infrastructure–can facilitate a strengthening of domestic manufacturing capacities for upgrading technology, developing comparative cost advantages and introducing new management and organizational structures needed to ensure effective integration in the global industrial economy. Without such *integration*, especially through foreign direct investment and transnational corporations, it will be difficult for developing countries to develop a dynamic and competitive industrial sector, which is so essential for achieving *sustainable development*. Industry is at the heart of the modern knowledge-driven economy. LDCs with a stagnant manufacturing sector cannot achieve sustainable development in a globalizing world, let alone alleviate poverty.

7. Experiences/Impact/Achievements of Export Promoting Industrialization Strategies in Developing Countries

A wide range of experiences in implementing EOI focusing in developing countries and some other part of developed countries have been documented. It is shown that such successes depend on many factors and extent of government policy supports. It varies from country to country. However, it is plausible to learn some successes and failure from each other so that those country wish to undertake EOI could try to avoid undesired consequences.

7.1 Experiences of Export-Oriented Industrialization

It has been mostly successful, although it can be sensitive to the market. The suspected failure of the ISI strategy has led to renewed interest in the EOI strategy in adopting exported-oriented industrialization policies. A number of experiences in developing countries have been acknowledged as follows:

- *In East Asian Countries*, export-oriented industrialization functioned as one of the main vehicle for long-term growth.

- The export success achieved by a limited group of newly industrializing countries (NICs) may not be possible for a large number of additional LDCs. (Kirkpatrick, Lee and Nixon, 1984, pp.199) thus causing concentrations of exports among few industries.

- During 1970s almost 50% exports from LDCs were due to TNCs which do not promote linkages for general industrialization of domestic economy.

- Almost 15 out of 26 exporting industries, used unskilled cheap labor-thus labor intensive exports will have no externality for rapid development of the LDCs economy.

- Public-owned enterprises were more active in exports from LDCs

- Export of light manufactures including textiles suffered as private exporters could not modernize production due to capital shortage

- Limited group of developing countries including Korea, Hong Kong and Singapore could expand exports

- Only public enterprises could expand exports by blocking TNCs and private industry-so less efficient

- At the end of the day, only restrictive ISI has been fundamentally responsible for EOI

- *In Africa, African firms seem to have faster productivity growth as a result of exporting* (Harding and Soderbom, 2004 cited in UNIDO, 2004)

- *African firm's inability to move up market into export of medium- to high-technology manufactures due to relatively low levels of technological capability-building and existing pool of skills as exemplified by the lack of R&D activity and minimal employment of engineers and technicians by the private sector.*

- The trend of the change in the composition of the exports of SSA toward manufactured goods occurred much slower than in East Asia. The inability of the least developed SSA countries to increase the value added was probably due more to other factors than to market access, of which were the domestic exchange rate policy. (Nziramasang, 1995)

- *In Kenya,* Air freight and logistics costs both domestic and international transportation to export related products e.g. fresh fruits, nuts, vegetables and cut flowers are costly preventing them to earn from international trade (Nziramasang, 1995).

7.2 Impacts of Export-Oriented Industrialization

Impacts were also perceived particularly during the 1998 Asian economic crisis that hurt the economies of countries which used export-oriented industrialization. It is criticized for its lack of product diversity, which makes the economies potentially unstable. Therefore, careful and flexible external trade and economic policies should be strengthened. The above mentioned impact of EOI to countries concerned can be attributable from the following phenomena:

- **The East Asian Miracle**

According to Petsas (2003), from the mid-1960s onward, exports of manufactured goods, primarily to advanced nations, was another possible path to industrialization for the developing countries. These were led by the *High performance Asian economies (HPAEs)***,** a group of countries that achieved spectacular economic growth. In some cases, they achieved economic growth of more than 10% per year. Relating to the facts of Asian Growths, The World Bank's definition of HPAEs contains three groups of countries, whose "miracle" began at different times:

- *Japan (after World War II)*
- *The four "tigers": Hong Kong, Taiwan, South Korea, and Singapore (in the 1960s)*
- *Malaysia, Thailand, Indonesia, and China (in the late 1970s and the 1980s)*

The HPAEs are very open to international trade. For example, in 1999, exports as a share of gross domestic product in the case of both Hong Kong and Singapore exceeded 100% of GDP (132 and 202 respectively). *Some economists argue that the "East Asian miracle" is the inducement to the relatively open trade regime. The World Bank suggests that the HPAEs have been fewer protectionists than other less developing countries, but they have by no means followed a policy of complete free trade.*

Average rate of protection in 1985 in percentage were as follows:

- *High Performance Asian Economies* *at 24 %*
- *Other Asia* *at 42 %*
- *South America* *at 46 %*
- *Sub-Saharan Africa* *at 34 %*

Low rates of protection in the HPAEs helped them to grow, but they are only a partial explanation of the "miracle." Several of the highly successful economies have pursued industrial policies (from tariffs to government support for research and development) that favor particular industries over others.

Conclusion

Trade policy in developing countries is concerned with two objectives: promoting industrialization and coping with the uneven development of the domestic economy. Government policy to promote industrialization has often been justified by the infant industry argument. Most developing countries are characterized by economic dualism. Dual economies have a serious problem of urban unemployment. The differences in wages between the modern and traditional sectors have sometimes been used as a case for tariff protection of the industrial sector. The HPAEs have industrialized via exports of manufactured goods.

Export-oriented industrialization of the sort that has occurred in the successful countries of East Asia is unlikely to be replicated in other developing countries – particularly in Africa and Latin America - which have much lower ratios of skill to land (or of human to natural resources). Therefore, developing countries may set up its own industrialization direction based on strength and relative factor endowment through primary processing into consideration. A country with extensive natural resources can produce and export processed primary products depends on the skills of its workforce. If the level of skill per worker is high, the country will have a comparative advantage in primary processing; if the level of skill is low, its exports will be concentrated on narrowly defined (unprocessed or less processed) primary products.

For countries with low skill/land ratios, but moderate levels of skill per worker, characterized by much of Latin America, is thus a positive one. Although they lack a comparative advantage in the sorts of manufactures in which East Asia specializes, these countries can, through primary processing, produce and export other sorts of manufactures. Primary processing is less labor-intensive than narrowly defined manufacturing. Exporting processed primary products is thus likely to yield fewer of the distributional and social gains that East Asia reaped from massive expansion of manufacturing employment.

For countries which have both low skill/land ratios and low levels of skill per worker, characterized by much of sub-Saharan Africa, it is a more negative one. Countries in this situation have no stronger a comparative advantage in primary processing than in narrowly defined manufacturing. They thus have little chance of exporting large amounts of any sort of manufactures, unless or until they can raise the skill level of their workers (not just absolutely, but relative to the rest of the world), which will require, first and foremost, large increases in the coverage and quality of basic education, and is bound to be a slow process.

In the meantime, countries with a lot of land and low levels of education should concentrate on opportunities for progress within the narrow primary category. Israel and the Netherlands for example, exporting unprocessed agricultural products is not necessarily associated with poverty. In Africa, too, there has recently been diversification into new crops -

fruit, flowers and vegetables which can create many jobs, as well as raising export revenues. Other than agriculture sector, there have also been potential in diversifying industries in developing countries to include clothing, textile, etc.

Lastly, reducing international inequality and marginalization could be an explicit objective. ODA levels will need to be significantly increased and restructured to stimulate productivity growth in developing countries. Technical assistance for capacity building in developing countries particularly for LDCs should also be increased significantly. The primary external stimulus for growth in developing countries is economic dynamism of neighboring countries. Developing countries are expected to grow at an annual average rate of between 5 and 6 per cent during the next decade. Cooperation between developing countries and developing countries, especially in the form of regional institutional arrangements, is vitally important for developing countries and would also benefit developing countries as a whole. The key to developing countries success is productivity growth, which cannot occur without industrialization. The industrial sector has historically been the main user and generator of technological skills. Technological and organizational capacity building is largely dependent on the pace and structure of industrial growth. Industrial policy ought, therefore, to be a priority concern of developing countries.

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Figure

Figures 2: World Distribution of Country Income Groups

East Asia and Pacific (developing only: 24)

American Samoa	Malaysia	Philippines
Cambodia	Marshall Islands	Samoa
China	Micronesia, Fed. Sts	Solomon Islands
Fiji	Mongolia	Thailand
Indonesia	Myanmar	Timor-Leste
Kiribati	Northern Mariana Islands	Tonga
Korea, Dem. Rep.	Palau	Vanuatu
Lao PDR	Papua New Guinea	Vietnam

Europe and Central Asia (developing only: 26)

Albania	Kazakhstan	Russian Federation
Armenia	Kyrgyz Republic	Serbia
Azerbaijan	Latvia	Slovak Republic
Belarus	Lithuania	Tajikistan
Bosnia and Herzegovina	Macedonia, FYR	Turkey
Bulgaria	Moldova	Turkmenistan
Croatia	Montenegro	Ukraine
Georgia	Poland	Uzbekistan
Hungary	Romania	

Latin America and the Caribbean (developing only: 29)

Argentina	Ecuador	Panama
Belize	El Salvador	Paraguay
Bolivia	Grenada	Peru
Brazil	Guatemala	St. Kitts and Nevis
Chile	Guyana	St. Lucia
Colombia	Haiti	St. Vincent and the Grenadines
Costa Rica	Honduras	Suriname
Cuba	Jamaica	Uruguay
Dominica	Mexico	Venezuela, RB
Dominican Republic	Nicaragua	

Middle East and North Africa (developing only: 14)

Algeria	Jordan	Syrian Arab Republic
Djibouti	Lebanon	Tunisia
Egypt, Arab Rep.	Libya	West Bank and Gaza
Iran, Islamic Rep.	Morocco	Yemen, Rep.
Iraq	Oman	

South Asia (8)

Afghanistan	India	Pakistan
Bangladesh	Maldives	Sri Lanka
Bhutan	Nepal	

Low-income economies (53)

Afghanistan
Bangladesh
Benin
Burkina Faso
Burundi
Cambodia
Central African Republic
Chad
Comoros
Congo, Dem. Rep
Côte d'Ivoire
Eritrea
Ethiopia
Gambia, The
Ghana
Guinea
Guinea-Bissau
Haiti
India
Kenya
Korea, Dem Rep.
Kyrgyz Republic
Lao PDR
Liberia
Madagascar
Malawi
Mali
Mauritania
Mongolia
Mozambique
Myanmar
Nepal
Niger
Nigeria
Pakistan
Papua New Guinea
Rwanda
São Tomé and Principe
Senegal
Sierra Leone
Solomon Islands
Somalia
Sudan
Tajikistan
Tanzania
Timor-Leste
Togo
Uganda
Uzbekistan
Vietnam
Yemen, Rep.
Zambia
Zimbabwe

Lower-middle-income economies (55)

Albania
Algeria
Angola
Armenia
Azerbaijan
Belarus
Bhutan
Bolivia
Bosnia and Herzegovina
Cameroon
Cape Verde
China
Colombia
Congo, Rep.
Cuba
Djibouti
Dominican Republic
Ecuador
Egypt, Arab Rep.
El Salvador
Fiji
Georgia
Guatemala
Guyana
Honduras
Indonesia
Iran, Islamic Rep.
Iraq
Jamaica
Jordan
Kiribati
Lesotho
Macedonia, FYR
Maldives
Marshall Islands
Micronesia, Fed. Sts.
Moldova
Morocco
Namibia
Nicaragua
Paraguay
Peru
Philippines
Samoa
Sri Lanka
Suriname
Swaziland
Syrian Arab Republic
Thailand
Tonga
Tunisia
Turkmenistan
Ukraine
Vanuatu
West Bank and Gaza

Upper-middle-income economies (41)

American Samoa
Argentina
Belize
Botswana
Brazil
Bulgaria
Chile
Costa Rica
Croatia
Dominica
Equatorial Guinea
Gabon
Grenada
Hungary
Kazakhstan
Latvia
Lebanon
Libya
Lithuania
Malaysia
Mauritius
Mayotte
Mexico
Montenegro
Northern Mariana Islands
Oman
Palau
Panama
Poland
Romania
Russian Federation
Serbia
Seychelles
Slovak Republic
South Africa
St. Kitts and Nevis
St. Lucia
St. Vincent and the Grenadines
Turkey
Uruguay
Venezuela, RB

High-income economies (60)

Andorra	France	Netherlands
Antigua and Barbuda	French Polynesia	Netherlands Antilles
Aruba	Germany	New Caledonia
Australia	Greece	New Zealand
Austria	Greenland	Norway
Bahamas, The	Guam	Portugal
Bahrain	Hong Kong, China	Puerto Rico
Barbados	Iceland	Qatar
Belgium	Ireland	San Marino
Bermuda	Isle of Man	Saudi Arabia
Brunei Darussalam	Israel	Singapore
Canada	Italy	Slovenia
Cayman Islands	Japan	Spain
Channel Islands	Korea, Rep.	Sweden
Cyprus	Kuwait	Switzerland
Czech Republic	Liechtenstein	Trinidad and Tobago
Denmark	Luxembourg	United Arab Emirates
Estonia	Macao, China	United Kingdom
Faeroe Islands	Malta	United States
Finland	Monaco	Virgin Islands (U.S.)

Source: the World Bank, 2007