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State Led Investment in Mexico’s Industrial Development: Lessons from an Asian Tiger

By

Edgar Zayago Lau

A Thesis Submitted to Saint Mary’s University, Halifax, Nova Scotia in Partial Fulfillment of the Requirements for the Degree of Masters of International Development Studies

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17 June 2005.

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ABSTRACT:

State Led Investment in Mexico’s Industrial Development: Lessons from an Asian Tiger

By

Edgar Zayago Lau

For the Less Developed or Developing Countries (LDCs), industrial development, pursued over the years within both the capitalist and socialist systems, has been the basic and arguably most viable strategy for achieving socioeconomic development. This research is an effort to introduce an analysis of the set of ideas surrounding industrial development and its connection with foreign direct investment (FDI). The main research question of this thesis is whether or not control over foreign direct investment determines the level of industrial development in countries such as Mexico in the developing world. For that reason, a comparative analysis is provided to determine why the outcomes so far are presumably different between the industrialization of Mexico and South Korea. Thus this research makes reference to three alternative models for exploring such differences the Neoliberal Model, the South Korean Developmental Model and the Neostructuralist Model.

17 June, 2005
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<tr>
<td>AUSEE</td>
<td>Acuerdo de Unidad para Superar la Emergencia Económica.</td>
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<tr>
<td>DOF</td>
<td>Diario Oficial de la Federación</td>
</tr>
<tr>
<td>CEDIS</td>
<td>Certificados de Devolución de Impuestos</td>
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<tr>
<td>CEESP</td>
<td>Centro de Estudios Económicos del Sector Privado</td>
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<td>CFE</td>
<td>Comisión Federal de Electricidad</td>
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<td>CEMEX</td>
<td>Cementos Mexicanos</td>
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<td>CNIE</td>
<td>Comisión Nacional de Inversión Extranjera</td>
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<tr>
<td>CONACYT</td>
<td>Consejo Nacional de Ciencia y Tecnología</td>
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<tr>
<td>CONASUPO</td>
<td>Compañía Nacional de Subsistencias Populares</td>
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<td>DM</td>
<td>Developmental Model</td>
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<tr>
<td>ECLAC</td>
<td>Economic Cooperation for Latin America and the Caribbean</td>
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<td>EPB</td>
<td>Economic Planning Board</td>
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<td>EZLN</td>
<td>Ejército Zapatista de Liberación Nacional</td>
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<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<td>FKI</td>
<td>Federation of Korean Industries</td>
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<td>FOBAPROA</td>
<td>Fondo Bancario de Protección al Ahorro</td>
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<td>FPI</td>
<td>Foreign Portfolio Investment</td>
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<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>HCI</td>
<td>Heavy Chemical Industry</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<td>IMCE</td>
<td>Instituto Mexicano de Comercio Exterior</td>
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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>INEGI</td>
<td>Instituto Nacional de Estadística Geografía e Informática</td>
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<td>IFIs</td>
<td>International Financial Institutions</td>
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<td>ISI</td>
<td>Import Substitution for Industrialization</td>
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<td>KAITECH</td>
<td>Korean Academy of Industrial Technology</td>
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<tr>
<td>KEPCA</td>
<td>Korea Electronic Parts and Components Association</td>
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<td>KCCI</td>
<td>Korean Chamber of Commerce and Industry</td>
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<tr>
<td>KIST</td>
<td>Korean Institute of Science and Technology</td>
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<td>KLDC</td>
<td>Korean Land Development Corporation</td>
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<td>LDCs</td>
<td>Less Developed Countries</td>
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<td>LFC</td>
<td>Luz y Fuerza del Centro</td>
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<td>MITI</td>
<td>Ministry of International Trade and Industry</td>
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<td>NAFTA</td>
<td>North American Free Trade Agreement</td>
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<td>NICs</td>
<td>Newly Industrialized Countries</td>
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<td>OCDE</td>
<td>Organization for Economic Cooperation and Development</td>
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<td>PEMEX</td>
<td>Petróleos Mexicanos</td>
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<tr>
<td>PITEX</td>
<td>Programa de Importación Temporal para la Elaboración de Productos de Exportación</td>
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<tr>
<td>PRONASOL</td>
<td>Programa Nacional de Solidaridad</td>
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<tr>
<td>SECOFI</td>
<td>Secretaría de Comercio y Fomento Industrial</td>
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<tr>
<td>SHCP</td>
<td>Secretaría de Hacienda y Crédito Público</td>
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<tr>
<td>SKDM</td>
<td>South Korean Developmental Model</td>
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<tr>
<td>SLNM</td>
<td>State-Led Neostructuralist Model</td>
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<tr>
<td>SOE</td>
<td>State-Owned Enterprise</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>SUE</td>
<td>Sindicato Único de Electricistas</td>
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<td>SUTERM</td>
<td>Sindicato Único de Trabajadores Electricistas de la República Mexicana</td>
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<td>TELMEX</td>
<td>Teléfonos de México</td>
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<td>UNDP</td>
<td>United Nations Development Program</td>
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<tr>
<td>UNAM</td>
<td>Universidad Nacional Autónoma de México</td>
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<td>UNCTAD</td>
<td>United Nations Conference of Trade and Development</td>
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<td>WB</td>
<td>World Bank</td>
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<td>WTO</td>
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ACKNOWLEDGEMENTS

I would like to express my extensive and sincere gratitude to Dr. Henry Veltmeyer, my supervisor, for his invaluable support and continuous assistance, not only in the research of this thesis but also throughout the years of graduate study. I am greatly grateful to Dr. Anthony O'Malley, my first reader, for his wise suggestions to maintain the focus and pragmatism of this research project. I would also like to express my appreciation for their encouragement and intellectual support. This has shaped my ideas and has helped me to become a better development analyst and a more responsible professional. I would like to thank my external supervisor, Dr. John Kirk, for his support and interest, and continuous commitment to help the people of Latin America.

I am greatly appreciative of the assistance and encouragement provided by Annette Wright during these difficult and complicated years of graduate study.

I would like to thank my entire family for their loving help, economic assistance and emotional support, but particularly my mother Virma Rosa Lau Rios, my father Gerardo A. Zayago Valdez, my uncle Fredy Lau Rios and his wife Maribel del Angel and my aunt Rocio Lau Rios. I would like to extend my gratitude to my beloved friends and new extended family, Lars Henry Andersen and Christine Sentongo-Andersen as well as Geoff Peters and his wife Erin. I would also like to thank my lifetime friends Gerardo Garcia Cortes, Omar Elizalde Sanchez and Dr. Francisco D'Egremy Alcazar as well as his life partner Elvira Mora.

Finally, I would like to offer this thesis to all the Mexicans who live in extreme poverty and to the Mexican children who die as a result of this. I specially dedicate this thesis to them.
Chapter I
INTRODUCTION

Posing the Problem

For the Less Developed or Developing Countries (LDCs), industrial development, pursued over the years within both the capitalist and socialist systems, has been the basic and arguably most viable strategy for achieving socioeconomic development. However, within what has been termed the ‘new world order’, a system in the making since the early 1980s, many LDCs in most areas of the so-called ‘Third World’ on the South of a divide in the global economy, have not managed to industrialize their production systems or find the path towards economic development. Associated with this ‘failure’ has been the production of problems such as the systematic weakening of domestic industry and a decline in their share of world trade, not to speak or write of a serious deterioration in the socioeconomic conditions experienced by most of the population.

The global race for industrial development is increasingly dependent and based on a process of ‘productive transformation’ – technological conversion of the industrial production apparatus, particularly in the manufacturing sector. In theory, the level of industrialization of a given country, using the capitalist system of production, is determined by the productive investment of capital. However, capital per se does not encourage the process of industrial upgrading. It is necessary to invest such capital in a productive way, that is, in technology development. This is observed as a necessary link between capital (in this case FDI) and the process of industrial development. The process
of capital accumulation is necessary to encourage the process of industrial development via technological advance. Thus it is essential for developing nations to produce capital-intensive-goods or, in other words, advanced high-tech manufactures. The experience of the industrialized countries, both the most advanced that make up the economies in the OECD and the ‘newly industrialized and industrializing countries’ in Asia (East Asia and China – and recently, India) suggests that without this productive transformation the developing countries will continue in their low productivity and low growth cycles that perpetuate their current structure of underdevelopment, reproducing widespread conditions of underdevelopment and poverty.

The debate about the factors that promote and facilitate industrial development, and the obstacles to be overcome, can be traced back five decades to the aftermath of World War II. The state-led development model advanced in the immediate post-war period and, involving the agency of the nation-state, stresses the importance of state intervention in the economy in order to promote industrial advance. There are recent historic experiences, particularly in East Asia, that illustrate the effectiveness of this model or state-led development. However, most recently, the industrial development of South Korea has captured the attention of several social scientists, being the central focus of a structural analysis. At the centre of this analysis is the package of policies implemented during the country’s successful industrialization process.

The South Korean process of industrialization, or the South Korean Developmental Model (SKDM) that defines it, is worthy of further study if not emulation. One critical factor requiring study is to understand the context in which the industrialization process unfolded – to determine its preconditions and any particular
favourable circumstances experienced by South Korea. After all, the country had just suffered a disastrous war from 1950-1953 which greatly damaged its economy and that under other circumstances might have impeded the economic development process. But then Japan and Germany also underwent a rapid industrialization process under similar circumstances. Clearly there is a problem here warranting a closer look and further study.

Another reason for this study, suggested by some analysts (Clark and Jung, 2002; Bienefeld 1988; Amsden 1989; Haggard and Moon, 1983, 1990; Mardon, 1990; Hayami, 1998; Gereffi and Wyman, 1990), is the ability of South Korea to protect its domestic industry from foreign interests and from the free-wheeling cowboy capitalism—and the penetration (and private sector ‘intervention’) of transnational corporations experienced by most nation-states in Latin America, for example. The weight of this factor, together with preconditions such as an extensive land reform, which created a solid domestic market for an expanding industrial production process, and the more likely critical factor of state-led strategic planning, provide good reasons for taking a close look at the South Korean model of industrial development.

By several accounts (Luedde-Neurath, 1984; Clark and Jung, 2002; Bienefeld 1988; Amsden 1989; Haggard and Moon, 1983, 1990; Mardon, 1990; Hayami, 1998; Gereffi and Wyman, 1990), control over foreign investment was a critical, if not the most important, policy measure taken by the government to generate a process of industrial development, technological conversion and productive transformation. This policy allowed the government to direct foreign investment to support the industries with the highest potential for development. From 1960 to 1990 it provided a mechanism for encouraging the growth of a domestic highly competitive industry. The South Korean
state-led investment policy was the starting point for its extraordinary industrial development. Today, without a doubt, the South Korean industrial sector is one of the most competitive in the world. This sector is represented by enterprises such as LG, Hyundai and Samsung among others.

In contrast the process of industrial development in Mexico has not been nearly as successful as the one experienced in South Korea. Nonetheless both countries are considered to be part of a group of Newly Industrialized Countries (NICs). But certain differentiations have to be made between the industrial development of Mexico and South Korea. The Mexican case is not as successful because its industrial development has not translated into better living conditions for the Mexican society (see UNDP, 2004 and Table XVII). This is also evident in the absence of Mexican products in the advanced high-tech manufacturing sector which under the capitalist system generates the highest rates of productivity gains and return of profit which provides resources for productive investment and technological upgrading, propelling thereby an endogenous industrialization process.

Mexico is highly representative of the paradox that characterizes the NICs. On the one hand, it accounts for almost one half of Latin America’s export of industrial production and the Mexican economy is now the ninth largest economy of the world. On the other hand, Mexico has pursued a very different development path from South Korea, led by the ‘private sector’ (that is, multinational capitalist corporations) rather than the state. Mexico’s development path has been paved by the widespread implementation of policies designed to structurally adjust the national economy to the requirements of the new world economic order based on financial liberalization, privatization and free trade –
the 'new economic model' of neoliberal capitalist development promoted by the international financial institutions (IFIs). This is notably not the path along which South Korea. This raises several questions about the circumstances; the structural factors that might either inhibit or promote a process of industrial development that results in social development as well as productive transformation (economic and social development of the society as a whole). What is the major catalyst of the process: is it the state (government intervention, strategic development planning and productive investment under conditions of the old economic order), or is the global market freed from government regulation and interventions – 'the forces of economic freedom', to paraphrase George W. Bush?

As for Mexico the view of the current government is clear, expressed inter alia in its championing of free trade agreements both in the region and across the globe. As we can observe in the following abstract from the Foreign Direct Investment Magazine, FDI:

Mexico is the . . . the top trading nation in Latin America. No country in the world has signed more free trade agreements: Mexico enjoys bi-lateral accords with 32 countries, including the two biggest markets in the world: the US and the EU. Altogether these countries make up a preferential market of about 850 million consumers and this number is set to increase when current negotiations for an agreement with Japan are completed (FDI Magazine, 2004).

On the other hand, according to official data provided by the Ministry of Social Development and the World Bank, 53.2 million of Mexicans cannot meet their basic needs regarding clothing, health, education, transport and housing (CEESP, 2005); (Castellanos, 2005; see Table XVII). This represents more than half of the Mexican population. This contrasts with the view that Mexico is an industrialized developed
country. Even so, Mexico is the only Latin American Country member of the Organization for Economic Cooperation and Development (OECD).

At any rate, several studies have been completed in order to evaluate the positive outcomes of having a rigorous control over foreign investment. These studies indicate that state-led investment policy generally promotes industrialization and certainly was a critical factor in South Korea’s path towards national development and its transformation from a poor and backward country into a newly industrialized country that has been able to deliver a substantial degree of economic and social development to the population with a relatively high degree of popular participation in the fruits of this ‘development’. In this connection the national income generated by the industrialization process in South Korea is distributed in a relatively egalitarian fashion, with a ratio of four to one in the share of incomes of the top and bottom quintiles of the population (*World Development Indicators*, 2002; see Table XVII). In Mexico, and Latin America generally, this ratio is closer to eighteen to one (Morley, 2001; *World Development Indicators*, 2002; see Table XVII), with a correspondent difference in the overall level of economic and social development, and in the incidence of poverty (over 50% of the population in Mexico versus under 20% in South Korea).

In the context of this difference in the form and level of economic and social development between South Korea, on the one hand, and Mexico on the other, it has been suggested and argued that if the strategy and policies pursued by South Korea and other ‘rapidly-growing countries in Asia’ (World bank, 2003) were adopted by countries like Mexico they would possibly induce a similarly long term process of productive transformation and socioeconomic development. Of course, the question is to determine:
(i) the structural preconditions of this development; (ii) the general and specific context of this development; and (iii) its driving forces. The World Bank itself in its 1992 World Development report on alternative paths of national development suggested that the critical factors in differentiating between cases of successful and unsuccessful industrialization were (i) a difference in the direction of national policy (market-friendly or not), which, it argued, explained at least 25% of the variation; (ii) the economic structure underlying these policies (the degree of openness to the global economy and the mobility of the factors of production, especially capital), which explained another 20 to 40% of this variation; and (iii) the state of the world market, which required governments and corporations to tack strategically with shifting winds and adjust to changing conditions. To address this and other arguments and to explore, if not settle, the issues involved and still in debate, it is necessary to undertake a systematic structural — and comparative — analysis of the process of industrial development. For this reason, the thesis research is focused on comparing Mexico’s industrial development with the South Korean experience of industrial development. The thesis provides a case study of the manufacturing sector of this development in Mexico.

Objective of the Study

There is an increasing emphasis, bordering on fervour, regarding the use of foreign direct investment as the means of encouraging industrial development in LDCs. The liberalization of FDI is highly recommended by international institutions such as the World Bank (WB) and the World Trade Organization (WTO) among others. In Mexico these policies are embodied in the implementation of the New Economic Model (Bulmer-
Thomas, 1996). This model has been operationalized in Mexico for three decades. Thus it is important to uncover the linkages of this model with the process of productive transformation by exploring the dynamics between FDI and industrial development. Since the Mexican economy is based on the capitalist system of industrial development, the theoretical framework of this thesis is focused on three major modern paradigms of industrial capitalist development. The South Korean Developmental Model (SKDM) or State Capitalism, taken as a very successful case of industrial and socioeconomic development; the New Economic Model, or Neoliberalism, that has been part of the Mexican political economy of industrial development; and the Neostructuralist Model, presented by CEPAL (1990, 1992) and viewed by this author as a possible alternative model to neoliberalism for industrial and socio-economic progress, not only for Mexico but also for Latin America.

The thesis supports the view and argues that for Mexico to undertake a process of socioeconomic development it is necessary to bring about an endogenous industrial development process. There is a need for a study that explores the contribution or the drawbacks of FDI in the process of industrial development in LDCs. For this reason the main objective of this research is to determine the relationship between FDI and industrial development in the context of the capitalist system of production, with Mexico as a case study. The thesis also seeks to present a viable strategy for encouraging the process of industrial development without compromising, and indeed by advancing, social wellbeing in Mexico, that is, to ensure that the fruits of development do not only accrue to a small number of capitalists like Carlos Slim, an industrial tycoon whose personal fortune exceeds the total income of several million of Mexico's poor. This
concern for a more equitable form of industrial development is another reason for taking South Korea as the major centre of reference for a structural analysis of the dynamics of industrial development in Mexico. Our primary reason for this approach is that South Korea is widely regarded as a paradigmatic case of a state-led form of industrial development with relatively equitable social outcomes in the distribution of economic growth outcomes accompanied by social development (see UNDP, 2004; and Table XVII). Mexico’s greater reliance on FDI in the process of its industrial development, and a very different government regime and economic model, allow us to construct a solid support for our thesis argument, a sort of scaffolding to support our observations and conclusions. In this the SKDM in South Korea will not in itself be a subject of investigation rather, it will serve as a centre of reference for our case study of the neoliberal model used to direct the process of industrial development in Mexico.

Thesis Statement

The main research question of this thesis is whether or not control over foreign direct investment determines the level of industrial development in countries such as Mexico in the developing world. The thesis of this study is that indeed it does – that it is a critical, if not determining factor in this development, albeit one of many. This argument will be supported by evidence weighed in support and relative to other contributing factors.

Before continuing with this it is worth mentioning that there are consistent links between the cultural, political, economical and sociological structures in LDCs. Nevertheless, for the purpose of this thesis, the main matter of analysis is how FDI is
used for encouraging the process of industrial development and why the outcomes so far are presumably different between the industrialization of Mexico and South Korea.

To address the issues stated above, and to construct an argument in support of this thesis, this research makes reference to three alternative models for exploring the differences between industrial development in South Korea and Mexico. The thesis of this study is that the neoliberal model behind the process of industrial development in Mexico, and that supports a dominant role for FDI liberalization in the process, is a major reason that Mexico has not managed to parallel South Korea’s achievement in this regard. The corollary and implication of this thesis is that if the Mexican government were serious about its declared concern to promote a sustainable process and more equitable form of economic development, then it needs to abandon the neoliberal model and pursue a different approach in regard to the contributions of FDI – not to dispense with it but to regulate it and, like the South Korean government over the years of its transformation into a Newly Industrialized Country, and to assume more control over FDI.

**Research Methodology**

The matter of analysis explored in this Thesis required the use of several specific sources. These sources included a variety of government documents, reports from international organizations, banks and different chambers of commerce. In addition, alternative sources were used such as magazines, newspapers, scholarly papers, journals and books. It is worth mentioning that most of the data required entailed the use of extracting strategies for archival and secondary information. Thus the evidence collected in support of the study's thesis came from secondary sources. However, to ensure the reliability of
these data and the validity of our interpretation of these data it was necessary to double-check the various sources of data against each other – to 'triangulate', as it were, the data. This we have done.

**Structure of the Thesis Argument**

The chapters of this thesis are structured so as to facilitate the analysis and understanding of the subject matter. Chapter I examines the matter of study and provides a brief introduction of the control issue to be analyzed. In addition, the chapter describes the objective of the study as well as the thesis statement and the research methodology used in order to answer as thoroughly the research question.

Chapter II provides a systematic review of the relevant scholarly literature. The purpose of this chapter is to provide a definition of the variables analyzed in this research, namely the concept of Foreign Direct Investment (FDI) and Industrial Development. In addition, the importance of technological development within the dynamics of both factors is explained. The next section of this chapter organizes the theoretical frameworks of the three models analyzed in this research. This is done by categorizing the models according with the different mechanisms suggested by them to use FDI to endorse industrial development. This section describes the three models of industrial development that provide alternative frameworks for understanding the process of industrial development and directing national policies in regard to it. The Developmental Model (DM) and the Neostructuralist Model encourage the control of FDI to support an endogenous industrialization. Within these models the institutional agent employed to control FDI is the state. However, there are some differences between the two models.
The Developmental Model (DM) advocates for a rigorous control over FDI to encourage a nationalist process of industrial transformation. This model was implemented in South Korea, the reference case of this research. This theoretical framework helps the reader to understand the industrialization process experienced in South Korea (which is explored in Chapter III of this project). The neostructural model of development explores the possible mechanisms for using FDI to upgrade the industrial infrastructure in the context of Latin America. With a neostructuralist analysis a “lighter” version of control over FDI is suggested. It is worth mentioning that Mexico followed a pattern of industrial development recommended by ECLAC embodied in the former structuralist model. For that reason, an overview of the evolution of ECLAC’s thinking is provided going from the theoretical framework of structuralism to the formulation of neostructuralism.

Contrasting with these models, the neoliberal model stands for a complete liberalization of FDI to encourage industrial development. This is what is explored in the next section of this chapter. In this section, the main contributions of the founding fathers of neoliberalism – Friedrich Von Hayek and Milton Friedman – are analyzed. This part is very important because it provides the theoretical antecedents of the model that has been implemented in Mexico since the early 1980s. It gives the reader the theoretical framework behind the Mexican process of industrial development which is the case study of this research discussed in Chapter IV.

Chapter III offers an overview of the South Korean industrial process with special emphasis on the several stages of the industrial upgrade. This is prepared by exploring the evolution of the South Korean industry from the development of the agricultural sector to the progress of the advanced-high tech manufacturing industry. The next section
of this chapter exemplifies the argument of the success of the SKDM on delivering social development. This is argued from the view that industrial development, which in general leads to capital accumulation, was a fundamental mechanism used by the South Korean government for having the necessary resources to execute the welfare programs.

Chapter IV begins with the analysis of the case study of this thesis. In this chapter the researcher explores the conditions of FDI in Mexico from the colonial period until the early 1980s. This section marks the longitudinal research regarding FDI and its influence over the Mexican industrial development. This part also prepares the reader for a more in-depth analysis of the neoliberal model of industrial development, which was established in Mexico after the 'failure' of the ECLAC model. The next section of this chapter builds on the preceding argument. Resulting from financial crises and problems derived from the economic stagnation of the 1980s, the ECLAC model had to be dismantled to implement a new way of industrial development (Neoliberalism). This section explains to the reader the dynamics and influence of the neoliberal model over the Mexican process of industrial development. For this reason, this section is organized into several divisions corresponding to the sexenios or presidential periods of the last four neoliberal presidents. Special attention is given to the role of NAFTA and its influence over FDI inflows to the Mexican manufacturing sector. In addition, a section describing how the neoliberal model has failed to encourage social development is provided.

Chapter V offers a discussion of the different models of industrial development with a special reference to the case study of the thesis. It also provides a critical analysis of the findings about the different outcomes of the Mexican and South Korean models. The chapter offers a consistent critique of the neoliberal model in Mexico, mainly for its
inability to encourage an endogenous industrial development. This chapter advances the argument that in fact the neoliberal model has encouraged a system of "cowboy industrialization" which only has benefited foreign enterprises. This is contrasted with the outcomes of the SKDM. Additionally, in this chapter the researcher offers an insight about a Neostructuralist alternative for industrial development. This is argued by analyzing some of the mechanism suggested by neostructuralism to encourage industrial development as well as an equitable process of socio economic development.

Chapter VI, by way of several concluding remarks, offers a series of recommendations corresponding with the preceding chapter. The argument advanced that FDI in Mexico by way of liberalizing it has only brought few benefits, and that in general it has stopped the development of Mexican industry. Thus this last section indicates the most viable alternative. This is the formulation of a new model of industrial development embodied in the combination of the SKDM and the neostructuralist model. The main purpose of this is to advance a state-led neostructuralist model (SLNM) in which the most beneficial policies of neoclassical economics are used to encourage industrial development. At the same time a SLNM is suggested to encourage social development by the direct intervention of the state. This last argument supports a recommendation that is offered tentatively in the expectation of additional research. In addition, according to the findings extracted from the exploration of the case study, this last part of the chapter advances the argument that the amount of control over foreign direct investment determines the level of industrial development in LDCs. In the case of Mexico the liberalization of FDI has held back the development of the advanced high-tech sector.
Chapter II
FOREIGN DIRECT INVESTMENT AND INDUSTRIAL DEVELOPMENT

Introduction

As was previously discussed, the level of industrialization of a given country, using the capitalist system of production, is to a great extent determined by the productive investment of capital. The most important link between investment and the process of productive transformation is technology development. For the purpose of evaluating the dynamics of those factors three different models of industrial development are analyzed. They can be categorized in two different divisions according to the mechanisms suggested to encourage the productive use of capital (in this case foreign direct investment). On one hand, the Developmental Model (DM) (which was used by South Korea) and the Neostructuralist Model, stand for controlling FDI in order to promote industrial upgrading. These two models differ regarding the degree of control over FDI as well as some of the mechanism used for that purpose. The Developmental State promotes a rigorous control over FDI to encourage the process of industrial upgrading. In contrast, the neostructuralist model stands for a 'lighter version' regarding the regulation of FDI.

Contrasting with these two models, the 'New Economic Model' (Bulmer-Thomas, 1996) or Neoliberal model advocates for the liberalization of FDI to promote a consistent pattern of industrial upgrade. This model has been implemented worldwide through the liberalization of three economic activities: international trade, foreign direct investment
(FDI) and capital market flows (World Bank, 2004). Mexico has used the model for more than twenty years to support the process of industrialization.

It is important mentioning that all three theoretical models are expected to function under certain conditions provided by the capitalist system of production. Those conditions (for instance the private property of the means of production) are reflected in the dynamics amongst labour, capital and technology. For the purpose of this research the focus of the variables has been narrowed down into the analysis of capital (FDI) and technology (to achieve industrial development). However, labour is mentioned according to the different perceptions that the models of this chapter have for it. This is done without any deep analysis whatsoever, since it is not the main focus of research.

**Foreign Direct Investment and Industrial Development: Some Definitions**

Foreign Investment takes place when assets of an individual or firm in one country are purchased by individuals or firms in another. Essentially, foreign investment can take two forms - Foreign Direct Investment (FDI) and Portfolio Investment (PI). According to Ellwood (2001), Foreign Direct Investment (FDI) occurs when foreigners buy equity in local companies, when they buyout existing companies or when they actually start up a new factory or business’ (Ellwood, 2001: 75). The World Trade Organization (WTO, 1996) defines FDI as the form of investment that occurs when an investor based in one country (the home country) acquires an asset in another country (the host country) with the intent to manage that asset. The management dimension is what distinguishes FDI from PI. In addition, FDI tends to have a direct impact on the productive sector of the host economies. Therefore, it is mostly preferred and even encouraged by the majority of
LDCs. In fact, specifically in the case of Latin America, enterprises and corporations define their strategies according to FDI flows (Taylor, 1999). Overall world FDI flows more than tripled between 1988 and 1998, from US$192 billion to US$610 billion, and the share of FDI to GDP is generally rising in both developed and developing countries (World Bank, 2000). Developing countries received about a quarter of world FDI inflows in 1988-98 on average (World Bank, 2000). Nevertheless, the problem with FDI has been the extended domination by US-based companies. Thus, FDI has been controlled to correspond with particular American interests which most of the time do not have a focus on social development. At any rate, the amount of capital being invested by the US is shocking. For instance, in 1998 US firms invested US $133 billion abroad (World Bank, 2000). This amount of money is bigger than most budgets of developing nations. Moreover, this has been an advantageous position for the US. Most of the income generated by FDI is one of the major sources of profits to the US. According to the Economic Cooperation for Latin America and the Caribbean, US$ 157 billion were repatriated by US companies from 1996 to 1998 (CEPAL, 1998). Thus, even thought FDI can generate jobs and bring some benefits, most of the profits generated were repatriated and were not reinvested in the host country. The trend continues today. This subordinates the industrial development of emergent nations to the specific interests of foreign enterprises.

Consequently, most of the industries in developing economies are producing basic manufactures or maquila-products'. In more recent years however, Latin America and the Caribbean have been the only regions in which FDI has consistently declined. As we can
observe in the following chart, in the last four years (1999-2003) the FDI inflows in Latin America and the Caribbean have abruptly declined.

<table>
<thead>
<tr>
<th>NET DISTRIBUTION OF NET FDI WORLD WIDE, 1991-2003</th>
<th>(Billions of Dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Total</td>
<td>254.3 481.9 686 1079.1 1393 823.8 651.2 653.1</td>
</tr>
<tr>
<td>Developed countries</td>
<td>154.6 269.7 472.3 824.6 1120.5 589.4 460.3 467</td>
</tr>
<tr>
<td>Western Europe</td>
<td>91 139.3 263 496.2 709.9 400.8 384.4 345.8</td>
</tr>
<tr>
<td>European Union</td>
<td>87.6 127.9 249.9 475.5 683.9 389.4 374.3 341.8</td>
</tr>
<tr>
<td>Germany</td>
<td>4.8 12.2 24.6 55.8 203.1 33.9 38 36.4</td>
</tr>
<tr>
<td>France</td>
<td>154.6 269.7 472.3 824.6 1120.5 589.4 460.3 467</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>16.5 33.2 74.3 84.2 130.4 62 24.9 23.9</td>
</tr>
<tr>
<td>Other Western European</td>
<td>3.4 11.4 13.1 20.7 26 11.4 10 4</td>
</tr>
<tr>
<td>North America</td>
<td>53.4 114.9 197.7 308.1 380.8 172.8 50.6 37.7</td>
</tr>
<tr>
<td>Canada</td>
<td>6.6 11.5 22.3 24.7 66.8 25.8 20.8 11.1</td>
</tr>
<tr>
<td>United States</td>
<td>46.8 103.4 174.4 253.4 314 144 30 86.6</td>
</tr>
<tr>
<td>Other developed countries</td>
<td>10.2 15.5 12 20.3 29.9 15.8 25.3 23.5</td>
</tr>
<tr>
<td>Japan</td>
<td>0.9 3.2 3.2 12.7 8.3 6.2 20.8 9.3 7.5</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>91.5 193.2 191.3 229.3 246.1 209.4 162.1 155.7</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>27.1 73.3 82 106.3 95.4 83.7 56 42.3</td>
</tr>
<tr>
<td>Africa</td>
<td>4.6 10.7 8.9 12.2 8.5 18.8 11 14.4</td>
</tr>
<tr>
<td>Asia</td>
<td>59.4 109.1 100 108.5 142.1 106.8 95 99</td>
</tr>
<tr>
<td>China</td>
<td>25.5 44.2 43.8 40.3 40.8 46.8 52.7 57</td>
</tr>
</tbody>
</table>


Another important variable for this research is industrial development. For the purpose of this thesis and since the framework of analysis is the capitalist model of production used in Mexico, industrial development is understood as the systematic and continuous upgrading of the industrial infrastructure. Generally speaking, the upgrade of the industrial infrastructure goes from basic agriculture to labour-intensive light industry, then to heavy industry, and finally to advanced high-tech manufactures. This process of catching up or industrial upgrading has been studied by several researchers whose main contributions will be explored in the review of the literature. In advance it is worth mentioning that for most of them the key element for the industrial upgrade of a given industry is the systematic use of technology. In other words the use of technology is observed as an essential input for the industrial upgrade because technology quickens the
process of industrial transformation. Most researches have shown that industrial
development in the capitalist productive system, via technological advance, is necessary
for developing countries to catch up with the most industrialized economies (Kuznets,
1954,1966; Chenery, 1968; Rostow, 1960; Gerschenkron, 1962,1963; Kim, 1997;
Hobday, 2003).

The Developmental Model (DM): A Model of State-Led Investment for Industrial
Development

Many constructive opinions have been generated after the successful implementation of
the South Korean Developmental Model (SKDM) inspired in the theory of the so called
Developmental Model (DM) or the Developmental State. It is important to understand the
systematic evolution of the developmental model as well as the different mechanism that
shape and give some logic to the operation of the model. For that reason, in the following
section of this chapter, a review of this model is provided. Special attention is given to
the mechanisms suggested by the model to control FDI in order to encourage the process
of industrial development.

For some theorists the state is the most important agent to successfully implement
the Developmental State (DS) or Developmental Model (DM). The model encourages
industrial development by means of the intervention of the state in the economy -- e.g. by
controlling FDI. The most important attribute, within this context, is the formation of a
very competent bureaucracy (Evans et al. 1985; Leftwich, 1995; Wade, 1990; Johnston,
1982). For others the success of the DM relies on the relationship or partnership between
the government and the business sector (Kung-Jung, 2001; Onis; 1991; Evans, 1995;
Weiss, 1994; Kondho, 2002). These features are essential for the 'developmental process' and are key for achieving the most important objective of the model. That is, industrial development via the allocation of capital (FDI) to encourage a systematic process of industrial upgrading.

Friedrich List was one important state theorist – and one of the first – to argue that less advanced nations’ needed to use the state to catch up with the advanced nations in order to accomplish the economical development of the nation and to prepare it for admission into the universal society of the future’ (List, 1885: 175). List anticipated the importance of government intervention in the economy with the purpose of improving the investment performance and thus industrial development. Such industrial development is expected to be achieved by the continuous upgrading of the national industrial infrastructure which for List is a direct consequence of the imposition of the power of the state.

‘...a perfectly developed manufacturing industry, an important mercantile marine, and foreign trade on a really large scale, can only be attained by means of the interposition of the power of the State’ (List, 1885: 178)

In 1962, Gerschenkron observed the importance of the government on the strategic coordination for most developmental efforts’. He stressed the significant role of the State while directing the economy with the main purpose of encouraging economic growth, especially in underdeveloped countries. He recognized that the mobilization of overall productive resources in LDCs was necessary to industrialize their economies. His ideas consisted of mobilizing the most abundant resources and concentrating them on higher growth sectors in order to boost productivity and support the process of industrial transformation (Gerschenkron, 1962). Later the argument of state intervention for
increasing industrial productivity was retaken by some developmental state theorists'. In fact, for some of them (Chibber; 2002; Gereffi and Wyman; 1990; Johnson 1982; Evans, 1995), state intervention is what defines the DM. The notion of 'developmental states' formally appeared in 1982. This took place when Chalmers Johnson presented his study about the Japanese Ministry of International Trade and Industry (MITI). In this study Johnson described the importance of the Japanese developmental state in the post-World War II country's economic miracle (Johnson, 1982). The role of the MITI was described by him as essential for managing the Japanese 'industrial rationalization' (Johnson, 1982: 27). The industrial rationalization was the specific ability of the state for setting policies and investment plans to encourage the rapid process of industrialization. For Johnson the foundation of the structural reform in Japan was initiated by training programs fashioned to improve the performance of the public servants. For instance, in 1977 only 1,300 out of 53,000 passed the examination to become public officials (Johnson, 1982: 57). This gives a perspective about the importance of public servants in the DM. This idea of an effective bureaucracy was "discovered" again by other developmental theorists.

During the same years (early 80's) in England, Robert Wade and his colleagues at the Institute of Development Studies at Sussex called Taiwan and South Korea as 'developmental states' (Evans, 1995). According to them those countries reflected an interventionist approach with the clear purpose of encouraging industrial development. In the mid-1980s the arguments explored by Peter Evans in his book *Bringing the State Back In* (Evans et al., 1985) plus the analysis observed by Robert Wade in his book *How to Govern the Market* (Wade, 1990) described the essential features of the DM.
Today the literature about the DM and the studies concerning its main characteristics are abundant. This literature clearly identifies the central features of the Model. There are at least three criteria for identifying the model:

- The formation of a very competent bureaucracy (Evans et al.; 1985; Leftwich, 1995; Wade, 1990; Johnston, 1982).
- The relationship or partnership between the government and the business sector (Kung-Jung, 2001; Onis, 1991; Evans, 1995; Weiss, 1994; Kondho, 2002).
- Industrial development as the most important developmental goal. (Weiss, 2000; Wade, 1990; Johnston, 1982).

Linda Weiss (2000: 23) provides a clear classification of those characteristics:

1. 'Their priorities (aimed at enhancing the productive powers of the nation, raising the investible surplus, and ultimately closing the technology gap between themselves and the industrialized countries);

2. their organizational arrangements (embodying a relatively insulated pilot agency in charge of that transformative project, which in turn presupposes both an elite bureaucracy staffed by the best managerial talent available, who are highly committed to the organization’s objectives, and a supportive political system); and

3. their institutional links with organized economic actors (privileging cooperative rather than arm’s-length relations, and sectors or industry associations rather than individual firms) as the locus of policy input, negotiation and implementation.’

In short a set of transformative goals, a pilot efficient agency and a form of institutionalized government-business cooperation (Weiss, 2000: 23) are the identifiable elements of the DM. Adrian Leftwich is another ‘developmental state theorist’. For him-as well as the previous theorists- the well trained bureaucracy is the foundation of the DM. He observes this bureaucracy as an elite group able to consolidate the control over
investment for increasing industrial development. There are others who complement the view of Leftwich in this regard, for instance Kung-Jung also believes that a close government-business relation, a capable bureaucracy and an efficient state intervention over the economy are the basis of the model.

‘the Developmental State, holding a capable economic bureaucracy, close government-business relations, and state-intervention financial institutions, becomes an initiator of economic growth’ (Kung-Jung, 2001:40).

The business-government relationship is another important feature of the DM. There are several dynamics in the formation of such relations (see Table III). The partnership formed by Developmental States is classified as one in which the public-private partnership is equitable shared. However, power relations are inequitable because the control over decision making is reserved to the government, (see 3rd sector Table III). To some theorists – Kung-Jung, (2001) Lee-Chung, (1992) Onis (1991) Weiss (1994) Wade (1990) and Evans (1995) – the interaction of the government and the private sector is more significant than the other characteristics of the DM. The reason is that the state together with the business class determines the necessary set of policies – including the investment policy – to encourage industrial development. Other theorists observe the importance of these business-state 'links'. However, they explain it in different wording. For instance, Weiss described those links as 'governed independence' (Weiss, 1994). To implement the DM, the government has to act independently from the business class to effectively coordinate and administer the state-business relations (Weiss, 1994). Otherwise the main objective of economic growth through industrial development would probably not be reached.
The argument is extensively discussed by others who see the structure of the partnership as a self-sufficient entity (Evans, 1995). This condition of relative autonomy is necessary for establishing a certain firm-like organization (Leftwich, 1995; Evans, 1995, 1985). For Peter Evans the dynamism of this feature is highly complex and complicated to emulate:

Autonomy is fundamental to the definition of the developmental state but not sufficient. The ability to effect transformation depends on state society relations as well. Developmental states must be immersed in a dense network of ties that bind them to societal allies with transformational goals. Embedded autonomy, not just autonomy, gives the state its efficacy (Evans, 1995: 248).

According to the latter, the transformational goals of the DM (industrial transformation) are implemented independently rather than subordinated to any particular interest of the business class. Therefore the state is expected to be the general manager and supervisor of all the business sectors (Lee-Chung, 1992).

On another topic, the success of the DM is related to authoritarianism. There are theorists, such as Leftwich (1995), who give central importance to the weak civil society as a required precondition to the success of the DM. Others such as Evans (1995) argue that there is a correlation between the power of the state and the fate of civil society.

First and most crucially, the fate of civil society is inextricably bound to the robustness of the state apparatus. Deterioration of state institutions is likely to go hand in hand with the disorganization of civil society. Sustaining or regaining the institutional integrity of state bureaucracies increases the possibility of mounting projects of social transformation (Evans, 1995: 249)
Furthermore, it is suggested that the repression of civil rights is directly related to the legitimacy of the state. Accordingly, this feature is central for the successful delivery of developmental goods.

A grim feature shared by developmental states is the combination of their sometimes brutal suppression of civil rights, their apparently wide measure of legitimacy and their generally sustained performance in delivering developmental goods. I suggest these are intimately connected (Leftwich, 1995: 411).

According to the DM, the precedent characteristics are necessary to control FDI. The Model advocates for a rigorous control over foreign direct investment (FDI). In fact, the DM is portrayed as the only capitalist model capable of controlling FDI for an endogenous process of industrial development (see Amsden, 1989, 1979; Haggard and Moon, 1983, 1990; Mardon, 1990; and Hayami, 1998). The model is observed as a pragmatic paradigm that allows LDCs to catch up with industrialized nations.

A Neostructuralist Approach: FDI and Industrial Development in Latin America

The neostructuralist model of development was created as a direct response to the Neoliberal model. Similar to the DM it advocates for more state intervention in the economy to encourage the process of industrial development. However, neostructuralism supports the use of orthodox neoclassical policies. Neostructuralism has its roots in the structuralist model of development. This model led the way development was conducted in Latin America from the 1930s to the 1960s. It also influenced development policy until the late 1970s. Nevertheless, in those years capitalism was in crisis, a process which affected the effectiveness of structuralist policies. Industrial development was not being
acceptably achieved by Latin American countries. In fact, there was a period of economic stagnation in most countries of the region. It is debatable, however, if the structuralist model of development had a direct and absolute responsibility for such stagnation in Latin America.

Policies were adapted from neoclassical economics (neoliberalism) – such as the liberalization of FDI -- to improve industrialization and break the stagnant cycle. The Economic Commission for Latin America and the Caribbean (ECLAC) started to search for alternative ideas to encourage the process of industrial development, and at the same time confront neoliberal policies. This originated a new theory of industrial transformation known as ‘neostructuralism’. The essential focus of this approach is to change production patterns, with the hope of achieving an equitable and fast industrial development (CEPAL, 2004; Sunkel, 1991a). The neostructuralist model has the main objective of solving the problem of the unbalanced industrial development in Latin America.

*Evolution of Neostructuralist Thinking*

ECLAC (CEPAL) agrees with the DM regarding the intervention of the state in the economy as essential element for socio-economic development. Specially, in the field of political economy, ECLAC has been always in favour of the intervention of the state in order to improve the industrial infrastructure. From ECLAC’s point of view, the state has to establish the main strategy for development (CEPAL, 2004a). This is expected to be achieved by placing the financial resources [e.g. foreign direct investment] into industrial sectors with enough potential to compete in national and international markets. At the
same time ECLAC encourages complementary measures such as the protection of the domestic market, the integration of Latin American economies to take advantage of economies of scale, and the gaining of external financing throughout international technical assistance (CEPAL, 2004a). Foreign investment is seen as a necessary element of industrial development. However, special focus is given to foreign lending as a secure option to obtain capital. Nevertheless it has to be complemented with foreign direct investment to successfully support the process of productive transformation (Sunkel, 1991a; CEPAL (2004a).

Changing the industrial structure of Latin American via the production of advanced high-tech manufactures is observed as indispensable for socioeconomic development (CEPAL, 2004a). The theoretical antecedents of this idea can be traced back to the structuralist thinking which initially had two forms. On one hand, there is the most radical form of structuralist thinking which is associated with the Marxist orthodox view. On the other, there is the reformist structuralist tradition connected to Keynesian, Post-Keynesian and neoinstitutionalist schools of thought. For the purpose of this research, and since the main focus of it is the capitalist model of production, the latter current is to be explored.

The reformist school originated its most recognized work under the second secretary of ECLAC, who is probably the most recognized Latin American economist, Raul Prebisch. For some, the analytical contributions of Prebisch are recognized as pre-economics (Rodriguez, 2001). Prebisch encouraged the formulation of a new paradigm of development based on the analysis of the structural conditions of the world economy. He created one of the most important analytical schemes for international political economy.
His main argument was that the world economic system has one centre and a peripheral organization. The centre is highly industrialized and is represented by the most industrialized countries such as the United States and the Western European countries. The periphery is generally agrarian and mostly formed by Latin American countries and the newly decolonized countries mainly located in Asia and Africa.

The structuralist paradigm lies in the proposition that the process of development and underdevelopment is a single process, that the centre and the periphery are closely interrelated, forming part of one world economy. Furthermore, the disparities between the centre and periphery are reproduced through international trade. Thus, the periphery’s development problems are located within the context of the world economy (Kay, 1989:26).

The centre is formed by countries in which intensive capitalist techniques of production domain, and the periphery is formed by ‘economies whose production continues to lag behind in an organizational and technical point of view’ (Rodríguez, 1980:26; cited in Lustig, 1991: 30). Those sectors are also characterized by the lack of technical progress and a high level of industrial underdevelopment which ‘only occurs in a few sectors of its enormous population; generally, it only penetrates those sectors where food and raw materials must be produced at a low cost for large industrial centres’ (Rodríguez, 1980: 26; cited in Lustig, 1991: 30).

According to CEPAL (2004) this creates an increasing technological gap between peripheral economies and economies located in the centre. In consequence, most of the trading operations between both structures are beneficial for the centre and detrimental for the periphery. Therefore, industrial development was suggested as the only alternative to reduce the productive and technological gap between the periphery and the centre. The idea was to endorse a competitive endogenous industrial development in Latin American
economies. During the 1950s and 1960s ECLAC recommended the implementation of policies to encourage an ‘inward-oriented’ model of industrial development. This model is commonly known as Import Substitution for Industrialization (ISI). This model was essentially reformist. In fact, this policy was compatible with the ideas of industrial modernization of that time:

It implied [ISI policy] encouraging the growth of an urban labour sector and strengthening the position of the businessmen vis-à-vis the oligarchical agro-export sector. It was assumed that industrialization through import substitution would lead the peripheral economies to a more independent, democratic and egalitarian growth path than growth based on primary growth exports (Lustig, 1991: 31).

Nevertheless the promised level of industrial development did not happen. At the end of the 1950s and at the beginning of the 1960s most countries that followed the ISI model suffered serious problems. They experienced stagnation, unemployment, a systematic decrease in the living conditions of the population and an increase in manufacturing costs. At any rate, the relative failure of the import substitution model was linked with three different causes. First of all the inflationary effect which for structuralists was a structural problem, therefore, 'as inflation was a consequence of structural imbalances one had to learn to live with it and confront it as part of a long-term policy toward the elimination of bottle necks' (Lustig, 1991:34). Second, certain sectors started to experience dramatic imbalances. One of the most damaged was the agricultural sector. It became less dynamic and it created bottlenecks of production which ironically increase inflation (Lustig, 1991: 34-35). Finally, 'as the import-substitution process advanced, the real resources initially transferred to industry by the agro-industrial sector
decreased (as a consequence of the stagnation of agricultural production), and the process depended more and more on state intervention and subsidies' (Lustig, 1991:34).

Due to the disappointments with the outcomes of the ISI, the model lost support. This originated the development of three new currents of thought. The first current advocated the development of regional integration in order to foster industrial development (Fishlow, 1985; cited in Lustig, 1999: 31). The second current suggested changes in the foreign exchange policy in order to alleviate fiscal imbalances. The third current had several ramifications. However, the most important of these was also the most pessimistic. This position argued that industrial development of Latin American economies within the capitalist system was impossible. For them the only solution to overcome the lack of industrial development was to change the system (Frank, 1969; cited in Lustig, 1991: 35).

Another ramification sustained that the industrial development of Latin American economies was possible within capitalism. However, to them, the implementation of redistributive mechanisms was essential (Pinto, 1970; cited in Lustig, 1991: 35). This idea was shared by several young structuralists such as Sunkel and Paz. They tried to readjust the initial plan for industrial development in Latin America by using a correlation among domestic markets, foreign markets and foreign investment. They also dismissed the idea that inflation was a structural problem because this thinking was associated by them as ‘intellectual inaction and practical irrelevance’ (Lustig, 1991).

The new structuralists had to face an unexpected challenge, the oil crisis, which later was going to become the origin of the debt crisis. In the 1970s the oil crisis erupted producing a huge increase in the price of oil and generating petrodollar accumulations by
the Arab economies. These Arab countries kept their 'oil money' in western banks. As a consequence, western banks were presumed to lend money to their creditors. This condition attracted several countries in Latin America in the search for finance to develop their industries. Thus they borrowed money without any measurement. In 1979 a huge rise in the price of oil took place which induced the developed countries to apply deflationary policies. One of these policies was the increase of interest rates. In 1982, the first country to collapse was Mexico. This started a chain reaction in other Latin American countries. As a result the implementation of short term policies became necessary. Those short term policies were part of the neoliberal structural adjustment program. Thus, it became necessary for the new structuralists to formulate an alternative model to oppose the neoliberal policies. Hence, the initial seeds of the neostructuralist model were born.

*A Neostructuralist Counterrevolution*

Short-term policies became part of the neostructuralist platform to oppose the neoliberal policies suggested to control the debt crisis. Nevertheless, in most of the indebted countries, policies of structural adjustment were implemented. This was done with the argument that Latin America would already be overcoming its difficulties and experiencing growth again within a few years. Among the ‘package’ of policies being recommended, the liberalization of FDI was included with the purpose of encouraging a rapid path of industrial recovery. However, the recovery of the Latin American economies never occurred. In fact, due to this condition the 1980s came to be known as the lost decade of development. ECLAC’s focus changed from a developmentalist
institution to mainly a rival organization to the International Monetary Fund and the World Bank.

The crisis of the 1980s would displace the developmentalist production of ECLAC to a secondary level, and the main intellectual effort would shift to the historically imposed area of opposition to the adjustment modality required by the creditor banks and IMF. In conditions where growth was impossible, space and interest for long-term discussions were clearly limited. Priority was given to immediate questions relating to debt, adjustment and stabilization (CEPAL, 2004a).

In those years the return of the state was observed as necessary to recover the path of industrial development. The initial focus of ECLAC took the form of ‘adjustment with growth’. At the end of the 1980s and at the beginning of the 1990s Neostructuralism officially became part of the theoretical framework at ECLAC. This current is represented, among others, by Osvaldo Sunkel, Joseph Ramos, Ricardo Ffrench-Davis, Nora Lustig, José Antonio Ocampo and Victor E. Tokman (Sunkel, 1991a). According to them the main economic problems of Latin America are not the result of political economy distortions. Rather, the economic problems are endogenous in character, structural and historic in essence. The main ideas of Celso Furtado, Aníbal Pinto and Aldo Ferrer were readapted; forming the method of neostructuralist analysis. In this regard neostructuralists observed three main concerns of Latin American economies:

- A continuing pattern of external insertion, which given the trends in international trade and the international financial system [including FDI], leads to an impoverishing specialization;

- the predominance of an uncoordinated production apparatus, which is vulnerable and highly heterogeneous, concentrates technical progress, and is
incapable of absorbing productively the growth of the labour force [hence
discouraging industrial development];

- the persistence of a very concentrated and exclusive income distribution,
  which reveals the system's incapacity to reduce poverty (adapted from

According to neostructuralists the solution to those problems is to increase
industrial productivity by encouraging a systematic endogenous technological advance
(Sunkel, 1991a). In addition, neostructuralists try to find less 'social-damaging' solutions
than the neoliberal adjustment policies. However they encourage the implementation of
heterodox neoclassical short-term policies to control inflation, such as the freezing of
prices and salaries which affect the working class (Lustig, 1991). In addition,
modifications were made to adapt the theoretical framework of neostructuralism to
today's economic conditions. These new adaptations include: the increase of state
dynamism; the use of foreign direct investment and the use of foreign markets to expand
the industry. At the same time, the neostructuralist model advocates a more inclusive
process of industrial transformation. Thus the base of the model changed from
'adjustment with growth' to 'changing production patterns with equity' (CEPAL, 2004a;
(Sunkel, 1991a). Such strategy is expected to be complemented with a strategy of
development from "within" in the context of supply side economics.

...what is vital is a dynamic effort on the supply side: accumulation, quality,
flexibility; the combination and efficient use of productive resources; the
deliberate incorporation of technical progress, innovation and creativity;
organizational capacity, social harmony and discipline; frugal private and public
consumption and emphasis on national savings, and the capacity of insert the
national economy dynamically into the world economy. In short our countries must take a deliberate effort 'from within', with the active participation of the state and private economic agents, to achieve self-sustained development (Sunkel, 1991b: 42).

Neostructuralist theorists think that the functioning of the market must be complemented by an effective action of the state (Sunkel, 1991a, 1991b). For example, neostructuralists declare that the state has to be more involved in the economy 'apart from its classical functions (public property macroeconomic stability and equity)' (Sunkel, 1991b: 41). In the centre of neostructuralist analysis are the discipline of finance and the control over investment. At this regard, they suggest the increasing of the financial resources of the government by fiscal reform. This is one important source of capital, but it has to be complemented with foreign investment. As it was already mentioned, the aim is to generate an endogenous accumulation that absorbs and generates technical advances, including the use of foreign direct private investment (Sunkel, 1991b). However, the government has to intervene to determine which sectors will be more competitive in the long term and then direct the financial resources (including FDI) to those sectors. This approach probably is taken from the experience of the East Asian Tigers such as South Korea and Taiwan. Moreover, neostructuralists agree with the SKDM regarding the advantages that can be learned from transnational corporations.

The output of the Transnational Corporations established in the region should also be exported; advantage should be taken of their international marketing network; and export commitments should be negotiated in exchange for the purchase of inputs at current international prices... basically what is proposed is a selective intervention that seeks to establish dynamic comparative advantages in international markets, since exporting is the natural next step to take in order to benefit from the industrial based already in existence (Sunkel, 1991b:43).
In general, neostructuralists are in favour of the regulation of capital and investment. However, this is suggested to be performed in a 'light version':

...neostructuralists seek to regulate capital movements, the exchange rate, trade policy and the interest rate, in order to build a stable macroeconomic framework which, as a source of confidence in future economic policy, promotes capital formation and the acquisition of comparative advantage of an increasing investment and innovation opportunities (French-Davis, 1990; cited in Sunkel 1991b: 45).

For neostructuralists, the implementation of policies to encourage the efficiency of public enterprises is also important. Nevertheless, the notion of efficiency has a broader scope than the one advocated by neoliberal thinking. There are two contesting concepts. On the one hand, there is the idea of productive efficiency which is defined by neostructuralists as production of goods at minimum costs. On the other hand, there is the notion of economic efficiency, which is defined as the optimum resource assignation in the economy, in the context of a price system with no distortions (Salazar 1991; in Sunkel, 1991a: 473). That is, for instance a monopoly which, whether public or private, always tries to maximize profits. Thus, this monopoly can be efficiently productive, but can be completely economically inefficient if you consider the entire socioeconomic system. This is because a private monopoly tends to increase unemployment and environmental degradation.

However, for neostructuralists it is imperative to increase the competitiveness of public enterprises to encourage the process of industrial development. The latter can be achieved by both the exercise of financial autonomy and the use of administrative independence. It is argued that public enterprises have to implement a similar price policy as the private enterprises. But, at the same time public enterprises have to reduce social
costs as much as possible. In general, neostructuralists as neoliberals suggest the privatization of public enterprises. But, only the ones which are not part of strategic sectors:

The state must limit their objectives to those that are productive. It must make them more competitive by granting them greater financial and managerial autonomy, by allowing them to charge prices similar to those of a private enterprise, by fixing “social prices only in a limited and exceptional fashion, by subcontracting and inviting bids for auxiliary prices and by privatizing ‘non strategic’ productive enterprises (Sunkel, 1991b: 46).

To successfully achieve the goals of the neostructuralist model, economic growth throughout industrial development has to be attained. For that reason neostructuralists suggest that neoliberal strategies are necessary to achieve macro economic growth. Furthermore, Sunkel and Ramos do not have any limitation to argue that there are some positive outcomes from implementing neoliberal policies:

It is worthy of recognition that the neoliberal predominance has served as much for questioning convictions profoundly rooted as for recalling the importance of the market, the price system, the private sector, the fiscal discipline and the orientation to the outside of the productive system (Translated from Spanish to English from Ramos and Sunkel, in Sunkel 1991a: 15-16).

Neoliberalism and neostructuralism agree on the necessity of an opening towards the world market. This strategy has to be complemented with the export of advanced high tech manufactures (Sunkel, 1991a, 1991b). The two models have also in common an emphasis on macro-economic balance needed for a stable economic growth. However, neostructuralists consider that:

neither the neoliberal prevailing focus nor a simplistic reformulation of the post-war structuralist analysis or even the most recent neostructuralists essays constitute an adequate base to deal with the actual Latin American problems
At any case, it is important to acknowledge that the theories of development inside ECLAC have systematically changed to adapt to actual circumstances. As we have been able to observe, the evolution of structural thinking to what is known as neostructuralism has been very dynamic and full of adjustments (see Table IX).

**Neoliberal Economics: Industrial Development and Foreign Direct Investment**

Contrasting with the view of the Developmental State Model and the neostructuralist model of controlling FDI to encourage industrial development via technological advance, neoclassical economics (the economic base of neoliberalism) stands for a complete deregulation of FDI inflows. Neoclassical economics dates back to the 1870s. During the 1960s a related but separate school of political theory appeared. This was neoclassical liberalism. The basic theoretical ideas were taken from classical liberalism, mainly from the works of John Locke (1632-1704), Montesquieu (1689-1755), David Hume (1711-1776), Jeremy Bentham (1748-1832), Adam Smith (1723-1790) and Alexis de Tocqueville (1805-1859). Classical liberalism stressed individualism as universal and as the most important value. At the same time, it argued that the less state involvement the better; as well because in the long term the minimalist state would produce a better economy and a better society (Nozick, 1974). The intervention of the State in national economies is discouraged. In addition, neoclassical liberalism argues that “Left with maximum freedom, people would not only realize their potential and pursue those things
in which they were best, but also would become more responsible and self reliant” (Rapley, 2002: 58).

The political theory of neoclassical liberalism emerged after the Second World War with the writings of Robert Nozick among other political philosophers (see Nozick, 1974). At the same time, neoclassical liberalism was reformulated by the contributions of recognized economists of the period such as Milton Friedman and Friedrich August von Hayek, who simultaneously, supported the \textit{laissez-faire} economic principles of Adam Smith (1723-1790), John Stuart Mill (1806-1873), and David Ricardo (1772-1823). This originated the designing of a New Economic Model called Neoliberalism. Within the neoliberal framework the liberalization of economic activities are expected, in both spheres national and international. Today, neoliberal thinking has influenced the policy making of International Institutions such as the World Bank (WB) and the World Trade Organization (WTO).

According to the World Bank, the liberalization of FDI has been the most beneficial aspect of globalization in developing economies:

The World Bank generally favors greater openness to FDI because the evidence suggests that the payoffs for economic development and poverty reduction tend to be large relative to potential costs or risks (while also paying attention to specific policies to mitigate or alleviate these costs and risks) (World Bank, 2004).

Without any doubt FDI has a direct impact on industrial development in the host country whether at the organizational level or within the domestic industrial infrastructure. The negative or the positive impacts of FDI in the host country depends on several circumstances. However, according to neoliberals FDI contributes to implement new technologies, improves processes and quality standards; increases the reach of
economies of scale and expands the economies of scope (Caves, 1971; Fajnzylber, 1983; Graham and Krugman, 1991; Storper, 1997; UNCTAD 1999). It is important to explore in detail the theoretical frameworks provided by Hayek and Friedman which set the basis of the neoliberal model.

_Von Hayek Economics_

Friedrich August von Hayek (1899-1988) was part of the so-called Austrian School of economics. Its main objective was to defend free market capitalism, above all against the systematic rise of socialism. Hayek emerged as one of the most important representatives of the new laissez-faire economic ideology when he wrote his first work _The Road to Serfdom_. Nevertheless, Hayek's laissez-faire doctrines were eclipsed by the growing prestige of J. M. Keynes and others, who argued in favour of more active government intervention in economic affairs, including the control and regulation of foreign direct investment.

At any case, Hayek's _Road to Serfdom_ established the basic economic principles of the New Economic Model (neoliberalism). For Hayek, government active intervention in the economy is an inefficient method of coordination of individual efforts; he argues that government intervention is less efficient than the price system of the free market competitive regime (see Hayek, 1944). In this context, foreign investment is to be liberalized to increase the efficiency of the free market system. Hayek was also a believer of efficient competency of individual efforts as the base for progress. In addition, the rich were considered by him as the driving forces of society to encourage innovation.
...individualism ensured that more things would be tried, and the greater the number of things being tried, the more innovation and progress there would be....individuals would only incur the cost of trying something new if they knew they would reap the benefits of any success they had [because people at the end are not altruistic]...Taxing the rich to feed the poor hindered the most well-off, reduced initiative and thus, industrial innovation and so hurt all society (Hayek, 1960 cited in Rapley, 2002: 56).

Accordingly, we can observe that individualism and innovation were important elements of Hayek’s theoretical framework. In this context asymmetries among classes are observed. However, there is the intrinsic notion that the rich are driving forces for innovation and industrial progress which in the long term would lead to the expansion of the free market. Within this theoretical framework, the wealthiest people of society are employment generators, initiators of industrial change, and thus channels for industrial development. In Hayek’s theoretical framework, the purpose of the market system is to encourage the maximization of benefits to the individuals by expanding their profits. With his notion in mind, governments achieve this objective by using different strategies such as the reduction of salaries or the increase of efficiency.

On a related topic, for Hayek, the main obstacle to market efficiency was the state. From the Road to Serfdom (1944) we can extract several observations made by Hayek with regards to state intervention in the economy. First of all, the state should not control prices and the quantity of goods produced. According, to him, the state discourages the positive effects of competition because it limits the coordination of individual action, and thus, limits the potential of individuals. Secondly, he argues, that if the formation of a monopoly is inevitable this monopoly should be controlled by the private sector, never by the government. For him, the control of monopolies by the
government gives it an excessive control over the economy which eventually would act to the detriment of society.

In this case, the control over FDI would be observed as an impediment to industrial development. Thirdly, according to Hayek, it is necessary to avoid the state control of foreign trade to encourage the free flow of goods, because as a consequence, individuals would be able to choose the most convenient goods according to their individual needs. He argues that there is a consistent economic interdependence which is natural and necessary for the expansion of the market system. This interdependence is not only among individuals, but also among organizations and countries. This in the long term would allow the integration of all humankind into one world market. Therefore, we can identify the idea of the liberalized global market system, defined by Hayek as one system which enhances economic interdependence amongst individuals:

That economic interdependence of all men, which is now in everybody's mouth and which tends to make all mankind One World, not only is the effect of the market order but could not have been brought about by any other means. What today connects the life of any European or American with what happens in Australia, Japan or Zaire are repercussions transmitted by the network of market relations (Hayek, 1973, Vol 2: 112–13).

Despite his idea of state intervention as the main obstacle to market efficiency, Hayek thought that the state had several important functions. For instance, according to him the rule of law and the defence of the nation by using the military were central functions of the government (see Hayek, 1944). There is another factor that was considered by Hayek as having a negative impact on the free market, namely the unions. For him, unions were the representation of the interests of closed groups which 'are always in opposition to the common interests of a great society' (Hayek, 1973: 107).
Hence, for Hayek the role of the free market economy depends on the liberalization of all economic activity.

However, according to his rationale about the free market, the benefits of the free market (choices, diversity of goods, innovation, and industrial development) would never be put at risk by the particular interests of monopolies. For Hayek, organized groups such as unions had more negative impacts in the market than private monopolies. His main argument was that unions use political force to change the effective and natural regulation of the market, with the purpose of altering its operation in their favour (see Hayek, 1973). Moreover, Hayek argued that trade unions were responsible for increasing unemployment. The idea was that unions have a tendency to keep wages high. Therefore, some industries can become less profitable. As a result, the unemployment rate would increase since fewer enterprises would be able to generate more jobs.

In fact, says Hayek, one of the most important causes of unemployment is the tendency of trade unions to keep wage rates high in industries that may be getting less profitable, and to enforce traditional differentials rigidly, even though the needs of the market change daily. This obstruction of the required adjustment of relative wage levels deprives the market of the guiding influence of the price of labour, and therefore guarantees that labour will be attracted into the wrong places and will not be used in its most profitable combinations. And this mismatching of labour supply with demand is bound to ensure that the total level of employment is lower than it would otherwise be (Butler, 1983: 45).

As we have been able to observe, the most important element of Hayek’s thought was the liberalization of the market. According to Hayek, the market is the main channel of information of industrial developed societies, and a perfect piece of communication that enables individuals to interact with each other.
We are only beginning to understand on how subtle a communication system the functioning of an advanced industrial society is based — a communications system which we call the market and which turns out to be a more efficient mechanism for digesting dispersed information than any that man has deliberately designed (Hayek, 1978:34).

The capability of the market to disseminate information is essential in order to set the right prices. The notion of the right prices through the interaction between supply and demand is the essence of Hayek’s free market. This is to be adapted along the idea of the liberalization of foreign direct investment in order to achieve a more efficient industrial development. On another topic, within the framework of Von Hayek economics it is interesting to observe that even though economics is a function of social interaction, the term social justice is ignored and even rejected as a legitimate function of economics. For Hayek, the term social justice is irrelevant or non-existent.

To discover the meaning of what is called 'social justice' has been one of my chief preoccupations for more than 10 years. I have failed in this endeavour – or rather, have reached the conclusion that, with reference to a society of free men, the phrase has no meaning whatever (Hayek, 1978:57).

From Hayek’s works we can conclude that are several consistent elements of his thinking, to wit:

- The importance of prices because the price system reflects the imbalance of demand and supply, and automatically allocates resources to where they are most needed.
- The importance of individualism because is a better construct than collectivism for shaping society.
- Competition as a dynamic process, in which people constantly search the cheapest resources to produce the most desired outputs.
- The state interventionist action is considered the main obstacle to efficient market operation.
Unions are seen as inhibitors of employment generation due to their actions that affect the market.

The inexistence of 'social justice' in a market-led society. Freedom is considered the most valuable individual outcome.

Friedman Economics

Milton Friedman is a member of the so-called Chicago school of economics. This school of thought is generally associated with a philosophy of neoclassical price theory and free market ideology. Again, within this framework foreign direct investment is expected to be liberalized since it is observed as a causal factor of industrial development. Friedman can be identified as a monetarist and he is generally associated with a philosophy of neoclassical price theory. He is widely regarded as a leading proponent of the monetarist school of thought; he maintains that there is a close and stable link between inflation and the money supply. He rejects the use of fiscal policy as a tool of demand management and holds that the government's role in the management of the economy should be severely restricted. Since 1962, Milton Friedman, (assisted by his wife Rose Friedman), has argued that the inconveniences of the free market in the economy, independently of their importance, are nothing in comparison with the problems generated by state intervention. Therefore, to Friedman, laissez-faire economics represent the real path for progressive societies (see, Friedman, 1962). Within the principles of Laissez-faire economics, foreign direct investment should be liberalized to encourage a systematic process of industrial efficiency.

The Friedmans have argued that the socio-economic machinery is disrepair. The main reason, agreeing with Hayek on this, is that government intervention discourages
the positive impacts of the free market. For the Friedmans this disrepair originated in the unnecessary centralization, the needless bureaucracy and excessive state regulation (Friedman, 1980). Therefore, they argue it is necessary to readapt the principles of Adam Smith and Thomas Jefferson (Friedman, 1980).

Wherever the state undertakes to control in detail the economic activities of its citizens, wherever, that is, detailed central economic planning reigns, there ordinary citizens are in political fetters, have a low standard of living, and have little power to control their own destiny (Friedman, 1980: 54-55).

In addition, Friedman sustains that there is a direct relation between politics and economics; and that only certain economic regimes can go along with certain political regimes. Particularly, he argues that ‘a socialist society cannot be democratic because democracy implies a guarantee of individual freedom’ (Friedman, 1962: 21). Generally speaking, Friedman gives the government a greater role in the economy than the other neoclassical economists. Nevertheless, he is in favour of the reduction of the size of the state and its intervention over economic matters. Friedman argues that the government has to provide an environment conduct for businesses and individuals interacting in the market. That is why Friedman agrees with Adam Smith’s ‘invisible hand theory’; because when individuals pursue their own interest, frequently they benefit entire society. In consequence, all the social agents would try to maximize their potential by maximizing their possibilities of profit-making.

Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible (Friedman, 1962: 133).
In addition, Friedman argues that the market, through its price system, allows individuals to freely interchange their goods. This allows them to maximize their benefits. For him, this can take place even among individuals all over the world. This is because the price system is very effective. However, as argued before, for Friedman the government can distort the price system by its intervention, mainly, by imposing tariffs that limit the size of the market. But, tariffs are not the only impediment, since the regulation of capital flows (e.g., FDI, FPI) is also observed as a way of discouragement that limits the size of the market by inhibiting its expansion (Friedman, 1980).

On another topic, Friedman is well known for his monetarist policies of macroeconomic stabilization. And, macroeconomic stabilization is observed as a prerequisite to encourage FDI and industrial development. He insists that inflation is highly destructive and that only monetary policy can control it. He maintains that there is a close and stable link between inflation and the money supply and he rejects the use of fiscal policy as a tool of demand management. For him, inflation is always and everywhere a monetary phenomenon. To the Friedmans, inflation is a monetary phenomenon that originates as a result of a higher rate of monetary supply compared with the rate of production. Consequently, to control inflation, you need to control the money supply (see Friedman, 1968). Nevertheless, he also argues that monetary policy is a strong instrument and cannot be used for short-term economic management. Therefore, Friedman argues that the government should be concerned with stable monetary growth because it can:

provide a monetary climate favorable to the effective operation of those basic forces of enterprise, ingenuity, intervention, hard work, and thrift that are the true springs of economic growth (Friedman, 1968: 17; cited in Rapley, 2002).
Unions, in the case of Hayek, are observed by Friedman as another factor of distortion of the price system and the free market economy. For Friedman, unions reduced the number of jobs of the sectors control by them. As a consequence, individuals that would like to find a job in a sector controlled by unions would not be able to do so. Moreover, for Friedman, the universal syndicalism would increase the salaries of individuals with jobs and as a consequence it would create unemployment (Friedman, 1980). With regards to education, the Friedmans accept the intervention of the state. However, this intervention is completely different from what we know today. The idea is to establish a voucher system that would offer parents a better freedom of choice; because they would be able to select the best schools, and at the same time competition would increase the quality of education (Friedman, 1984).

The most important measure proposed by Friedman is the absolute deregulation of economic activities. Friedman observes that during the 1960s and 1970s there was a dramatic increase in the regulation of industrial activities. This phenomenon is attributed by Friedman to the ‘anti-industrial development movements’ such as the ecological movement, the hippie movement, the desert protection movement, the Small is Beautiful movement and the antinuclear movement. He says that these movements act to the detriment of progress, of industrial innovation and of the use of natural resources for development (Friedman, 1980: 178). As a consequence, government has implemented norms and regulations that discourage industrial development. Friedman, says that as a result of this regulation ‘all mediocre products are produced by the government or by the industries regulated by the government’ (Friedman, 1980:178). In contrast, 'all the
products with excellent quality are produced by the private sector with little or no regulation by the government’ (Friedman, 1980:178).

Some of the main ideas of Friedman’s economics can be summarized in the following manner:

- Inflation is like a drug. Its stimulating effect is temporary, and only larger and larger doses can sustain the stimulus, before the chaos of hyperinflation removes all the gains.

- Annual consumption is a function of people’s expected lifetime earnings – not just their income at the current time.

- Keynes was wrong on just about everything, and his followers are wrong on absolutely everything.

- State licensing rules limit entry into the professions, thereby allowing professionals to charge higher fees than if competition were more open. That (more than the public interest) is why professionals love licensing.

- Rent controls have the opposite effect to those intended. Rental property becomes less profitable and is taken off the market. Instead of delivering cheap housing for all, the controls actually produce a chronic shortage.

- Minimum wage laws cost jobs. Employers eliminate, or mechanize, jobs that are not worth the minimum rate to them. Worst affected are the inexperienced young people, those with poor skills, and minorities.

- Education and other public services should be financed through a system of vouchers, so that everyone has access to important services but service users

Adapted from the Adam Smith Institute

Conclusions

Following this literature review we can observe a well defined difference between the three models analyzed in this chapter. On one hand, the neoliberal model advocates a complete liberalization of FDI to encourage industrial development via technological
innovation. On the other hand, both the Developmental State and the neostructuralist model stands for controlling FDI to promote an endogenous process of industrial development. Most importantly, however, is the main objective of the DM and the neostructuralist model for such industrial upgrade. This is the encouragement of social development. The neoliberal model argues in opposition to the concept of social justice and equitable distribution of resources. This creates serious doubts about the validity of using the neoliberal model to boost industrial development in LDCs in order to reduce poverty.

However, at least in theory, all three models have as a main objective to advance industry within the capitalist system of production. Nevertheless, they suggest completely different mechanisms for achieving the industrial upgrade via technology development. The neostructuralist model and the developmental model advocate the use of FDI under the control of the state. The degree of control over FDI is the main difference between these two models. Furthermore, the neostructuralist model gives practical suggestions in correspondence with the reality of Latin America. Nevertheless, the neostructuralist model gives too much emphasis to the implementation of orthodox neoclassical economics policies such as the freezing of salaries, which generally speaking affects the working class. Obviously, this measure affects the most disadvantaged, contradicting the neostructuralist principle of implementing the ‘least social damaging policies’. At any rate, the following sections of this thesis will reflect the correspondence of the South Korean experience of industrialization with the Developmental Model and to some extent with the neostructuralist model. The adaptation of the neoliberal model will be explored in the case study of the Mexican process of industrial development.
Chapter III

SOUTH KOREAN DEVELOPMENTAL MODEL (SKDM)

Introduction

This chapter describes the experience of South Korea regarding the mechanisms used to control FDI with the main purpose of encouraging industrial development. It is worth to observing that the model based on the Developmental Model advocates a rigorous control over FDI. In the case of South Korea this control was exercised to allocate FDI into strategic industrial sectors via technological advance. The South Korean experience also reflects some of the strategies followed by the former structuralist model of Import Substitution for Industrialization (ISI). In addition, it is worth mentioning that some of the mechanisms suggested by the neostructuralist model are based on the successful experience of the South Korean Developmental Model (SKDM). Thus one can clearly observe a compatibility between the SKDM and the neostructuralist model.

In any case, the SKDM illustrates the mechanisms used to promote industrialization in LDCs together with social development. This reflects the possibility of adjusting the capitalist system of production by the intervention of the state to encourage an equitable distribution of resources.
A Review of South Korea’s Industrial Development

At the beginning of the “colonizing era” in Asia most economic relations were formed by unequal relations of power. There was an interposition of economic planning by the colonizer over the colonies. For instance, in 1942 South Korea controlled only 1.5 percent of the total capital invested on its industries (Chul-Lee and Macnulty, 2003: 31). Clearly, during colonial times governments actively intervened in most economic affairs including the decision-making over investment policies. There are studies that show (for instance Lee, 1967) that the welfare of Asian colonies depended only on the decision of the imperial governmental powers. The colonizers were the ones who set the conditions for investment in early periods. It is logical to observe that in South Korea some of the ‘developmental pre-conditions’ were established by the interaction between Japan as colonizer and South Korea as a colony. In the case of South Korea, the Japanese legacy of state control over economic matters had a clear influence on determining the capability of the South Korean State to become an archetype of the Developmental State (DS) or Developmental Model (DM).

In 1948 the Korean decolonization was achieved, but due to the confrontation of the particular interests of the US and the Soviet Union, the peninsula was divided in two portions. One region located in the North, was supported by the economic and political structure of the Soviet Union, and the region in the South, protected by the capitalist assistance of the US. For that reason, an economic division emerged in the industrial system of both sections. The North (North Korea) kept most of the industrial zones, and the Southern part (South Korea) held in reserve most of the agricultural areas. The
economic consequences of such division created severe setbacks to South Korea's economy (Lee, 1984). Nevertheless, an important land reform took place in South Korea throughout the establishment of private property. The land was redistributed among the population. Before this reform, and as a consequence of the Japanese colonization, 'landed property was concentrated as about half of the farmland was owned by less than 5% of farm households' (Kay, 2002: 1079). In the following years the agricultural sector played an essential role in the industrialization of South Korea.

In subsequent years, the tension between South Koreans and their counterparts in the North increased. As a result, a war was declared in June of 1950 when North Korea attacked South Korea. The costs of the war were high, industry was paralyzed, and there was political instability and disparity amongst the fragmented economic sectors. Furthermore, the conditions were considerably difficult; the economy had lost two-thirds of its industrial capacity and 1.5 million lives in the War (see Kim and Leipziger, 1993). But, in 1953, a peace agreement was finally signed. In the coming years, South Korea was highly dependant on foreign lending which was estimated at 58.4 percent of the governmental budget (Chul-Lee and Macnulty, 2003). Due to the socio political instability, in 1960 South Korea suffered a social revolution which allowed General Park to take control of the South Korean government.

Park Jung-Hee is seen by many scholars as the real promoter of the Korean miracle. Park is observed as the person behind the implementation of the SKDM and the real application of 'developmental measures'. This took the shape of a formal economic plan that was launched in 1962:
...economic development became a top national issue under the Park Jung-Hee government launched in 1962. At that time, two fundamental problems contributed to Korea's poverty: the lack of resources to develop and the lack of a popular will to progress. Korea had no capital, no technological know-how, no oil, but considerable war damage (Chul-Lee and Macnulty, 2003: 32).

The Farm Household Side-Business Program was introduced by Park to promote traditional rural manufacturing in 1968 (Hayami, 1998, Table IV). The government allocated investment into the agricultural sector to promote its expansion. In addition, the first five-year economic development plan was introduced in the early 1960s which set the foundation for the future industrialization. The formal industrialization process began with the upgrade of the textile industry which was developed during the Japanese occupation. The government took advantage of the 'know-how' learned by the South Koreans workers during the colonial period. During the late 1950s and early 1960s large-scale modern spinning mills and synthetic chemical fibre plants were built in the country. But, it was not until 1965 when the government created the Taegu region as an industrial zone for woven textiles (Kim and Nugent, 1994: 71 Table IV). It is worth mentioning that the bureaucratic elite of the SKDM was close to the decision-makers or the executive officers of the government (Johnston, 1982; Evans, 1995). While implementing the SKDM the investment decisions were controlled by the Economic Planning Board (EPB). The idea was to encourage the development of a "super ministry able to control investment" (Kim and Nuget, 1994: 28). The main objective of this 'super ministry' was to boost productivity by increasing investment. The government within the frame of the SKDM had an intensive participation for controlling and allocating investment via the EPB for increasing the investible surplus and for boosting the industrial progress. Furthermore, the South Korean State acted as gatekeeper to investment (Hayami, 1998: 53).
The main objective of the EPB was to allocate investment according to the developmental goal of industrial development (Hayami, 1998; Gereffi and Wyman, 1990; Evans, 1995; Kim and Nugget, 1994). The pilot agencies of the Asian Developmental States (MITI in Japan and the EPB in South Korea), had to interact with the private sector in order to coordinate the efficient, but regulated, participation of the business sector in the economy. Those relations were essential. In fact, the EPB was formed by managers from both the private and the public sector. However, the government was the general manager and decision maker of the investment policy. These relations although cordial were always regulated by the government as Kung-Jung illustrates:

These businessmen had close relations with political elites.... Obviously, political institution-bound factors have effectively bolstered industrial growth... The political institutions of strong states effectively mobilized resources of nations and invested those in various industries for achieving high growth. The developmental states provided business groups with favourable policies and financial resources in order to achieve rapid industrialization” (Kung-Jung, 2001: 38).

At the same time, in 1967 the Economic Planning Board (EPB) created the Agriculture and Fishery Development Corporation with the purpose of increasing the production of agricultural merchandise in marginalized areas (Hayami, 1998: 190). Such action dramatically increased the production of agricultural products and encouraged the development of more efficient processes. Parallel to this process the development of the light manufacturing industry took place. This process was consolidated at the beginning of the 1980s (See Table IV). Nevertheless, this measure did not benefit the peasantry because it was not translated into an improvement of their living conditions, even though a dramatic increase of productivity was achieved. For that reason the migration to the big cities increased. However, the exodus of the labour force from the countryside was not
completely negative. There is research that shows (Kay, 2002) that extra labour was used to promote the recently developed light industry.

After this development the government turned its attention to the expansion of the manufacturing industry and the expansion of trade (Yong-Pal and Soon-Bong 1989). However, the private sector was emerging and the business class had neither enough capital nor the confidence to perform risk investments. In consequence, the government created its own enterprises where it identified critical economic needs that had not been met by private domestic investment. In the late 1960s many State-Owned Enterprises (SOE) were established in order to balance the unwillingness of the private sector to accept the risks involved in the required industrial upgrading (Kim and Leipziger, 1993: 36). For that purpose Park nationalized the banking system. Afterwards Park canalized FDI, foreign lending and domestic investment to the development of certain *chaebols* (large enterprises administrated by close relatives) that were part of the strategic program for industrial development. However, the South Korean government always had in mind to gain advantage from FDI. The main purpose of this was to protect the domestic industry while acquiring the knowledge and the technology necessary to upgrade its industry. In fact, the South Korean government encouraged the formation of joint ventures with foreign enterprises, but always under domestic majority of ownership. The main purpose of it was to ensure or at least to facilitate the transfer of technology and administrative skills because according to this strategy:

Foreign investment in an industry would be solicited but would only be allowed in the form of joint ventures with domestic firms. Once the domestic partner learned the business and the technology and was strong enough to carry on operations on its own, the MNC would be forced to divest itself (under the terms
of the original contract), thereby leaving a new industry in local hands (Clark and Jung 2002: 31).

For Korea, the evidence clearly shows an extensive and effective degree of state involvement that was designed to attract foreign capital only on terms and conditions that would allow its activities to be integrated into a nationally defined development strategy. Numerous analysts have drawn strong conclusions to this effect after extensive and detailed studies of Korean industrial sectors (Bienefeld, 1988:23).

The chaebols had particular characteristics that facilitated their control and growth such as: control and management by close relatives; a very close relationship with the government and very centralized structures. However, the government always maintained the control over the enterprises and the process of industrial upgrade.

The basic government attitude appears to be that business (whether domestic or foreign) should serve the government and not vice versa. For LDCs, the implication is that the Korean experience supports rather than contradicts the view that directive state intervention is necessary if FDI is to play a constructive role in national development (Luedde-Neurath, 1984: 22-23).

It is worth mentioning that the control and the minimum presence of foreign enterprises in South Korea were clearly reflected in research conducted in 1977. The research consisted of a survey which showed that the proportion of wholly foreign-owned subsidiaries was of 33 per cent in South Korea. This percentage was even lower than in Japan (Curhan et al, 1977: 315). Complementing this process of a national industrial development, the South Korean corporate strategy implemented some of the characteristics of the Japanese keiretsu. This was clearly observed with the vertical integration to facilitate the accumulation of capital within the South Korean industries. The South Korean government controlled the financial system, and so it directed
investment into the ‘sunrise industries’ (Clark and Jung 2002: 22). In addition, the South Korean government, with the purpose of promoting an endogenous industrial development, borrowed money from several sources (mainly foreign). However, the government redistributed that money through the banks which were operated by the government. Thus not only did the Chaebols benefit, but also the private companies.

The government borrowed foreign capital and redistributed it to private companies through banks. Businessmen who made investments in preferred industries received public support and subsidies (Chul-Lee and Macnulty, 2003:34).

However, to increase the finance of the chaebols the government increased the expansion of state-led investment policies such as the state-led investment plans. Here, it is worth mentioning that even though the South Korean strategy to attract FDI was important for industrial development, the South Korean government preferred foreign lending to FDI. In fact, for most years since 1965, FDI has been just a small part (less than 8%) of the foreign capital inflow to South Korea (data taken from Amsden, 1989: 76) (see table XI). The main purpose of these measures was to upgrade the industry in order to upgrade the industrial infrastructure from a light manufacturing industry to the development of a competitive heavy manufacturing industry. For that reason, other State Owned Enterprises (SOE) were created with the purpose of reinforcing the consolidation of the heavy industry. Practically more than twenty major state enterprises were set up by the government between 1961 and 1976, such as: the Korea National Airlines, Inc. (1962), the Korea Electric Power Company (1962), the Korea Petroleum Company (1962), the Korea Petroleum Development Corporation (1977), the Korea Mining
Promotion, Inc. (1967), the Inchon Heavy Industries, Inc. (1963), the Korea Shipbuilding Corporation (1968), and the Pohang Iron and Steel Company (1968).

In addition, the government opened special banks and financial institutions to allocate the FDI and the overall investment. Some of these institutions were the Korean Small and Medium Industries Bank (1962), the Korean National Citizens Bank (1963), the Korean Reinsurance Corporation (1963), the Korean Housing Bank (1967), the Korean Exchange Bank (1967), the Korean Development Bank (1969) and the Korea Imports and Exports Bank (1976). Since the late 1960s, the Korean economy sustained high growth, only interrupted by a few years when production temporarily declined. Real GNP in Korea grew at an average annual rate of 8.4 (See table V) percent from 1966 to 1984.

In 1973, Korea launched an attempt at supporting both industrial diversification and the next upgrading process – using the infrastructure of economic growth to support the heavy manufacturing industry. The policies applied during this process were similar to the ones employed during the upgrading of the light manufacturing industry such as: the promotion of exports and the protection of the domestic market. At least meanwhile the heavy manufacturing industry acquired enough competitiveness for the international market. The first industry to be supported was the Heavy Chemical Industry (HCI). However, the experience of the HCI was not as positive as it was expected because the political instability derived from the assassination of General Park which affected the economic success of the HCI. In late 1979, in order to control the economic instability and to sustain the upgrading of the industry, more SOE were created. This process was reinforced with the creation of the Pohang Steel Company (POSCO) which was expected
to support and to provide the raw material required for the entire industrial sector. Today, POSCO is one of the largest, if not the largest, steel company in the world.

Another strategic sector that was supported during this “upgrading period” was the automobile sector and the related industries such as parts and components. Before this industrial upgrade, the automobile sector was only focused on producing military equipment, rebuilding military cars and adapting military vehicles for civilian use. However the government saw its potential and supported its development.

In 1962, Korea began assembling Japanese Nissan cars from semi-knock down (SKD) and complete knock-down (CKD) kits. Following the Korean economy's deliberate and dramatic shift toward promotion of heavy and chemical industries beginning in the late 1970s, Korea's automobile production jumped from 28,000 in 1970 to 123,000 in 1980 and 1.5 million in 1991.... Many firms are clustered in Ulsan and Pusan in the southeast, near Hytuni Motors, while others are scattered in Inchon and the west-central region near Kia and Daewoo Motors (Kim and Nugent, 1994: 9).

As a result, South Korea's auto parts exports grew rapidly, from $US 37.1 million in 1983 to 417.2 million in 1991 (Kim and Nugent, 1994: 10; Table VII). During this period domestic producers were licensed to produce foreign technologies in an effort to encourage industrial diversification and the upgrading of the HCI. Simultaneously, the government started to allocate FDI (using the principle of joint ventures) into small and medium enterprises (SMEs). In addition, these enterprises were amassed in clusters which allowed them to increase productivity via vertical integration together with larger enterprises (Kim and Nugent, 1994). As a result, the dynamics of the manufacturing industry were stimulated and the process of industrial development was boosted again. The exports of the heavy manufacturing industry practically tripled from 1973 to 1983 (Kim and Leipziger, 1993).
The heavy manufacturing industry was already consolidated, and therefore the South Korean government launched the last upgrading process. The idea was to invest the surplus obtained by the heavy manufacturing industry to upgrade the high-tech industry and produce high-tech manufactured products such as electronics and components. For that reason the South Korean government enacted the *Electronic Promotion Industrial Law* which offered incentives for achieving ambitious production goals (see Kim and Nugent, 1994). At the same time, the government, via the EPB, implemented plans to allocate investment in this sector (Evans, 1995; Johnston, 1982; Gereffi, 1990). The industrial planning for promoting the high-tech manufacturing sectors was based on allocating not only foreign investment but also domestic investment in strategic targeted sectors. As a matter of fact, the South Korean government always tried 'to ensure that it was the targeted sectors that, in fact, received new investment' (Chibber, 2002: 960). The enterprises of those sectors were encouraged to gain knowledge so they could be more competitive and efficient. Additionally, at the same time that the economy was getting robust, South Korean enterprises became more competitive. In 1966, in order to complement the actions of the EPB, the government encouraged the creation of the Korean Institute of Science and Technology (KIST). The activities at KIST were complemented by actions of the Federation of Korean Industries (FKI). The FKI was created in the 1960's to maintain a very close relation with the government and to improve the economic performance of the *chaebols*:

The FKI maintained various state-business meetings...the Korean Export Promotion Meetings were well known in addition to the monthly luncheon meetings (Kondho, 2002: 226).
During those years, the South Korean government encouraged research and development which was seen as the key element for sustaining the upgrading of the electronic industry. Thus several research and development centres were created such as the Korea Academy of Industrial Technology (KAITECH) and the Korea Electronic Parts and Components Association (KEPCA). In the early 1960s the 'electronic Chaebols' became part of the organizational array of the industrial sector. Samsung, Lucky-Goldstar (now LG), Hyundai among others, began to produce electronic products and were seen by the South Korean government as enterprises with great growth potential. In fact, since the beginning of the government support to the electronic industry its exports have grown rapidly. They went from producing 2 $US million to 582 US million in ten years (Cyhn, 2000: 161; Table VII and VI). In the electronics industry the partnerships between the government and the business people demonstrated their effectiveness in setting the correct policies. The major participants of those meetings were the largest electronic chaebols (Samsung, LG, and Daewoo). Samsung, Hyundai, LG and Daewoo were able to increase their share in the electronic industry as a result of the investment and support received from the government. Their share in the world's electronic market increased from 1.3 per cent in 1980 to 2.9 percent in 1986 and 4.0 per cent in 1991. (Cyhn, 2000: 162). In the 2000 it was estimated that the share of the world's electronics industry for the electronic chaebols was of 7.1 per cent in 2000. According to the Korean Chamber Of Commerce and Industry (KCCI), the electronics production, domestic sales and exports grew by 12.2%, 7.8% and 20.9%, respectively in 2003 (KCCI, 2004; Table VI and VII). In 1997, the Korean electronic sector was already 8.7% of GDP and by 2000 was 11.8% with 56.2 US billion of output.
South Korean Social Development

In South Korea the power of the state was used to control FDI in order to encourage industrial development. The main purpose was to benefit the nation and not just particular interests. Unfortunately it was also used to repress labour activism, union formation and wage reduction. There are several studies that reflect these negative features of the SKDM, particularly regarding the repression of the working class (Amsden, 1989; Fallows, 1994; Johnson, 1982; Prestowitz, 1988; Wade, 1990; and Woo, 1991).

These developmental states [South Korea and Taiwan]... state power was also used to control and channel the activities of MNCs, to prevent traditional elites and vested interests from holding back change, and to suppress labour activism to hold down wage costs (Clark and Changhoon, 2002: 23).

Due to these conditions the dissatisfaction of workers was not shown for a long period (Chul-Lee and Macnulty, 2003: 39). However, it was not until 1987 when, along with the democracy movement, workers were allowed to carry out demonstrations. Furthermore, workers were able to organize strikes, and it is estimated that number of strikes dramatically increased from 1987 to 1986 (Table VIII).

Generally speaking social welfare and economic development depend on the consolidation of the necessary social institutions to systematize all the proceedings of ‘developmentalism’. This is also an important complementary feature of the SKDM. Even though, there is a formal suppression of civil rights, at least at the beginning of the implementation of ‘developmentalism’, some theorists had found genuine popularity of the South Korean government during the phase of the implementation of the DM (Liddle 1992: 450). The latter is probably the result of the implementation by the South Korean government of several reforms to encourage human development. One of the most
important was the pension program. It began with the idea of improving the welfare and providing a more stable life for the workforce. The first pension scheme was introduced in 1960. However, it was only reserved for government employees. The second stage was implemented in 1963. But this time it was exclusively for the military personnel. In 1975 it was introduced for supporting school teachers (Bong-Min, 2001: 3). Nonetheless, with the dramatic economic crisis of the 1970s, there was no rush to widen the program. In 1986, the economy was already stable, and thus the government upgraded the pension plan with the National Pension Plan to the general population.

This new Act specified that the first public pension scheme was to be implemented in January 1988, and that the National Pension Corporation was to be created as its administrative body (Bong-Min, 2001: 07).

Additionally, in 1992 the pension plan was advanced to cover all the small and micro enterprises with five or more employees. Later, in July of 1995 the pension plan started to cover self-employment in the rural sector which was an extraordinary action, possible of course, after the astonishing economic growth. Nevertheless, it is worth mentioning that the emphasis on export-led industrialization limited the expenditure on social development. That is why during the 1960's there was a restraint on the social expenditure 'in order to pour national resources into the primary goal of national policy' (Ku, 1995:360). The primary goal was to increase the economic growth, and thus at the beginning of the 'developmental years' economic growth was at the expense of social welfare. This continued until 1970 when an important shift in social policy took place. The upgrading of the industrial sector required a more educated and more stable working force. Consequently the government invested in plans for improving living conditions. In
fact, in the 1980s social welfare became the main concern of the South Korean government. In 1979 the South Korean government created, under the Land Development Promotion Law, the Korean Land Development Corporation (KLDC) which together with the National Housing Fund, created in 1981, reformed the requirements for owning land and dwelling. In the long term such measure provided political and social stability.

Another important effort by the state to decrease poverty was the implementation of the health care system. The implementation the health insurance system began in 1963 with the Health Insurance Act. In 1977, the health insurance became compulsory for those enterprises with 500 or more workers.

A special program for civil servants and schoolteachers was introduced in January 1979. In January 1980, the scheme was extended to cover families of military personnel and pensioners. An occupational health insurance program was introduced as a voluntary scheme in December 1981 to cover groups of self-employed workers with similar occupations. In January 1988, the rural regional health insurance program was initiated for people in rural farming and fishery areas. Finally, a program to cover self-employed and unemployed populations in urban areas, the urban regional health insurance program, began in July 1989 (Bong-Min, 2001: 10).

The evolution of social policy was consistent and coherent with the plan of industrial development. Industrialization guided the dynamics of the implementation of social policies. According to the Human Development Index (HDI), Korea is the 4th most socially developed Asian economy, after Japan, Hong Kong and Singapore (UNDP, 2004). In addition, the disparity between the industrial and the rural areas was decreased as a result of the use of the additional labour coming from the agricultural sector. Therefore, the income distribution was solved via the implementation of redistributing policies.
the income ratio of the first 20 per cent of the house holds to the bottom 40 per cent was of 2.68 in South Korea, such inequalities were significantly better than the ones from other developing countries of 4.84 (Chan, 1989: 12).

Clearly, the government of South Korea pursued a policy of 'economic growth first and distribution next' (Bong-Min, 2001:7).

Conclusions

The SKDM illustrates how LDCs can implement some mechanisms to achieve industrial and social development. One of such mechanisms is the use of FDI in a way in which domestic industries can take advantage of it. The intervention of the state was a key element for the success of the model. South Korea was able to become an industrial power in just 30 years thanks to the allocation of FDI to strategic sectors. Most important is the fact that the Government invested most of the capital into technology development. There was a systematic planning to support technology. This was necessary to close the technological gap between South Korea and the most industrialized countries. Clearly, the government was seen by the SKDM as a key agency of industrial development. This is shown in the creation by the government of several research institutes to complement the allocation of financial resources. In addition, the government protected domestic enterprises against the worldwide capitalist system. At least until they became competitive enough for the international market. It is worth to mentioning that the bureaucratic elite of the SKDM was really close to the decision-makers and formed partnerships with the business sector. This was also a very important mechanism. As a result most FDI was allocated into specific sectors in which there was an increasing need not only of foreign capital but also of foreign 'know-how'. The potential of such sectors
was mainly determined by the government and not by the business class. Today, as a result of those mechanisms in the high-tech market South Korean brands have an extraordinarily important international presence. One of the negative aspects of the model was the excessive repression of labour. However, we have to keep in mind that the encouragement of the economic development and the distribution of wealth were possible thanks to the rigorous control over the decision making. It is important to observe that the industrial upgrading came first, a process which allowed the accumulation of capital. Afterwards, the distribution of such wealth via social programs was possible. Today South Korea is ranked 28th in the Human Development Index of the United Nations Development Programme (UNDP, 2004). Those measures set the difference between the predatory governments (without growth) and the developmental state (with economic growth and social development). The latter was clearly embodied in the South Korean experience. We have to observe that, the origins of the developmental state in South Korea had violent experiences. Thus in order to implementing the SKDM, it was necessary to have a strong government. Unfortunately, however, labour was systematically repressed.
Introduction

This chapter explores the dynamics of FDI and industrial development in the context of the Mexican economy. This is organized in two sections; the first part shows the dynamics of FDI and industrial development until the 1980s when Mexico experienced the effects of the oil crisis (explained later in this chapter) the debt trap. After the debt trap the ISI model of industrial development was dismantled. This was made via the implementation of recommendations made by the IMF and the World Bank. The ISI model was replaced by the Neoliberal Model. These policies were applied in correspondence with Friedman and Hayek's ideas. Such policies are supposed to encourage economic growth and to foster market expansion. These recipes of development seek to increase the efficiency of both the state and the market. Another important purpose of these policies is to facilitate the integration of countries to the global economy. In Mexico, the Neoliberal Model offered radical but appealing solutions for solving the problems of the capitalist recession. Under the Mexican neoliberal governments, the following terms (market-led economic growth, austerity, monetary and fiscal discipline, budget equilibrium, deregulation, privatization and downsizing of the state), have been part of the economic jargon since the early 1980s. These policies were portrayed as universal remedies for solving particular problems not only in Mexico but
also in Latin America. Above all Mexico has experienced problems in the last three decades such as declining of world wide productivity, the failure of the development model and the Latin American fiscal crisis. The second section is organized according to the different neoliberal sexenios or presidential periods. Under Miguel de la Madrid (1982-1988), Carlos Salinas De Gortari (1988-1994), Ernesto Zedillo (1994-2000) and part of the period of Vicente Fox Quesada (2000-2004).

**Dynamics of FDI and Industrial Development in Mexico**

During the ‘colonizing era’, the former territories of the native cultures in Mexico were conquered by the Spaniards. Similar to the experience of South Korea, under Japanese rule, Mexico was subordinated to the particular interests of the colonizers. However, after winning its independence Mexico to some extent also took advantage of the industrial infrastructure left by the Spaniards:

The system of the Spanish Crown ... was one of pervasive law and regulation. Trade with any country other than Spain was illegal. Import and export licenses for trade with Spain could only be obtained through a board, sitting in Seville, controlled by Spanish merchants. Trade inside Mexico was controlled almost as rigorously as foreign trade; local monopolies, trading privileges, investment and tax exemptions proliferated in every area of the colony. And production was controlled even more than trade. In principle, nothing fabricated in Spain could be produced in Mexico; and what was produced in Mexico was subject to the minute’s regulation (Vernon, 1963: 29-30).

The dynamics of Mexican independence were different from the ones in South Korea. After winning independence from Spain, Mexicans fought to take control over the institutions and the industrial infrastructure left by the Spaniards. Initially, both structures were controlled by Mexican elites; the so-called conservatives managed the Mexican
economy, including the strategy of industrial development. The performance of the Mexican industry during the eighteenth and nineteenth century was extremely poor. This is observed in depth by Engerman and Sokoloff (1997), North et al. (1998) and Coatsworth (1999). During the Porfiriato, (1876-1910) Porfirio Diaz initiated the division of public lands (1883). Approximately, 27 per cent of the total land area of Mexico was distributed to private landowners. The distribution of land was complemented with an aggressive foreign investment policy implemented by Porfirio Diaz with the purpose of increasing his prestige overseas. In fact, the industrial development of Mexico became subordinated to foreign interests, above all outside the agricultural sector and the handicraft industry: ‘of Mexico’s total investment outside agriculture and the handicraft industrial, foreign interests accounted for two-thirds’ (Vernon, 1963: 43). In the eighteenth and nineteenth century foreign direct investment was concentrated in specific sectors. Most of the FDI flows were coming from Europe and the United States, and most of them went to specific industries such as the mining industry, the oil industry, the textile industry, the building of haciendas and coffee plantations. By 1910, FDI in Mexico accounted for USD 2,000 million which represented approximately 73 per cent of all the investment in Mexico (Dussel and Kim, 1993:10). The most important benefit perhaps or the only benefit of the large amount of FDI inflows to Mexico in those years was the increase on tax collection by the Government (Sherwell, 1992). The revolution of 1910 changed the political economy of Mexico, however. FDI inflows maintained their pace until the nationalization process of the 1930s (Meyer, 1992). In the early and late 1930s Lázaro Cárdenas (1934-1940) won the presidency, he made some changes to the FDI Law and the political economy of the
country. This affected FDI inflows. The reason was the nationalization of several industrial ‘assets’ that were controlled by foreigners such as the nationalization of the rail road system in 1937 and the nationalization of the oil industry in 1938. Those measures dramatically changed the patterns of FDI. As a matter of fact, the FDI flows to Mexico dropped almost 43 per cent from 1935 to 1940 (Ornelas, 1989). At the beginning of the Cárdenas period Mexico established a pattern of inward-oriented industrial development through the implementation of ECLAC’s ISI model for industrialization. However, as a result of the excessive protectionist policies and the lack of market expansion, the Mexican industry became vulnerable to foreign loans, oil prices and foreign direct investment (FDI) (Dussel and Kim, 1993). Nevertheless, during the first phase of the ISI strategy Mexico had similar outcomes to those of South Korea such as the manufacturing of consumer goods and the promotion of intensive labor industry. At the same time it protected the industry from external competition. Other mechanisms were to complement the ISI policy such as the selection of financial resources from overseas and the imports of intermediate goods. In consequence, the process of industrial development made interesting gains that were reflected in the GDP per capita. From the late 1930s to the early 1970s it increased approximately by 2.9 per cent annually (Meyer and Reyna, 1989).

After the Second World War, FDI inflows increased and during this period it became more diversified. Before the Second World War, FDI flows were mainly invested in the agricultural sector, but after this period they moved to the industrial sector (see Table X). In any case, the initial success of the accumulation model depended on both the external financial resources and the diversification of technologies brought by foreign
companies. In fact, foreign direct investment and trade surpluses in agriculture and tourism financed the initial stage of the ISI model (Dussel and Kim, 1993). However, the Mexican industrial development was based on the production of basic goods and intermediate goods. Foreign companies with higher productivity concentrated their efforts in more advanced sectors.

Taking advantage of their market power, the TNCs began to dominate in such protected and fast-growing sectors as transport equipment, electrical and non-electrical machinery, chemicals, rubber products, and modern consumer goods...TNCs, with higher total factor productivity and profit rates concentrated their activities in relatively more advanced manufacturing branches (Dussel and Kim, 1993: 5-6).

Towards 1970 FDI was 71% of overall GDP, and this was concentrated into chemicals, machinery, electronics, and the automobile industry -in other words the manufacturing industry (see Table X). However, it was the US who had the highest participation over the FDI inflows to Mexico. The US was the main origin of FDI, and in 1940 the US participated with 63.7% of FDI flows to Mexico. In 1960 FDI from the US accounted up to 83.2% and 78% in 1973 (Chapoy, 1975; Sepúlveda and Chumacero, 1973). At the beginning of the 1950s, the ISI model in Mexico was readjusted through trade policy. Its purpose was to encourage the expansion of the process of industrial development. Exports were considered as an essential strategy in the national program of industrial development. The main purpose of this policy was to strengthen international competitiveness and to encourage the development of advanced high tech industries (see in particular, CEPAL, 1979; Solis, 1980; and the Plan Nacional de Desarrollo Industrial 1979-82). For that reason, in 1971 the Federal Government implemented export subsidies
called *Certificados de Devolución de Impuestos* (CEDIS), and it also implemented credit programs provided by *Fondo de Equipamiento Industrial*.

The Mexican Government complemented those measures with the creation of IMCE (*Instituto Mexicano de Comercio Exterior*) in order to facilitate export promotion. However, the Mexican industrial sector was, only to some extent, competitive in the basic and intermediate industry, but was not competitive enough for the international market. It is argued that this shift in the industrial policy was a response to the pressure of the 'revolutionary family' that had special interests in encouraging exports. In fact, in Mexico, contrasting with the SKDM, political elites or bureaucrats are intrinsically related with the business sector. Sometimes it is complicated to make a distinction between economic and political elites:

> A number of well known works has emphasized the interlinks between political and economic elites, arguing that policy results from the coincidence of interests that holds these elites (often referred to as the ‘revolutionary family’) together.... This perspective focuses on the ways in which capital has been dominated and controlled by the state through the allocation of credit, import licenses, cheap inputs and other business requirements (Teichman, 2002: 497-498).

In any case, the basic industry in Mexico had difficulties for adjusting to the changing condition of the international market (Haneine, 1987; Kate and Wallace 1980; Peres Núñez, 1990). In consequence, during the 1970s, low productivity in agriculture and the basic manufacturing industry caused problems in the balance of payments. It is worth mentioning that the agricultural sector and the basic manufacturing industry did not have the same level of protectionist policies as the high tech industrial sector which at the same time, was dominated by foreign companies. This affected the financing and productive capabilities of the basic industry even more; in consequence the industry
focused its efforts towards imports and non-tradable goods (Kate and Wallace 1980; Zabludovsky 1990). The pattern of industrial development based on basic manufactures and agriculture became unsustainable. As a result, the oil industry and foreign borrowing became the pillars of the Mexican industrial development:

The first signs of Mexico’s developmental crisis emerged in the late 1960s, as the agricultural sector—the main source of financing the strategy—could no longer remain viable with its declining production and increased imports. Oil revenues and foreign borrowing replaced it as the pillars of Mexican development throughout the 1970s (Dussel and Kim, 1993: 7).

Nevertheless, the flows of FDI in Mexico were much higher than in South Korea in the same period (see Table XI). According to certain studies (e.g. Villarreal, 1988), FDI attraction has been the most important strategy to promote Mexican industrial development. Villarreal points out that the strategy was complemented with foreign borrowing. In the period 1939-1958, FDI and foreign debt accumulated were 1.1 billion and 0.5 billion respectively. However, the trend changed in 1959-1975 to 2.2 billion and 3.4 billion. During those years FDI was still to some extent regulated by the State. The Foreign Investment Law and the Law for the Regulation of Foreign Investment published in the *Diario Oficial de la Federación* (DOF, 1973) stipulated that foreign and Mexican businesses could not invest in certain sectors. Those sectors were all related with oil and its derivatives, the basic petro-chemical industry, the mining sector, the electricity industry, the nuclear sector, the railroads and the telecommunications. These sectors were reserved to the ownership of the Mexican State. This Law gave discretionally powers to the government in determining in which sectors foreign investment could be allowed. In addition, FDI was allowed within a limit, namely between 40 per cent and 49 per cent of total shares depending on the industry.
However, the Mexican model of industrial development suffered a dual crisis. First, the accumulation crisis which was caused by the lack of profit returns from the basic and tourist industry, and secondly the crisis of the capitalist system (Glyn, 1989). Additionally, the Mexican industrial development was affected by external factors such as the first oil shock crisis in 1973 (which eventually widened the current account deficits) the collapse of the Bretton Woods System, and the increasing inflationary pressure in the US. Those external factors affected the exchange rate in Mexico. In consequence, the already reformed ISI strategy was changed, but in this time those adjustments were intended to set the basis for a new form of industrial development in Mexico. Those reforms included:

a) A scheme of export promotion through import protection in sectors under specific industrial programs (automobile, microcomputers, and a number of heavy intermediates and capital goods). These industries were protected through import licenses in the domestic market. They enjoyed, generally, the highest levels of effective protection in the economy. [However, the majority of these industries were open to FDI]

b) An export-oriented system for the maquiladora plants in the northern border—the expansion of which to other regions was facilitated throughout the 1970s—under a de facto free trade regime for the imported inputs to be processed and exported. Labour intensive, low-paid assembly of electronic components and apparel are the quintessential maquiladora industries [The maquiladora industry is still the most important exporting sector and it is largely dominated by foreigners]

c) A traditional import-substitution regime in the rest of manufacturing (mostly consumer goods and light intermediates) only modified by the presence of some export promotion incentives. These sectors generally enjoyed lower effective protection rates, sometimes negative, than those of the first group. [In contrast with the first group this sector was dominated by Mexicans]

d) Oil revenues, cheap labour and energy, and foreign borrowing should be the main financing resources for the future development.
(Adapted From Dussel and Kim 1993: 7)
The second oil crisis deepened the financial deficit in Mexico, ending up with the declaration of Mexico that it would not been able to fulfil the payment commitments for its debt. These commitments were acquired after having foreign borrowing as the strategy for industrial development. In 1982, as a result of the economic debacle the strategy for industrial development was changed. Despite the benefits that the ISI model for industrial development brought to Mexico (such as the generation of an industrial base, the growth of GDP, and the creation of many jobs (Villarreal, 1988), the model was dismantled by Miguel De la Madrid Hurtado. This set the beginning of the neoliberal era of the Mexican industrial development via the liberalization of the FDI by changing the FDI Law.

*Miguel De La Madrid 1982-19881*The Beginning of the Neoliberal Revolution

Miguel De la Madrid was in charge of dismantling the ISI policy for industrial development due to its apparent ‘failure’. He is a former lawyer who graduated from the National Autonomous University of Mexico (UNAM). After finishing his education he worked for Mexico’s central bank and taught law at the UNAM - before securing a position at the Treasury in 1965. Between 1970 and 1972 he was employed by Petróleos Mexicanos (PEMEX). But, his political career was recharged in 1976 when he was chosen to serve in José López Portillo’s cabinet as Secretary of Budget and Planning. Afterwards, he was appointed by López Portillo to be the presidential candidate for the 1982 elections. He inherited a complicated economic situation. There were several conditions that ‘forced him’ to implement structural changes in the Mexican economy. The profound debt crisis of the 1980s was the main initiator of these structural changes.

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1 Miguel De la Madrid Hurtado is a lawyer who graduated from UNAM. He holds a Master’s degree in Public Administration from Harvard University.
The historical evolution of neoliberalism in the country began after this crisis. It is worth mentioning that a dramatic turn was given after the 1982 crisis given that the inward-process of industrial development was radically modified. The economic development plan shifted from a government-centred based on the ISI model to one with a higher liberalization of the economy based on the free market neoliberal model.

Under the period of Miguel De La Madrid Hurtado the reinvention of the Mexican economic structure was prepared. Practically, in 1982 the Mexican economy was in a terrible depression. For instance, the real Gross Domestic Product (GDP) was 0.2%, the real growth of the manufacturing sector was -2.4%, inflation went up to 100% and the net external debt was more than US $80 billion (Story, 1986). Therefore, De la Madrid dismantled the model of Import Substitution for Industrialization (ISI), reduced government intervention over the market and eliminated restriction over foreign direct investment (Hoshino, 1996). Following the suggestions from the IMF concerning the measures of the rescue package, De la Madrid devalued the Mexican currency and made some changes to the FDI Law. The National Commission for Foreign Investment (Comisión Nacional de Inversión Extranjera CNIE) changed the regulations and the requirements for foreign investment in Mexico.

In February 1982 the value of the peso in relation with the US dollar went from 26 to 45. However, the highest devaluation came shortly after De La Madrid took office. Practically, it reached 150 pesos per US dollar (Soederberg, 2001). The idea of this neoliberal measure was to put the exchange rate into a more “realistic rate” to encourage exports and attract foreign investment. Fiscal discipline was another important measure suggested by the IMF. According to neoliberal economics its purpose was to deal with
inflation and to reduce the public deficit in order to achieve fiscal balance. Nevertheless, to achieve the fiscal balance two possible measures were suggested, to increase taxation or to cut public expending. It was clear that increasing taxes was not the solution since the Mexican people were living under a deep economic crisis. Thus De la Madrid encouraged a reduction of public expending. This measure has continued over several presidential periods. The public budget has been dramatically reduced. Practically, it went from 41.4% of the GDP under De la Madrid to 26.6% under Zedillo (SHCP; in Guillén, 1997: 101).

Another neoliberal measure encouraged under De la Madrid was privatization. Following the line imposed by the IMF and the WB the Mexican neoliberals implemented a program to dismantle public enterprises. The main objective was to increase efficiency and to reinforce public finance. For that reason, the Mexican version of the Chicago Boys (Chilean students of neoliberal economics) encouraged the dismantling of non-viable public enterprises and the privatization of the viable public enterprises. In addition, De la Madrid started a program to denationalize the Mexican banking system. In the early 1980s the Mexican banks were expropriated by the president López Portillo. His main argument for doing this was that the private banks were unbalancing the economy through monopolistic practices. From his perspective they were responsible for the massive capital flight. Consequently in 1982, 58 banks from the 60 owned by private organizations were nationalized (Haluk, 1999). However, this action was very much criticized by the private sector both domestically and internationally. As a result De la Madrid, trying to regain the confidence of the private sector, launched a program to re-privatize the banking system. When De la Madrid took office he first
proposed several changes in the legislation to encourage the participation of the private sector in the banking business. De la Madrid enforced these series of reforms to 'partially reverse the 1982 expropriation decision' (Haluk, 1999: 03).

In general privatization was one of the main neoliberal policies implemented during the De la Madrid regime:

Dismantling the state and its withdrawal from a wide variety of activities hitherto considered the legitimate arena of the state was the cornerstone of the new program. Divestitures of state companies (their sale liquidation or transfer) have probably been the most publicized aspect of that policy thrust. From more than a thousand companies in 1983, the number of companies in the hands of the federal government was reduced to 209 by 1993. The number of companies divested by the de la Madrid administration was impressive (Teichman, 1996: 4).

The program was pushed forward by De la Madrid with the main purpose of recovering the confidence of the business world. Therefore, with this in mind, De la Madrid opened state-owned enterprises to FDI. According to the Diario Oficial in 1973, under the law of investment, foreign investment had to be regulated by the government. Only certain sectors of the economy were open and always foreign investors were only able to own up to 49% of business shares. All this was changed by De la Madrid, since there was no longer a requisite to foreign investors to get special authorization from the Mexican government to invest in domestic enterprises as long the investment represented less than 50 per cent of the capital. Secondly, due to the changes of the FDI Law in 1984, foreign direct investment was allowed with more than 50 per cent of the shares in activities related with the export sector, with the high technology industry and with enterprises that generated short term employment – the maquiladoras (CNIE, 1984, 1988). After these changes in the FDI Law it is clear to appreciate an increase of the FDI flows for the 1974-1993 periods (Table XII). This increase represents a continuous rate of
growth represented by extraordinary FDI flows of USD 362.2 millions in 1974 and USD15, 617 millions in 1993 (SECOFI, 1994; Table XIV). In fact, the growth rate of the 1983-1987 periods was of 28.1 per cent (SECOFI, 1994; Table XII). It is important to observe that during the presidency of De la Madrid most of the FDI flows went to the manufacture industry.

Additionally, De la Madrid in the same years supported by the Mexican version of the Chicago Boys, Pedro Aspe, José Córdoba and Jose Angel Gurria changed the FDI National Law. But, it was not until 1989 when such changes went into effect. At any rate, the limits on foreign shares ownership were eliminated. In addition, they proposed the removal of the remaining scheme of government regulations on foreign direct investment. As a result, foreign investment became free to move in and out of the Mexican economy (Guillen, 1997: 125). The response to all these modifications was almost immediate. Since 1984 foreign capital started to flow to Mexico, but in 1989 the flows increased dramatically. In 1989 the foreign capital invested in Mexico exceeded the entire investment of the 1970s (Guillen, 1997:125). Despite the radical change from a state-led development to a free market-led plan of economic growth, this was only the beginning of the neoliberal revolution in Mexico. At any rate, under Miguel De la Madrid, the Mexican government applied cuts that mainly affected three central public services. Those were health, education and subsidies. We can observe that Hayekian and Friedman neoliberal thinking was embodied in those measures. Nevertheless, they were not the only neoliberal policies adopted under De la Madrid. For instance, after the inability of the Mexican government to borrow money during the crisis of 1982, De la Madrid was forced (although he was sympathetic with these ideas) to open the Mexican economy to
foreign investment and imports. The purpose of this (according to the IMF and the WB), had two main objectives: firstly, to open the Mexican economy to foreign competition because this would encourage enterprises and producers to become more efficient; and secondly, to increase both Mexico’s competitiveness in global markets and its integration in the global economy in order to earn hard currency and to control inflation.

Consequently De la Madrid started a wide trade reform to integrate Mexico to the global economy. The first step was taken in 1986 with the admission of Mexico to the General Agreement on Tariffs and Trade (GATT). Once Mexico was part of the GATT, the elimination of import licenses and the reduction of trade tariffs became part of the trade reform. While in 1983 all imports were subjected to special licenses, by the end of 1991 only 9.1% of the imports required authorizations (SECOFI, cited in Guillen, 1997: 108). This is an illustrative example of efficient neoliberal implementation and in only six years almost all trade was liberalized.

Carlos Salinas De Gortari 1988-1994: A Neoliberal Dream

When Miguel De La Madrid was at the end of his period, he selected his former student at UNAM Carlos Salinas de Gortari, as the next presidential candidate of the Interinstitutional Revolutionary Party (PRI). The control over the implementation in Mexico of the neoliberal model was handed on from De La Madrid to Salinas de Gortari. The liberalization of the Mexican economy under Salinas became the central element of the industrial development strategy. In addition, the process of industrial development

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2 Carlos Salinas de Gortari joined the PRI when he was 18 years old. He has a B.A. in economics from UNAM. Latter on Salinas obtained several postgraduate degrees from Harvard University: a Master’s degree in Public Administration (1973), another in Political Economy (1976), and a PhD. in Political Economy and Public Administration (1978).
was based on both exports and the private manufacturing sector. Particularly, in the period of Salinas de Gortari the strategy of economic liberalization was only explored under a macroeconomic perspective. Therefore, the pillars of economic liberalization were the regulation of inflation and the control of the fiscal deficit. The attraction of foreign direct investment became the main source of finance of the industrial development process (Gurria Trevino, 1994). The latter was a direct consequence of the financial insufficiency to support the process of industrial development via the surpluses of the oil industry and the agricultural sector. In fact, the growth rate of FDI flows during Salinas was 34.5% which was higher than the 28.1% of De la Madrid’s period (SECOFI, 1994). During Salinas’ period the Foreign Investment Law was changed to allow FDI flows into the main cities of the country, including Mexico City, Guadalajara and Monterrey. Before this the Foreign Investment Law of 1973 and its legal manual of 1987 encouraged and even reserved FDI flows only for industries outside of Mexico City, Guadalajara and Monterrey.

In addition, neoliberal reforms such as budget austerity, foreign trade liberalization, budget cuts to social programs and the privatization of state owned enterprises were also central policies under Salinas. However, the central element of the strategy of industrial development continued to be the liberalization of foreign direct investment. It is worth mentioning that Carlos Salinas presumably lost the presidential elections against Cuauhtémoc Cárdenas Solórzano (the son of the Grl. Lázaro Cárdenas) in 1988. However, the famous unexpected failure of the computer system caused the loss of the electoral information. At the end when the information was recovered, Carlos
Salinas was declared the Mexican president. Despite the political turmoil caused by this event, Salinas continued with the implementation of neoliberal policies.

Another important neoliberal policy implemented under Salinas was the liberalization of trade. The justifications provided by Salinas were several:

- The increasing regionalism experienced worldwide. In this regard, Salinas sold the idea that there was an urgent necessity for reinforcing the Mexican integration to the rest of the world via the liberalization of the economy, including the deregulation of foreign direct investment;
- The desire to encourage foreign direct investment in Mexico from the US, Europe and Japan;
- The necessity of boosting the process of industrial development which would be translated into an increase of employment and economic growth.

These were some of the arguments and, as we can observe, those ideas can be associated way back with neoclassical economic thinking. At any rate, under Salinas the North American Free Trade Agreement (NAFTA) was negotiated and signed. However, fortunately for him, NAFTA went into effect until 1994; the year in which Salinas left office. Most of NAFTA’s negative effects have been related to Ernesto Zedillo who was the next Mexican president. However, Salinas negotiated another Free Trade agreement with Chile.

Another neoliberal policy implemented by Salinas, was the liberalization of finance. This liberalization was included in the Foreign Investment Law of 1989 to complement the FDI flows and the strategy of world economic integration. In fact, for many years the Mexican financial system was regulated by the government. The financial sector was mainly controlled by the Ministry of Public Credit and Taxes (SHCP) and the
Central Bank. However, Pedro Aspe, the Minister of Finance under Salinas, thought that the financial liberalization was a very important element for encouraging Mexican competitiveness and the process of industrial innovation. He configured the open market strategy for the Mexican stock system. Several public debt instruments were created with the purpose of encouraging the development of the capital market using instruments such as the CETE, Petrodolares, Tesobonos, Ajustabonos and Tesobonos. Practically, by the end of 1991, the Mexican Stock Exchange became one of the most important stocks in the world, just behind the stock market of Taiwan and of Hong Kong (Guillén, 1997).

During the same period, Salinas promoted a very controversial major reform. In 1992 he encouraged the gradual privatization of the communal Mexican ejidos by both national and foreign private investment. The ejido was a socio-economic unit and a way of living for most of the Mexican peasantry. Nonetheless, Salinas reformed the 27th article of the Mexican Constitution. Consequently, all the ejidatarios got the legal right to hold title for the land. They were able to do with the land whatever they wanted (Teichman, 1996). However, there was an increasing problem with the system of production. After trade liberalization, these ejidatarios were not able to compete with the highly subsidized US farmers. As a result most of the Mexican agricultural productivity dramatically plunged. Over the same period, Carlos Salinas restructured the credit scheme in BANRURAL (Banco Rural). This bank was the main source of credit for the rural peasantry. Today the bank only provides funding to producers with high possibilities to return the credit. Therefore, most of the credits destined to peasants living

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3 In Mexico, he was Secretary of the Treasury (1988-1994), of Programming and Budget (1987-1988) and President and founder of the INEGI (1982-1985). He has a B.A. in Economics from the Instituto Tecnológico Autónomo de México (ITAM) and a Ph.D. in Economics from the Massachusetts Institute of Technology (MIT).
in poverty were dismantled. Carlos Salinas indeed changed the entire structure of the Mexican economy. However, it is worth mentioning that those changes were only possible as consequence of the excessive central power that Salinas had. Thus, in this period he was able to modify many things at the constitutional level. He changed the constitution in order to privatize some state owned enterprises that were ‘protected’ against foreign direct investment. Therefore, most of Salinas’ economic success resulted from selling out most of the state-owned enterprises to both national and foreign private investors. Under Salinas the most important state-owned enterprises were privatized. They included:

- Teléfonos de México (TELMEX),
- Mexicana de Cobre,
- Red Nacional de Televisión,
- Siderúrgica Lázaro Cárdenas, CONASUPO,
- Aeronaves de México,
- Altos Hornos de México,
- Grupo DINA,
- Constructora Nacional de Carros de Ferrocarril,
- Compañía operadora de Extracción y de Servicios de PEMEX,
- Hules Mexicanos,
- Banco Nacional de México (BANAMEX); and
- Banco Nacional de Comercio (BANCOMER).

Due to this economic success Carlos Salinas de Gortari left the presidency acclaimed as an economic genius. He even campaigned to become head of the World Trade Organization (WTO), but less than a month after he left power new president Ernesto Zedillo Ponce de Leon devalued the Mexican peso (by approximately 200%), plunging Mexico into a deep economic crisis. In addition, his brother, Raul Salinas was accused of several charges, and in all his international reputation was ruined.
Several researchers have observed this circumstance, as does Judith Teichman in the following terms:

the most important divestitures occurred during the administration of Carlos Salinas. The remaining state steel companies, the airlines, the telephone company (Teléfonos de México, TELMEX) and the banks -- were all sold during Salinas' administration. The Salinas administration also privatized a variety of functions carried out by state enterprises in areas reserved exclusively to the state by the constitution: petroleum, basic petrochemicals, and certain areas of mining (Teichman, 1996: 4).

Under Salinas the neoliberal agenda was implemented without any problem. Nevertheless, in 1994, before Salinas left office, several political disturbances emerged such as: the appearance of the Zapatista Movement of National Liberation which began at the same time NAFTA went into effect; the assassination of the PRI presidential candidate for the 1994 elections Luis Donald Colosio Murrieta and that of José Francisco Ruiz Massie. These events were translated into an economic chaos. The international community was shocked because Mexico was seen as a major neoliberal success. In 1994, this was clearly reflected when Mexico became a member of the Organization for Economic Cooperation and Development (OECD). Practically, the Mexican economy went from being another "free market" miracle into a dramatic economic crash.

*Ernesto Zedillo Ponce de León 1994-2000:* Neoliberal Consolidation under Crisis

This period was the most important for foreign direct investment and for the development of foreign companies established in Mexico. The main reason was the beginning of the

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5 Ernesto Zedillo Ponce de Leon is widely recognized as a truly neoclassical economist. He has a B.A. in economics from the IPN. He holds a Master degree in Economics and a Phd in Economics from Yale University. At one public meeting of the World Economic Forum he coined the term Globaliphobic to refer to globalization detractors. The term became widely used in Mexico and throughout the world.
North American Free Trade Agreement (NAFTA). In fact, the last two presidential periods can be observed as periods where the framework for NAFTA was prepared. The US is the main trade and economic partner of Mexico, but since NAFTA the Mexican export flows had increased dramatically. In 1994 total exports to the US represented almost 80% of the total, and in 2002 90% of Mexican exports went to the US market (Economia, 2004).

Ernesto Zedillo was elected president, but the political conditions in Mexico were complicated. Nevertheless, the neoliberal agenda was almost complete. Most of the strategic neoliberal policies were already running such as: market liberalization, privatization, budget austerity, monetary and fiscal discipline; budgetary equilibrium, deregulation of the market, financial liberalization and depreciation of the exchange rate. Under the apparent success of neoliberalism in Mexico there was a substantial problem, the excessive liberalization of finance which fomented the subordination of the productive economy (FDI) to the ‘casino economy’ (FPI). Additionally, socio-political instability began in 1994. The starting point for the economic crisis was the rise of the Zapatista Army of National Liberation (EZLN) which started the same day that NAFTA went into effect.

However, the event that started the economic crisis was the assassination of Luis Donaldo Colosio Murrieta who was the PRI’s presidential candidate. The political instability worsened until it reached the economic system. The capital deficit increased as a result of the capital flight. On the 21st of December of 1994 the capital that was exported from Mexico reached almost 2,500 million US dollars (Guillén, 1997: 189). This was dramatic considering that it happened in just one day. As a matter of fact, in one
month Mexico lost $US 11,000 million from its reserves due to the speculative attack over the peso (Guillen, 1997: 189). In order to control the crisis Zedillo devaluated the currency. It lost almost 80% of its value against the dollar.

It is worth mentioning that currency devaluation is embodied in the Structural Adjustment Policy Package. These policies are the main mechanism used to expand neoliberalism. At any rate, the exchange rate was devalued to a more ‘realistic’ level to encourage exports. After the devaluation, Zedillo implemented the (AUSEE) *Acuerdo de Unidad para Superar la Emergencia Económica*. This plan was elaborated with the ‘technical assistance’ of the IMF. The main purpose of this plan was to stabilize the market and to control inflation. The (AUSEE) was supported by the US with USD 17,800 million and by the commercial banks with USD 3,000 Million (Guillen, 1997: 191). After the crisis, Zedillo took the Mexican economy to the neoliberal plan even further than his predecessors. However, one could argue that Zedillo only followed the previous trends:

The aftermath of the 1994-1995 peso crisis also produced some economic reforms. Most of them continued previous trends: the privatization of public services, including ports, railroads, airports and telecommunications, as well as increased government deregulation in the form of fewer permits and licenses for business operations. Social security was also drastically reformed after the 1994 crisis through the introduction of a private pension fund system designed to promote private savings (Kaufman and Rubio 1998: 58).

All these policies were already in practice during De la Madrid and Salinas. At any rate, Zedillo continued with the implementation of neoliberalism in Mexico. For instance, under Zedillo several additional free trade agreements were negotiated and signed. The economy was liberalized even more in order to increase its competitiveness. NAFTA went into effect while Zedillo was in office. This was very important to the
Mexican economy in terms of FDI flows. Before, NAFTA went into effect Zedillo’s regime prepared the legal and regulatory framework to FDI. There were several changes made to the Foreign Investment Law and new legal regulations were created. In fact, in 1993 a new Foreign Investment Law was created which in 1996 was modified (DOF, 1996) to increase the flows of FDI into the Mexican economic system. To complement those changes the manual of the Foreign Investment Law and the manual of the National Register of Foreign Investment were readapted (DOF, 1998a). The Foreign Investment Law was modified the 27th of December of 1993 anticipating the beginning of NAFTA; those changes went into effect the 1st of January of 1994 (DOF, 1993).

The reform to the Foreign Investment Law in 1998 allowed foreigners to invest in specific sectors that were regulated primarily by the government and reserved to nationals. Those sectors included the telecommunications industry and the railroad industry among others. This reform also brought together all the regulations regarding intellectual property. To encourage FDI even more the Foreign Investment Law of 1993 established that the investment made by foreigners with the migratory status of ‘imigrantes’ would have the status of Mexican investment (DOF, 1993: 92). In addition, foreign direct investment through the modification of the Foreign Investment Law in 1993 was allowed to be allocated in ‘restricted areas’. This was supposed to be possible through special permits for a maximum of 50 years with a previous permit of the Foreign Relations Ministry (DOF, 1993: 94, DOF 1996: 28).

The US since the revolutionary periods has been the main origin of FDI inflows to the Mexican manufacturing sector but they dramatically increased after NAFTA (see Table XIV and XIII). In 1992 FDI flows from the US to Mexico were USD 1,320 million
but it more than doubled in 1997 with 5,646 USD million (DC-EU, 1999, Dussel, 2000) (see Table XII and XIV). Most of this FDI was directed to the manufacturing industry, which increased exports as a result of the “maquila” program or PITEX (*Programa de Importación Temporal para la Elaboración de Productos de Exportación*) (see Table XIII and XIV). In fact, the tendency has been maintained because most FDI is allocated into the manufacturing industry which includes the maquiladora industry (see Table XVI).

Since 1995 sectors such as electronics and transport vehicles have had a participation of US FDI higher than 70%. In fact, the most important exporting companies in Mexico of this sector are Ford, General Motors and Chrysler which at the same time have the highest rate of export in Latin America (see Expansion, 1999). However, there is an important presence of Asian automobile brands such as Honda, Hyundai, Toyota and Nissan as well as Europeans such as Peugeot, Renault, BMW, Volkswagen, Mercedes-Benz, Volvo and Audi among others. After NAFTA US-based enterprises have allocated most of their manufacturing processes in Mexico via FDI (Table XVI). This strategy was implemented to expand the automobile industry through NAFTA member countries and other international markets (CEPAL, 2000). As a result, by 1998 up to 93% of total automobile exports were send to the US market from foreign automobile factories established in Mexico (SIC-M, 1999).

The case of the electronics industry after NAFTA is very similar to the automobile industry. Most of the enterprises in the electronics sector are foreign, and the Mexican subsidiaries of US electronics companies have contributed with almost 20% of overall electronic imports to the US. Before NAFTA there was an important presence of
foreign enterprises in the electronics sector. However, after NAFTA more enterprises established their factories in Mexico. In 1990 there were only 19 foreign enterprises in the electronic industry but after NAFTA that number grew to 52, just in the first four years of NAFTA (Dussel, 2000: 44). In fact, Mexico became a place where US and Asian enterprises compete for spaces in order to establish subsidiaries. Cities in Mexico such as Tijuana and Ciudad Juarez have become the manufacturing centres where processes of assembly and sub-assembly take place (Expansion, 1998; Dussel, 2000).

Another sector that has expanded after NAFTA is the industry of computers and semiconductors. This sector is also part of the manufacturing industry, which has the highest rate of FDI inflows (Table XVI). However, it is worth mentioning that this sector is largely dominated by Asian companies such as the Japanese NEC, Hitachi, Fujitsu, Sonny, Seiko, Mitsubishi, Toshiba, Sanyo and Mastushita and the South Korean Samsung, LG Electronics and Hyundai. The only US companies with an important presence in this sector are Intel, Microsoft, IBM, Dell and Hewlett Packard (Expansion, 1998). In this sector there is no important presence of Mexican enterprises.

FDI inflows were dramatically increased after NAFTA. However, in 1994 FDI sharply declined as the result of the rising of the EZLN. Nonetheless, the FDI inflows to Mexico recovered by 1997 (Table XV and XVI). With the purpose of encouraging more FDI inflows to Mexico, Ernesto Zedillo negotiated another eight free trade agreements; including one with the European Union that has become the second largest source of FDI in Mexico (Table XV). The Free Trade Agreements negotiated by Zedillo were the following:
NAFTA United States and Canada
FTA-G3 Colombia and Venezuela
FTA Mexico – Costa Rica Costa Rica
FTA Mexico – Bolivia Bolivia
FTA Mexico – Nicaragua Nicaragua
FTA Mexico – Chile Chile
FTA EU European Union
FTA Mexico – Israel Israel
FTA Mexico – TN Salvador, Guatemala and Honduras
FTA Mexico – AELC Iceland, Norway, Liechtenstein and Switzerland
TFTA Mexico – Uruguay Uruguay

In addition, Zedillo fostered the privatization of the rest of the state-owned enterprises. He opened them to private investment both foreign and national. This process also included the banking system, which today is 92% owned by foreign financial groups. The denationalization of the banking system brought negative effects in the socioeconomic structure in Mexico. Until the beginning of the 1990s there were no foreign banks in Mexico but after NAFTA the number of banks dramatically decreased due to acquisitions and fusions. In 1994 there were 14 national banks in Mexico but by the end of 1991 there were only 8 banks. Today most of the banking system is owned by foreign financial groups for instance BBVA-Bancomer, Banamex-Citybank, Santander, the Bank of Nova Scotia (Scotia Bank-Inverlat) and the Honk Kong and Shanghai Banking Corporation (HSBC) are some examples of these groups. In contrast, the only solid Mexican bank is BANORTE which eventually is expected to be absorbed by larger financial companies.
At the same time the banks went private, the government supported the creation of the FOBAPROA—Fondo Bancario de Proteccion al Ahorro (Haluk, 1999). This is a fund which provided assistance to all the private banks that had financial problems during the 1994 crisis. The FOBAPROA was used to rescue these banks from becoming insolvent. For that reason the banking debt was turned into a public debt. This affected millions of Mexicans. In fact, this debt has become the largest public debt in the Mexican history.

Following the neoliberal policies Zedillo pursued the privatization agenda. During Zedillo’s period, several public enterprises became a target of privatization. In that time the worldwide stagnation and the decrease of the oil prices obliged the Mexican government to obtaining capital. Consequently, the Zedillo regime supported the privatization of the last public enterprises of the energy sector. The purpose was to maintain the organization of the economy, to encourage the economic growth and foster foreign direct investment (Baker and Blume, 1999). However, some political circles and parts of civil society obstructed the process because these enterprises are considered sacred cows in Mexico. The main public enterprises under the aim of this program were practically three:

- Comisión Federal de Electricidad (CFE);
- Luz y Fuerza del Centro (LFC); and
- Petróleos Mexicanos (PEMEX).

His offer to privatize CFE and LFC was immediately rejected by the unions of the sector: The Sindicato Unico de Trabajadores Electricistas de la República Mexicana (SUTERM) and the Sindicato Unico de Electricistas (SUE). Nevertheless, several
problems remerged and the agenda of privatization stopped. Political instability derived from the rising of the Zapatistas in Chiapas and a profound crisis in the social sector due to the levels of poverty discouraged the privatization processes. However, on February 1999, Zedillo sent a proposal to the Congress outlining the implications of privatizing the power industry as. The main objectives were the following:

- Guarantee electricity supply to cover the growing demands of the Mexican people;
- provide a reliable, high quality service at competitive prices to encourage further growth of the nation’s economy;
- attract more investment from all sectors in order to strengthen the development of the electricity industry;
- expand the coverage of electricity and subsidize the sectors of the population with the highest necessity;
- create new and better jobs for the labour force of both, the electricity industry and the country;
- devote resources to high priority programs such as education, health and combating poverty, and;
- Strengthen the regulatory function of the government within the electricity sector (Baker, and Blume, 1999: 28-29).

According to Zedillo, the privatization of the energy sector can bring about several benefits to Mexico. But during that period the social and political dynamics did not allow the privatization of these enterprises. Probably the neoliberal argument of increasing efficiency and incrementing profits were already detested. Therefore, Zedillo changed the discourse for explaining the purpose of privatization. Luis Tellez, former Minister of Energy, argued that one purpose for privatizing CFE and LFC was to increase
benefits for the social sector. In addition, he argued that this privatization would help in the advance on the struggle against poverty and inequality:

Mexico can not afford to miss opportunities to attain the levels of efficiency, and low costs reached by the electricity industries of other countries were barriers to competition have been eliminated. Nor can Mexico afford to waste the opportunity to devote resources to remedying poverty, inequality and lack of capital. The energy sector must be at the forefront in supporting the international competitiveness of the nation’s industries and the welfare of all Mexicans (Baker and Blume 1999: 29).

Despite the change in the official discourse to a more social approach, people were opposed to the discourse of socioeconomic development via neoliberalism. The systematic decrease of social programs contributed to the resistance of Mexican society to accept more neoliberal policies. As a result the Mexican people voted for Vicente Fox Quesada in order to encourage a change in the Mexican political economy. Nevertheless, Fox has continued to pursue the neoliberal agenda in Mexico but with many difficulties.

Vicente Fox Quesada (2000-2006)

The Debacle of Neoliberalism in Mexico

Vicente Fox took advantage of the neoliberal crisis in Mexico. This allowed him to become the first non-PRI president after nearly 72 years of PRI’s ruling. Nevertheless, his party, the National Action Party also promotes free market economics, including the liberalization of foreign direct investment to encourage industrial development. In addition, the PAN is also recognized by its conservative values and its conventional

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6His education included the Universidad Iberoamericana and seminars given by lecturers from the Business School of Harvard University. After the end of his education he went to work for the Coca-Cola Company, starting off as a route supervisor and driving a delivery truck. He rose in the company to become supervisor of Coca-Cola’s operations in Mexico, and then in all of Latin America, despite the fact he didn't graduate from university until he became presidential candidate in 2000.
policies. But, such factors were ignored by the Mexican people. The Mexican population was asking for a change in the political economy of the country. However, the neoliberal agenda did not change at all. The earlier neoliberal trends were also followed by Fox. For instance, he signed and negotiated the Free Trade Agreement with Japan that went into effect in 2005. This agreement is expected to boost FDI inflows from Japan (Table XV).

During Fox, FDI inflows have been declining, possibly due to the economic stagnation of the US economy (Table XIV and XV). In addition foreign investment in certain sectors has declined more dramatically. In the agricultural sector the tendency has even become negative (Table XVI). In any case, Fox continued the privatization of the banking system. However, since most of the neoliberal program had been already implemented by his predecessors, Fox has put his efforts on opening the last state-owned enterprises to foreign investment via their privatization. Despite the intricate conditions, Vicente Fox Quesada has taken several measures to promote the denationalization of the oil industry. Ironically, most of the electorate voted for Vicente Fox because of his aspirations to stopping the privatization of Pemex. The role of Pemex in the Mexican economy is fundamental since it is the largest enterprise in Mexico, with over 130,000 employees and sales of up to US$ 40 Billion (Pemex, 2004). It ranks between third and fifth largest oil companies in the world, depending on the market conditions. Nevertheless according to the Pemex’s chairman Muñoz Leos, ‘The government is engaged in an ambitious program to improve operation and efficiency’ (Webb, 2001:27). So we can observe, once more, the neoliberal discourse of efficiency and competitiveness. One should expect that if Pemex becomes private, under the flag of
efficiency, much of the personnel will be fired. Nonetheless, the process of privatizing
Pemex has already begun and Fox has implemented a plan for restructuring PEMEX.

For this reason, Fox created a management boards with the most successful
businessmen in Mexico. The official discourse is that the board only promoting the
modernization of the industry. This board is formed by Carlos Slim Helu, who is the
richest man in Latin America, Lorenzo Zambrano who is the owner of the third largest
cement maker Cementos Mexicanos (CEMEX), Rogelio Rebolledo who is the CEO of
Fritolay Latin America and the minister of finance Francisco Gil Diaz among others.
These individuals are recognized as neoliberals. Therefore, one can argue that under this
‘management board’ privatization is being pushed. Most analysts consider that Fox’s
term will be remembered for following the steps of previous governments (most notably
previous president Zedillo). Paradoxically, most of the important neoliberal reforms
passed in Fox’s term were proposed by the PRI in previous terms and rejected by Fox and
his party. His economic policy is the natural continuation of Zedillo’s. This can be
observed with the continuous proposals for privatizing CFE and LFC.

Additionally, a new facet of neoliberalism has been present in Fox’s neoliberal
thinking the privatization of education which is a matter of further study. However, it is
worth mentioning that under Fox, most of the budget of public universities has been
reduced. In fact, the Autonomous National University of Mexico (UNAM) has been one
of the public universities affected with these reductions (La Jornada, several issues,
2004). Unfortunately, this measure has dampened down the competitiveness of UNAM in
relation with the private universities. (In any case the dynamics of the privatization of
public universities is a different matter of research that would require a further investigation).

**Mexican Social Development**

The application of the Neoliberal Model of industrial development in Mexico has led to an increase over the income inequalities among the Mexican population. This ‘new’ negative phenomenon started to appear as an asymmetrical difference in the income growth of the different classes. Income inequalities started to increase during De la Madrid’s administration. From 1984 to 1989, 90% of the Mexican population saw a decline in their income. The top decile of the population had 22.6 times the income of the ones in the bottom decile. But in 1989 (already under Salinas) this ratio increased to 32.9 times (Kaufman and Rubio, 1992: 99). This condition was different from the early 1950s to the mid-1970s. For instance, the income share of the poorest 40 per cent of the population fell from 13.1 per cent to 11.8 per cent in the period of 1950-1975 (Barkin, 1991).

During De la Madrid’s *sexenio*, following the mechanisms of the Neoliberal Model, three social matters were affected: public expending on health and education, and subsidies. De la Madrid encouraged a reduction of public expending. This measure has continued over several presidential periods. The public budget has been dramatically also reduced. Practically, it went from 41.4% of the GDP under De la Madrid to 26.6% under Zedillo (SHCP, in Guillén, 1997: 101). The public budget of the health sector was reduced in real terms. The salaries of the people working in the sector were reduced and in addition, some of the social programs were dismantled. Regarding education the
The budget was dramatically reduced; it went from 5.3% of GDP in 1982 to 3.5% of GDP in 1988. Teachers' salaries fell 33% in real terms. In addition, schools were not enough to meet the demand of basic education due to the lack of funds. (Guillen, 1997:102).

Regarding subsidies the Mexican government made an effort to eliminate what it considered non-justified subsidies. For instance, in the case of food, De la Madrid dismantled most of the food programs created by his predecessor without offering an alternative agenda for Mexico’s poor. Thus, in the 1980s economic stabilization and liberalization took place without an appropriate safety net in place. (Kauffman and Rubio, 1998: 123).

The negative impacts of these policies were to some extend mitigated by social programs implemented by the state such as the Programa Nacional de Solidaridad (PRONASOL). But, in the first years of Salinas' mandate most of social programs were dismantled affecting the social sphere even more. These actions affected Mexican labour. But in fact the Mexican working class was under attack under the Salina (following neoliberal ideas of the needlessness of labour in the free market economy).

President de la Madrid took a hard line against labour resistance to changes in collective agreements; Salinas’ stance was even tougher. A variety of changes—all geared to achieve greater productivity and international competitiveness—were imposed on unions by both administrations: the abolition of union participation in decisions to move labour between regions and departments, the elimination of union involvement in promotions and movement through the ranks, the use of private contractors in areas previously reserved for unionized labour, and the replacement of unionized personnel by ‘confidence’ (non-union) employees (Teichman, 1996: 6).

During Salinas' sexenio the agricultural sector was opened to foreign investment (following Friedman’s theory of market integration). For that reason, fixed prices and the
subsidies of most products were removed. At the same time all the state-owned companies belonging to CONASUPO (Compañía Nacional de Subsistencias Populares) were privatized (Teichman, 1996). It is worth mentioning that CONASUPO was the main aid institution for the agricultural producers. It used to provide the market for selling their products and it acted as a food development bank for the poor. Nevertheless, this 'welfare' institution was dismantled. Additionally, Salinas instituted the private pension system with the idea of encouraging private savings. Yet the only beneficiaries of this measure were the persons already working. In contrast the unemployed did not have access to any social security plan including unemployment insurance or housing. This policy still persists today. The unemployed do not have access to any social security programs.

Conclusion

Mexico’s industrialization via FDI from the beginning was controlled by the elites. As early as the colonial period the so called ‘conservatives’ have managed the Mexican economy, including the strategy of industrial development. It has been set for serving the particular interests of the conservative elite. Furthermore, political elites and bureaucrats are closely related to the business sector. This is probably the explanation of the poor industrial performance of Mexican industry from the 18th to the 20th century. There is no concern for a nationalistic industrial development. On the contrary, it seems that the policies so far implemented have been only correlated with foreign concerns, and never for national interest. In addition, the implementation of the neoliberal model has stopped the development of the Mexican industry. The liberalization of FDI has brought benefits
to foreign enterprises that have taken advantage of the Mexican cheap labour. The Mexican sunrise industries do not have the financial resources or the institutional support for the industrial upgrade. Technological development has not been a priority. Therefore, FDI has only served to benefit foreign enterprises that control the high tech industry both in Mexico and overseas. In fact, there is no presence of Mexican brands in the high tech manufacturing sector. In addition to make matters worst the Mexican neoliberal governments have dismantled most of the social programs complicating the survival of the poorest sectors of society. If this model continues to be applied the problems of unemployment, extreme poverty, marginalization and industrial underdevelopment will continue. The complete deregulation of FDI questions the strategy of national industrial development and the priorities of such a plan.
Chapter V

INDUSTRIAL DEVELOPMENT
IN MEXICO AND SOUTH KOREA

Outcomes of Different Models of Industrialization via FDI

Julio Boltvinik\(^7\) has argued that even though the interaction between supply and demand sets the most convenient price for bread, such a price system will not solve the problems of starvation and poverty. For that reason, state intervention becomes essential to give proper prioritization to market mechanisms in order to solve social problems. In a cowboy capitalist system state intervention is very limited or non existent. This only lead to a deterioration in social conditions. According to the neoliberal model, welfare programs only contribute to hinder the expansion of the market. For that reason all the assistance programs directed to the poor have been dismantled by the Mexican Government. In Mexico there are no social welfare programs as in South Korea. This seems to resemble a sort of Social Darwinist system. Thus Mexicans living at the bottom line of poverty have been subjected to the most painful effects of neoliberalism and industrial underdevelopment. In simple words you can say that in Mexico the son (Neoliberalism) is now devouring his father (State-Led Capitalism). This, of course, affects Mexican enterprises that are less integrated to the cowboy capitalist system. In the case of Mexico the data suggests that the complete liberalization of foreign direct investment has underdeveloped the Mexican industry.

\(^7\) Julio Boltvinik is professor of the Colegio de México. Today he is also a Senator for the PRD. He holds a Master degree in Development Studies from East Anglia University.
We have been able to observe that the only industrial segments supported by FDI have been the maquiladora sector and some segments of the manufacturing sector controlled by foreign enterprises (Table XVI). When NAFTA went into effect, the concentration of FDI inflows increased, essentially in the most representative sectors of the high tech industry such as electronics, automobiles and computers. Foreign companies with higher productivity have concentrated their efforts in the most advanced sectors (see Chapter IV, Table X). In contrast, the Mexican industry has been forced to concentrate its resources in the basic and intermediate manufacturing sector. As a result, there is little or no technological development. In fact, according to the National Council of Science and Technology (CONACYT), in Mexico 96% of the registrations for new inventions and patents in the industrial sector are made by foreign companies such as Procter & Gamble, Kimberly Clark, and Bayer among others (Herrera in la Jornada, 2005). Thus, Mexican industry is always a step behind from its foreign competitors. This is clearly illustrated by the absence of Mexican enterprises in the sector of advanced high-tech manufactures such as computers, electronics and semiconductors. One explanation is that there has been a special interest by the “revolutionary family” to encourage the support of basic and intermediate manufactures (see Chapter IV). This clearly differs from the SKDM where business elites were forced to work in favour of the developmental goals. This is other difference between the SKDM and the Mexican Neoliberal Model. In South Korea the business sector formed partnerships with the government to implement policies directed to support the process of industrial upgrade. The South Korean government had always the control over the partnerships. In contrast, Mexico’s capitalist class has always influenced policy according to its particular interests.
To make matters more complicated FDI inflows have been encouraged by changes to the Foreign Investment Law. Today it establishes that the investment made by foreigners with the migratory status of “inmigrante” would have the same status as Mexican investors (DOF, 1993: 92). This has caused foreign companies to get the same tax benefits as the Mexican enterprises. This structural condition has acted to the detriment to the domestic market by encouraging the creation of a parasitic and primitive Mexican industry. This parasitic condition has underdeveloped the domestic chains of production. As a result the Mexican industry has a presence only in low-intensive capital industries such as textiles, basic chemicals, oil derivatives and labour-intensive products. The Mexican government has not been capable of using FDI more productively as illustrated by the South Korean experience using the DM (see Chapter III). We have to remember that the Neoliberal Model advocates the liberalization of the economy. That is, the absence of state intervention to allow the ‘magic of the market’ to work and support economic growth. Thus the Mexican government has not been able to protect domestic enterprises and direct more financial resources to technological development. In fact, contrasting with the SKDM, the Mexican government has not created research institutes to encourage the development of technology to support the process of industrial upgrading.

It is important to stress that the SKDM followed the rules of the market. However, the government always intervened with the purpose of adjusting the flows of FDI. The South Korean government strictly determined which enterprises (depending on the sectors) were suitable for FDI. In addition, Mexico has depended highly on FDI as a mechanism to boost industrial development whereas South Korea took two different
approaches concerning FDI. First, South Korea implemented restrictive controls of FDI inflows by selecting how when and where FDI could flow. Secondly, South Koreans preferred foreign lending to FDI (see Chapter II and Table XI).

There are other important medium and long term negative effects of FDI in the Mexican context. FDI has not been used to reactivate the domestic productive chains as in South Korea. Furthermore, Mexico has lost control over its industrial base. Most of the state owned enterprises were sold except in the sectors in which the law prohibits it. FDI flows have been focused on the acquisition of state-owned enterprises. Therefore, you can argue that the increase of FDI during the last three decades is more the result of the privatization process than the competitive advantages of the Mexican economy. The strategy of massive privatization encouraged by the liberalization of FDI accelerated the process of underdevelopment of the Mexican industry. This has increased the unemployment level. In 2004, according to the Instituto Nacional de Estadística Geografía e Informática (INEGI), the Mexican unemployment rate in the manufacturing sector was 6.2% (INEGI, 2004). However, this figure contrasts with the macroeconomic outcomes of the Mexican economy because in the same year the economy grew 4.2%. This growth has been the highest since Fox took office. How is it possible to have the highest rate of economic growth but at the same time the highest rate of unemployment in the industrial sector? This circumstance can only be explained by the high number of foreign enterprises and their position to take advantage of cheap Mexican labour.

The outcomes of the SKDM are noteworthy because the South Korean government was able to maintain the balance between economic growth and social development (Table XVII). Today the socio-economic indicators of South Korea reflect
the efficiency of the model. For instance, the gini coefficient in South Korea is 32, which contrasts with Mexico's coefficient of 53 (Table XVII). This is reflected in the number of people living in extreme poverty. According to the *Centro de Estudios Económicos del Sector Privado (CEESP)* and the Mexican Ministry of Social Development, 53.2 million Mexicans cannot fulfil their basic needs regarding clothing, health, education, transport and housing (Castellanos, 2005; CEESP, 2005). Furthermore, social development in Mexico is far worse than South Korea's. For instance, Mexico is ranked 53rd in the *Human Development Index* (HDI) whereas South Korea is ranked 28th (UNDP, 2004).

The position of Mexico in the HDI is lamentable, above all considering that Mexico is the ninth largest economy in the world. However, it is important to point out that due to the cowboy capitalist system most of the wealth is concentrated in either few Mexican hands or is owned by foreigners. This is the explanation for the lack of social development in spite of the size of the Mexican economy. Curiously neoliberal economists have critiques regarding the evolution of the SKDM. First of all, it is argued that the level of intervention by the government over the economy was less than the one founded in other places:

...[the neoclassical response] claims that the level of intervention in the NICs may be substantial, but that it is nevertheless less than that found elsewhere (Bienefield, 1988: 30-31).

One of the most representative observations from neoclassical economists comes from Bhagwati who argues against the protectionist policies of the SKDM embodied in the import substitution strategy for industrial development.

I fail to find compelling reasons for thinking that the orthodoxy among economists should revert to the IS strategy.
...the evidence is overwhelming that the countries that adhered to import substitution [state interventionist policy] too long instead to shifting to export promotion, lost the opportunity for an impressive economic performance that the world economy liberally provided (Bhagwati, 1986: 102, 95)

Another important critique from neoclassical economists comes from Professor Hill of Australian National University. Hill, argues ‘that industrial development in those countries [South Korean and Taiwan] has grown rapidly as much in spite of as because of high-level government intervention and direction’ (Hill, 1986: 134)

Despite the neoliberal critique, in this research the SKDM has been illustrated as a successful experience of industrial development contrasting with the neoliberal experienced in Mexico. It is important to point out, however, that the social, economic and political conditions between Mexico and South Korean are completely different. This makes the exact reproduction of the SKDM highly complicated. Nevertheless, it is interesting to observe the similarity between the SKDM and the neostructuralist model of development. For that reason, it is important to consider the contributions of neostructuralism to find a new model of industrial development. For neostructuralism the purpose of governmental regulation is to ensure the stability of the entire social system. Additionally, neostructuralists advocate government intervention to improve social welfare. Neostructuralists advocate the use of the industrial infrastructure already in existence to encourage an endogenous industrial development. However, neostructuralism is now closer to neoliberalism than the older structuralism had been. But, neostructuralism suggests further-reaching conceptions, which go beyond market and emphasize the connections between social equity and economic growth. This is
expected to be achieved in Latin American societies by encouraging a process of industrial development complemented with an orientation to foreign markets.

An interesting part of neostructuralism is the balance between the orthodoxy of 'market friendly' neoliberal policies with a more social responsible economic approach. This convergence can be viewed as a tragic contradiction but it raises questions that are worth exploring further.
This study has examined the dynamics of the liberalization of FDI as one of the strategies for industrial development in Mexico. From a macroeconomic perspective it concludes that FDI has played an important but not necessarily positive role in Mexico's industrial development. FDI in Mexico has sought efficiency through a better integration into the global market. However, this has only benefited foreign companies. Their activities have been mostly linked with the foreign market and very little with the domestic economy. This sort of industrialization, led by foreign enterprises, has generated in Mexico risks and challenges. For example, the complete deregulation of FDI has undermined the design and implementation of a strategy for national industrial development that worked so well in South Korea. From this perspective FDI has had a clearly negative impact with lots of ambiguities. For instance, FDI has contributed to the modernization of some Mexican enterprises but unfortunately these enterprises have been denationalized, absorbed by foreign companies that tend to be more competitive. Many remaining Mexican companies have been condemned to play a parasitic role or to be part of the maquiladora system.

More importantly, the dynamics of FDI in Mexico have not been able to solve the main challenges of the Mexican economy such as stagnation of the domestic productive chains, lack of industrial integration, unemployment, increasing levels of poverty and the
financing of a sustainable and competitive domestic industry. In contrast, the much more positive outcomes of the SKDM of Korean enterprises are reflected in their position and performance in the international market. More importantly, the superior performance is reflected in the advances in socioeconomic conditions and general well-being experienced by most South Koreans. The outcomes of Mexico’s neoliberal industrial development suffer in comparison, particularly as regards the level of human or social development and the incidence of poverty. Close to one half of Mexico’s population is unable to meet their basic needs after two decades of industrial development under neoliberal policies. The data suggests that the poor performance of Mexico’s economy and the observed weaknesses in its industrial development process are directly related to an excessive dependence on, and the operation of, foreign direct investment and the presence of foreign capitalist corporations in the country. It is clear that the lack of government control over FDI has contributed substantially to the relative state of underdevelopment of Mexico’s industry. This is the thesis of this study.

Today more than ever the intervention of the Mexican state to control FDI is essential. The Mexican government needs to control the imbalances of the market that generate inequitable industrial and economic development. This must be achieved by improving economic development via an endogenous industrialization, but with the least social costs as possible. The thesis concludes that the most viable model of industrial development in Mexico would be a combination of the SKDM and the neostructuralist model of industrial development. The economic growth achieved by the SKDM can be combined with the Neostructuralist model of industrial development because the outcomes of social and industrial development are compatible and mutually conditional.
This sort of State-Led Neostructural Model (SLNM) can be formed so as to control the negative aspects of both models. This means, first of all, the need to control the excessive oppression of labour promoted by the SKDM. And secondly it means greater state intervention in the economy and a movement away from the orthodoxy of neoliberal fiscal and monetary policy in a more ‘socially responsible’ direction, i.e. in the public interest. The ‘private sector’ – or, to be more precise, the capitalist corporations – if allowed to operate freely, without regulation and restrictions, in their own rather than the public interest cannot produce socially equitable outcomes or an advance in the level of human development. Therefore, beyond the disagreements that we have with neostructuralism and the SKDM, both models constitute a possible, and most importantly, a responsible pragmatic option for defining an alternative political economy of industrial development. However, the precise determination of this policy mix is outside the scope of this thesis. But it is an area recommended for further analysis and research.
<www.bok.or.kr>
TABLE II

KOREAN GDP GROWTH RATE % (1971-2003)

TABLE III  
Possible Combination of Partnerships (South Korean Case)

1. (Public authorities). In the form of government line organization, special account agency, or public corporation with a 100% of government investment.
2. (Private enterprises) Including legally incorporated and household enterprise.
3. (3rd Sector) Including public-private partnerships with equitable share and inequitable power in favour of one partner.
4. (4th Sector) In the form of municipal bond and citizens participation.
TABLE IV

PERCENTAGE OF GDP IN AGRICULTURE AND TEXTILES & BASIC MANUFACTURES IN SOUTH KOREA

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Textile &amp; Basic manufactures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>1972</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>1982</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>1992</td>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: with data from the Bank of Korea, National accounts (2004) <www.bok.or.kr>
TABLE V

TABLE VI
GROWTH OF THE KOREAN ELECTRONIC INDUSTRY (US Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic production</td>
<td>11</td>
<td>106</td>
<td>860</td>
<td>2,852</td>
<td>8,460</td>
<td>29,711</td>
<td>61,367</td>
</tr>
<tr>
<td>Electronics exports</td>
<td>2</td>
<td>55</td>
<td>582</td>
<td>2,004</td>
<td>2,004</td>
<td>4,532</td>
<td>41,223</td>
</tr>
</tbody>
</table>

Source: Adapted from Cyhn, Jin W (2002:161).

TABLE VII
PERCENTAGES OF INFRASTRUCTURES BY INDUSTRIAL SEGMENTS IN SOUTH KOREA (1983-2000)

<table>
<thead>
<tr>
<th>INDUSTRIAL SECTOR</th>
<th>1983</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery</td>
<td>10.4</td>
<td>12.1</td>
</tr>
<tr>
<td>Electronics</td>
<td>8.2</td>
<td>15.4</td>
</tr>
<tr>
<td>Automobile</td>
<td>3.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>4.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Petrochemical</td>
<td>3.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Industrial chemicals</td>
<td>3.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Petrochemical refining</td>
<td>9.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Iron and steel</td>
<td>7.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Textiles</td>
<td>13.9</td>
<td>8.3</td>
</tr>
</tbody>
</table>

### TABLE VIII

Number of Strikes during the SKDM

<table>
<thead>
<tr>
<th>Years</th>
<th>Number of Strikes and Lockouts</th>
<th>Workdays Lost due to Strikes and Lockouts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>114</td>
<td>20</td>
</tr>
<tr>
<td>1985</td>
<td>265</td>
<td>64</td>
</tr>
<tr>
<td>1986</td>
<td>276</td>
<td>72</td>
</tr>
<tr>
<td>1987</td>
<td>3749</td>
<td>6847</td>
</tr>
<tr>
<td>1988</td>
<td>1873</td>
<td>5401</td>
</tr>
<tr>
<td>1989</td>
<td>1616</td>
<td>6351</td>
</tr>
<tr>
<td>1990</td>
<td>322</td>
<td>4487</td>
</tr>
<tr>
<td>1991</td>
<td>234</td>
<td>3271</td>
</tr>
<tr>
<td>1992</td>
<td>235</td>
<td>1528</td>
</tr>
<tr>
<td>1993</td>
<td>144</td>
<td>1308</td>
</tr>
<tr>
<td>1994</td>
<td>121</td>
<td>1484</td>
</tr>
<tr>
<td>1995</td>
<td>88</td>
<td>393</td>
</tr>
<tr>
<td>1996</td>
<td>85</td>
<td>893</td>
</tr>
<tr>
<td>1997</td>
<td>78</td>
<td>445</td>
</tr>
<tr>
<td>1998</td>
<td>129</td>
<td>1452</td>
</tr>
<tr>
<td>1999</td>
<td>198</td>
<td>1366</td>
</tr>
<tr>
<td>2000</td>
<td>250</td>
<td>1894</td>
</tr>
<tr>
<td>2001</td>
<td>235</td>
<td>1083</td>
</tr>
</tbody>
</table>

Source: South Korean Ministry of Labour (2002), Adapted from Chul-Lee and McNulty, 2003: 58
## TABLE IX
### SUMMARY OF ECLAC THOUGHT

<table>
<thead>
<tr>
<th>Periods and topics</th>
<th>Permanent elements</th>
<th>Historical-structural analysis</th>
<th>State action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1948-1960 (industrialization)</td>
<td>International integration (central-periphery and external vulnerability)</td>
<td>Internal structural (economic and social) conditions for growth/technical progress, and for employment/income distribution</td>
<td>Deliberate management of industrialization</td>
</tr>
<tr>
<td>1960s (reforms)</td>
<td>Deterioration in the terms of trade; structural imbalance in the balance of payments; regional integration</td>
<td>Process of industrialization through substitution; perverse trends caused by specialization and the structural heterogeneity;</td>
<td>Reform to make development possible</td>
</tr>
<tr>
<td>1970s (styles of growth)</td>
<td>Dependency; regional integration; international policy of reducing periphery</td>
<td>Land reform and income distribution as a requirement for boosting the economy; structural heterogeneity; dependency</td>
<td>Strengthen industrial exports</td>
</tr>
<tr>
<td>1980s (debt)</td>
<td>Dependency, dangerous levels of indebtedness; insufficient exports</td>
<td>Industrialization that combines the internal market and the export effort</td>
<td>Renegotiating of debt to adjust with growth</td>
</tr>
<tr>
<td>1990-1998 (changing production patterns with social equity)</td>
<td>Ineffective export specialization and vulnerability to capital movements</td>
<td>Difficulties in effective production transformation and in reducing the equity gap</td>
<td>Policies to change production patterns with social equity</td>
</tr>
</tbody>
</table>
TABLE X

FDI BY SECTOR IN MEXICO (1940-1970)

Source: Adapted from Sepulveda y Chumacero (1973).
| Source: International Financial Statistics; Taiwan and South Korea Statistical Book. (Adapted from Gereffi and Wyman, 1990: 61) |
**TABLE XII**

*Average Growth Rate of FDI inflows to Mexico (1974-1993)*

<table>
<thead>
<tr>
<th>Year Period</th>
<th>Average Growth Rate</th>
</tr>
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<tbody>
<tr>
<td>1974-1982</td>
<td>7.30%</td>
</tr>
<tr>
<td>1983-1987</td>
<td>28.10%</td>
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<tr>
<td>1988-1993</td>
<td>30.50%</td>
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TABLE XIII

Foreign Direct Investment in Mexico (1970-2005)

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<tbody>
<tr>
<td></td>
<td>1,000</td>
<td>2,000</td>
<td>3,000</td>
<td>4,000</td>
<td>5,000</td>
<td>6,000</td>
<td>7,000</td>
<td>8,000</td>
<td>9,000</td>
<td>10,000</td>
<td>11,000</td>
<td>12,000</td>
<td>13,000</td>
<td>14,000</td>
<td>15,000</td>
<td>16,000</td>
<td>17,000</td>
<td>18,000</td>
<td>19,000</td>
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</table>

Source: Based on data from Table XIV.
<table>
<thead>
<tr>
<th>Years</th>
<th>US Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>200.70</td>
</tr>
<tr>
<td>1971</td>
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<td>Percent of Population living on less than USD 2 a day</td>
<td>2.00%</td>
<td>37.90%</td>
</tr>
<tr>
<td>Human Development Index (HDI)</td>
<td>28</td>
<td>53</td>
</tr>
<tr>
<td>Percent of Population who are unable to meet their basic needs (Education, Health, Clothing, Food and Transport)</td>
<td>4.00%</td>
<td>53.80%</td>
</tr>
</tbody>
</table>


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