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University of London
School of Oriental and African Studies
Department of Economics

**An Investigation Into
the Political Economy of Industrial Policy:
the Case of Mozambique**

Carlos Nuno Castel-Branco

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ABSTRACT

This thesis examines the recent experience of industrial policy in Mozambique in the context of developments in the economy as a whole and in the Southern African region, in order to draw attention to the fundamental pressures and issues that form part of the economic policy decision-making process. The thesis analyses the debate between opponents and proponents of industrial policy, and concludes that there is no abstract rationale for or against industrial policy that is independent of the specific socio-economic pressures and processes of change under consideration. Orthodox and heterodox arguments for and against industrial policy tend to analyse either agents or linkages in a simplistic way and to ignore the dynamic relationships between them. Thus, they fail to acknowledge that decisions regarding investment and industrial strategies reflect a three-way interaction between the state, capital and labour under specific socio-economic conditions and pressures; that the state and the relationships between the economic agents through or outside the state are influenced by similar conditions, processes and forces; and that the state operates through the market. Hence, the state and the market are not alternatives to each other. Outside the analysis of specific socio-economic conditions there is no way of determining how strategies, policies and interactions between agents and linkages will materialise in economic performance.

The main original contribution of the thesis consists of the expansion and application of the linkages-agencies analytical framework to the study of the recent experience of industrial development in Mozambique. This is done within the context of dynamic pressures, conflict, policy reform and development that occur in the economy as a whole, and pressures and influences associated with the Southern African region, in particular with the re-structuring of South African capitalism. Consistent long-term time series and cross section data sets were constructed, out of fragmented and inconsistent data sets, to analyse the performance and role of the manufacturing sector within the Mozambican economy over the last four decades, and to study the patterns of investment in the Mozambican economy in the 1990s.

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List of Acronyms and Abbreviations

- ADB – African development bank
- BCM – Banco comercial de Moçambique (Mozambican commercial bank)
- BCI – Banco comercial e de investimentos (commercial and investment bank)
- BIM – Banco internacional de Moçambique (international bank of Mozambique)
- BM – Banco de Moçambique (Mozambican central bank)
- BPD – Banco popular de desenvolvimento (people's development bank – replaced by Banco Austral)
- BSTM – Banco Standard Totta de Moçambique
- BVM – Bolsa de valores de Moçambique (Mozambican stock exchange)
- COMECON – former community of economic cooperation of the socialist countries
- CPI – Centro de promoção de investimentos (investment promotion centre)
- DDI – Domestic direct investment
- DNI – Direcção nacional de indústria (national directorate for industry)
- DRC – Domestic resource cost
- EDM – Electricidade de Moçambique (Mozambican electricity corporation)
- EOI – Export oriented industrialisation
- ESCOM – South African electricity corporation
- FARE – Fundo de apoio à reabilitação empresarial (enterprise rehabilitation support fund)
- FDI – Foreign direct investment
- FFPI – Fundo de fomento para a pequena indústria (small enterprise support fund)
- FIZ – Free industrial zone
- Frelimo – Mozambican political party that currently holds majority in Parliament and governs; originally was the national liberation front against Portuguese colonialism.
- GDP – Gross domestic product
- GOM – Government of Mozambique
- GREICT – Gabinete de reestruturação de empresas da indústria, comércio e turismo (unit for privatisation of industrial, trading and tourism enterprises)
- IDC – Investment development corporation (South Africa)
- IDIL – Instituto de desenvolvimento da indústria local (local industry development institute)
- IFC – International financial corporation (member of the World Bank group)
- IMF – International monetary Fund
- INA – Instituto nacional do açúcar (national sugar institute)
- INCAJU – Instituto do caju (national cashew institute)

- INE – Instituto nacional de estatística (national statistics institute)
- INNOQ – Instituto nacional de normalização e qualidade (standards and quality institute)
- IP – Integrated industrial programme (of private enterprise development)
- IPEX – Instituto de promoção de exportações (export promotion institute)
- ISI – Import substitution industry
- ISIC – International standards of industrial classification
- ISP – Industrial strategy project
- KPMG – international business consultancy company
- MCC – Maputo corridor company
- MEC – Minerals-energy complex
- MIC – Ministério da indústria e comércio (Ministry of industry and trade)
- MICTUR – Ministério da Indústria, Comércio e Turismo (Ministry of industry, trade and tourism – replaced by MIC)
- MPF – Ministério do Plano e Finanças (Ministry of planning and finance)
- MVA – Manufacturing value added
- OTM-Central Sindical – Organização dos Trabalhadores de Moçambique (one, of two, main workers organisation in Mozambique)
- PFP – Policy framework paper
- PoDE – Enterprise development programme
- PPI – Plano prospectivo indicativo (prospective indicative plan)
- PRE – Programa de reabilitação económica (economic rehabilitation programme)
- PRSP – Poverty reduction strategy paper
- R&D – Research and development
- RPED – Regional program for enterprise development
- SAB – South African breweries
- SADC – Southern African development cooperation
- SAP – Structural adjustment programme
- SASOL – South African fuel (coal and gas to liquid) corporation
- SDI – Spatial development initiative
- SEB – Swaziland electricity board
- SME – Small and medium enterprise
- SSA – Sub-Saharan Africa
- TFP – Total factor productivity
- UNCTAD – United Nations conference on trade and development
- UNDP – United Nations development programme
- UNIDO – United Nations industrial development organization

UTRE – Unidade técnica de reestruturação de empresas (central technical unit in charge of the
privatisation programme)

WB – (The) World Bank

Chapter 1

Introduction

Over the past fourteen years, Mozambique has been following a classical Washington consensus type of economic reform, primarily aimed at stabilisation and liberalisation of the economy. These reforms have also been expected to bring about economic growth and change, and industrialisation of the economy is, theoretically, a crucial component of such a process. The government has formulated general and industry specific industrial policy documents and legislation that, with rare exceptions, have not been implemented. Furthermore, fundamental socio-economic pressures and forces that act upon the state, the markets and the direction of industrialisation and economic development are only marginally discussed or covered in the policy documents and legislation. Moreover, although industrial output has grown quickly in the last five years, the dominant patterns of industrialisation and allocation of investment have not changed significantly and, if anything, have become narrower. Finally, industrial policy has been a marginal activity of the government when compared with other areas such as monetary and fiscal policies, general system of investment incentives, trade, agriculture, infrastructures and education.

The debate about, and analysis of, industrial policy in Mozambique are closely associated with the general ongoing debate about the role of the state and industrial policy in late development.¹ On the one hand, the Bretton Woods institutions and mainstream researchers claim that industrial development is a natural outcome of a sound economic and business environment based upon economic stability, liberalised markets and prices, private ownership and control over productive assets, public provision of social capital and minimal red-tape. Hence, industrial policies and strategies are not only not very important, but could even be damaging if they lead to outcomes that differ from the hypothetical optimum that markets would be able to achieve in the absence of imperfections.² On the other hand, heterodox organizations and researchers claim that the state has a fundamental role to play to promote industrialisation, and this role is not determined by the presence of market imperfections but

¹ See, for example, Amsden 2001 and 1992.

² See, for example, Biggs, Nasir and Fisman 1999, and World Bank 1999, 1995b and 1990b.

by the need to provide a strategy and build the institutions of development.³ Despite fundamental differences between and within each of these groups, their analyses have in common: (i) the study the manufacturing sector in isolation from the rest of the economy; (ii) the focus on linkages and the need to increase aggregate capital formation, with little or no attention paid to the analysis of direction and patterns of development; (iii) the fact that the models are heavily dependent upon strong assumptions about the agencies they intend to develop, be it the state or the private sector, without any detailed analysis of such agents in the context of the Mozambican economy; (iv) the lack of analysis of the conditions of competition or market structures and dynamics; (v) the concentration on the "national dimension" of industrial policy while simultaneously seeing foreign direct investment (FDI) and the Southern African region solely as opportunities or threats; and (vi) the inadequate use of available data (and effort put into producing data) about the structure of manufacturing output and trade and its dependence upon imports for purposes of policy making. At the end of the day, these analyses are mainly concerned with whether manufacturing output, exports and employment expand or contract.

This idea for this thesis was borne against this background. The critique of the terms of analysis and debates, of the little use made of long-term data or effort put into producing it, and of the inconsistency between the analyses and the available evidence initially led to the idea of researching the role and meaning of economic and industrial policy and in the case of Mozambique under stabilisation and structural adjustment programs. This research very quickly demonstrated the need to study the fundamental economic dynamics that are relevant to understanding industrialisation in Mozambique, and how these dynamics could be explained. Moreover, it became obvious that the study of industrial policy is not only about its potential, or lack of it, in promoting linkages, but fundamentally it is about how its goals are established, and how industrial policy is defined, determined and implemented in specific conditions of industrialisation. General literature research in the field of industrial policy showed that the dynamics of accumulation are determined by linkages, by agents and by the dynamic relationship between them. Moreover, trying to understand linkages and agents in isolation from each other would obscure the analysis instead of simplifying and focusing it. This thesis is the outcome of this critical stance.

³ See, for example, GOM and UNIDO 1993, UNIDO 1999 and 1987, and Weiss 1992.

1.1 Research approach

Aim and analytical framework of the thesis

The general aim of this thesis is the application of the linkages-agents analytical framework to the study of the process of industrialisation in Mozambique. More specifically, the thesis will discuss the role of industrial policy in the Mozambican economy, and how to address the task of developing coherent industrial policies and strategies that take into account the structural characteristics and the dynamic socio-economic pressures that shape industrial progress. Thus, rather than recommending a specific policy programme, the thesis will try to identify the dynamics of industrial accumulation and its implications for industrial policy, so that policies can be based upon the understanding of the socio-economic relations and pressures that characterise the process of industrialisation in Mozambique.

The linkages-agents analytical framework addresses socio-economic development processes by focusing upon the study of linkages, agents and the dynamic relationship between the two. Linkages refer to the process by which one economic activity or pressure leads to another activity or pressure and, in doing so, generates economic growth, change and development. Agents are those who perceive and anticipate linkage opportunities and implement them, be it the state, firms, entrepreneurs or any other market and non-market organisation and institution that is in the position of making economic processes happen. Whether resulting directly from economic pressures or from strategy and planning, for the implementation of potential linkages it is necessary that agents have the ability to anticipate the linkage opportunity, and the entrepreneurial capacity (managerial, organizational and financial) and political will to take advantage of the perceived opportunity.

The linkages-agents framework adopted in this thesis is different from the mainstream analysis of linkages and agents – be it from the neo-classical, institutionalist or from the developmental state points of view – in various ways. First, it recognises the socio-economic and political context in which agents and linkages emerge and operate. Agencies reflect social interests, often conflicting and not necessarily coherently articulated, which may determine not only whether linkages are implemented but also the perception and definition of the important linkages to materialise and how to do it. Second, it introduces the analysis of the dynamic relationship between agents and linkages and how they influence each other. Therefore, this framework consists of three components: agents, linkages and their dynamic relationship. Third, it acknowledges that not only are agents and linkages dynamically related

with each other, but also they cannot be adequately understood if studied separately. This means that agents are not, cannot and need not be autonomous from economic conditions and pressures, which in turn are not independent of social and political interests. This analysis also reveals the inadequacy of the "state versus markets" debates about public policy by showing that states work through markets and both states and markets are similarly subject to socio-economic pressures and interests.

Methodologies

The thesis focuses on the analyses of economic pressures and processes, agencies and the dynamic relationship between them, as far as they are relevant for the understanding of the process of industrialisation and industrial policy determination in Mozambique. The analysis is pursued through a combination of qualitative and quantitative methods.

First, an empirical analysis is made of the patterns of growth of gross domestic product (GDP) and manufacturing valued added (MVA), the composition of GDP and MVA, trends and composition of manufacturing exports, and the relationship between investment, growth, trade balance and finance of investment (Chapter 3). This analysis is based upon long-term, consistent data series covering periods between 20 and 40 years (according to availability of data), and which were specifically constructed, out of fragmented and inconsistent series, for the purpose of this thesis. This analysis shows the pattern of industrial accumulation in Mozambique, how it relates to the economy as a whole, why it is highly unstable and the relationship between output growth and diversification of production. It also provides evidence that is used to argue that economic processes, or linkages, and agencies are not independent of each other, industrial outcomes are not only influenced by agencies and by public policies, and that official policies are not the only policies, and may not even be the dominant policies, in place.

Second, an empirical analysis is made of the patterns of allocation of investment and sources of investment finance over the past decade. The cross-section data sets utilised were produced specifically for this thesis from the study of 1,300 investment projects approved between 1990 and 1999. This analysis shows the link between three factors: current investment decisions; established capacities, structures, agencies and dynamics of economic accumulation in Mozambique; and the role of the South African economy, particularly through FDI, in shaping manufacturing development in Mozambique. It provides evidence

about dominant forces in the Mozambican economy and expected future patterns of accumulation on the basis of current allocation and origin of investment.

The descriptive statistical analysis using time series and cross-section data sets is a fundamental foundation of the critique of industrial studies and official industrial policies (chapters 4 and 5), and provides the empirical basis upon which policy conclusions of the thesis rest (chapter 6).

Third, a critical study is undertaken of the industrial policies and analyses and their relationship with the core and dominant stabilisation and liberalisation programmes in Mozambique. This study is based upon interviews in public institutions, international, bilateral and multilateral agencies, firms, banks, as well as reports, legislation, and in loco data collection about different aspects discussed. The analysis makes extensive use of examples of firms and industries, and selects crucial areas of linkage and policy (namely the acquisition of industrial capabilities, finance and conditions of competition, within the context of dominant FDI and South African capitalism) for more detailed discussion. This analysis provides information about the direction and relevance of existing, official industrial policies, as well as about other factors (namely established linkages, agencies and their dynamic relationship) that influence the pattern of industrial development and the practice, if not the rhetoric, of industrial policy.

Original contribution of the thesis

The linkages-agents analytical framework adopted is not an original contribution of this thesis, as its fundamental bases have been discussed in the literature that addresses socio-economic development and change. The original contribution of the thesis consists of, firstly, the extension and application of the framework to the analysis of the Mozambican case of industrialisation. A central argument of this thesis is that the definition, role, relevance, content, implementation and outcome of industrial policies and strategies depend upon the specific socio-economic conditions that shape the process of industrialisation, and the economic pressures and interests that act upon it and upon the state and the market. In other words, industrial policy is better understood from the study of the underlying socio-economic relationships and pressures that govern the process of industrialisation upon which policy is expected to act. Therefore, the application of the linkages-agents framework to a country-case study is relevant insofar as it raises general questions related to industrialisation, generates new ways of understanding the dynamics of industrial accumulation in a specific reality and

helps to produce the relevant information. The application of this framework to the study of industrial policy differs significantly from the available studies of the manufacturing sector and policy documents in Mozambique, which are focused on linkages and, after very strong assumptions, take agents – the state or the private sector – for granted. Furthermore, these studies and policy documents cannot explain how the interests and action of the agents develop in relation with economic conditions, nor have they an explanation for the empirical fact that long-term patterns and dynamics of manufacturing development have not been particularly sensitive to radical changes in ideology and policy orientation.

The second original aspect of the thesis is related to the production of consistent, long-run time series for the analysis of the role of the manufacturing sector in the Mozambican economy, the sectoral composition of output and exports of manufactures and the relationship between manufacturing and macroeconomic conditions. These series, which cover between 20 and 40 years, according to data available, were constructed out of fragmented and inconsistent data in order to support the analysis of long-term patterns. Original data were also created for cross-section analysis of allocation of investment over the past decade, based on a list of 1,300 investment projects approved between 1990 and 1999. These data are explained and analysed in chapter 3.

The third element of originality is associated with the way industrial policy in Mozambique is discussed in chapters 4 and 5. On the one hand, there is systematic reference to the patterns of production, trade and long-term sustainability of industrial accumulation, as well as to the patterns of investment. Thus, the discussion is based upon a sound empirical basis, with long-term data. On the other hand, industrial policy is discussed in the context of the dynamics of industrialisation and economic development in Mozambique, and industry is analysed in the context of the economy as a whole. One of the various original points, in the context of Mozambique, that emerges from this type of analysis is the clear relationship between the narrow pattern of specialisation of production and trade and long-term instability of output and trade. These trends are derived from the fact that manufacturing expansion, under the current conditions of import dependence and low export drive, exerts unsustainable pressures over the balance of trade. Finally, the dynamics of manufacturing development and policy formation are discussed with reference to two central and observable facts, namely the key influence of South African capitalism in the economy as a whole, and the dominant role that FDI, mainly originated from, or linked with, South African corporations, has been playing in the determination of structure of manufacturing in Mozambique.

Comments about the direction of the thesis

Before undergoing a more thorough presentation of the structure of the thesis, it is important to make some comments regarding some of the choices about the direction of the thesis. First of all, and most important, the reasons behind what has been done in the thesis have already been explained. However, there are five issues that could have been followed in the thesis but have not, and this requires some explanation.

The first of these issues is that if the thesis tries to relate economic and political conditions of accumulation, why has it not undergone a detailed study of corruption and party member privileges, and how these affect socio-economic development? There are four main reasons why this analysis was not done. Corruption and the use of political positions for acquisition of economic advantages, which are not uncommon throughout the world, are factors that usually can be explained through the analysis of the patterns of accumulation and the associated political and institutional settings. These factors, by themselves, are usually not explanatory variables of the patterns of accumulation, but explained variables.

When the stabilisation and liberalisation economic reforms were initiated in Mozambique, in mid-1980s, fast privatisation soon became one of three core objectives of economic policy. There were only two Mozambican groups with enough power to compete for access to public assets: those with political positions, and traders and speculators that had financial power, business experience but little interest in manufacturing. Very few Mozambicans had the capital and experience to successfully acquire and manage industrial firms. In the same period, many Frelimo veterans had lost their positions in the army and the party because of modernization. Thus, the association of political and economic power was initiated as part of a process to create a domestic capitalist class and to minimise internal tensions that could have risen out of demobilisation of veterans. Corruption started in the context of economic scarcities and also as part of transfer of resources from the public sector to private hands to finance the development of a broader domestic capitalist group. It is true that corruption has spread everywhere and very fast, that a lot of it is associated with the relationship between economic and political power, and that the current level of corruption affects negatively the socio-economic environment and political stability. Nonetheless, it is also true that the fundamental dynamics influencing the path of economic development in Mozambique are not dominated by, even if receiving influence from, political corruption. It is infuriating to see how corrupt and arrogant some Ministers and other politicians and public servants can be, but this is not the same as saying that corruption and arrogance of holders of public office are the

central factors determining what happens to an economy dominated by its interaction with the Southern African region and inflows of foreign capital.

The thesis demonstrates that the long-term patterns, shape and direction of industrialisation of the Mozambican economy are determined by fundamental dynamic factors, which cannot be mainly explained by corruption and the association between political and economic privilege at national level. Moreover, there is significant heterogeneity and differentiation between party members and holders of public office, so that generalisations concerning their individual role in policy decisions and privileges are greatly exaggerated. Finally, as argued throughout this thesis, the state, party members, or owners of private companies are not autonomous entities capable of pursuing their interests independently of the other agents and of the overall economic conditions. In brief, for the purpose of this thesis the analysis of corruption and the association between political and economic power were not considered a fundamentally relevant direction of research.

Another issue, which is associated with the one just discussed, is that if this thesis investigates the political economy of industrial policy in Mozambique, why not focus on the analysis of the internal agents and their conflicts, rather than paying so much attention to foreign capital? The thesis criticises the restriction of industrial policy and politics to what is called the "national dimension" because capitalist accumulation is hardly a national factor and is far better understood through its global connections, and also because of the very strong impact of the Southern African region and dominant role of FDI in the Mozambican economy. The power of the region and of FDI is demonstrated empirically (see chapter 3). Hence, it would not make much sense to analyse domestic class formation and conflict in isolation from what happens in the region that affects Mozambique. Finally, the thesis is concerned not with a specific group located somewhere in the economy, but with the identification of the fundamental dynamics of industrialisation.

The third issue to explain is that, if the thesis also aims at making a relevant contribution to industrial policy in Mozambique, should it not recommend more detailed policies and policy directions? If, as the thesis argues, industrial policies result from the underlying socio-economic conditions that govern the process of economic development and industrialisation, it seems more sensible to focus on understanding such conditions rather than producing detailed policy programmes. Moreover, why would a policy programme produced outside the process of negotiation between different interest groups and under specific economic pressures be accepted, not to speak of successfully implemented, by the different agents involved in the process of industrial development? However, it should be noted that in each

chapter of the thesis there is a discussion of the implication of the analysis for policy. Such discussions are revisited in the final chapter, which goes further and tries to develop, with some detail, what the thesis shows are the main concerns for industrial policy formation and implementation in Mozambique.

The fourth issue is associated with the fact that the empirical work done in this thesis does not involve the application of rigorous econometric techniques, which could be open to questioning and criticism. The answer to this point is detailed in section 3.1, chapter 3. In brief, the explanation for not using econometrics in the analysis is based on four points: (i) the data sets have been constructed and used for descriptive, statistical analysis as the basis for clarifying the structure and dynamics of the Mozambican economy and the main lines of enquiry for this thesis; (ii) the data sets, even if they are the best available for the length of the period cover, are not as reliable and accurate as it would be necessary for the results of rigorous econometric analysis to be trusted; (iii) more generally, modelling was considered inadequate because of the absence of stable structural equations and parametric values; and (iv) in some of the cases, econometric analysis would not add explanatory power give the line of enquiry followed, as well as the characteristics of the economic processes. For example, panel data econometrics could have been used to study allocation of investment over time. However, apart from practical difficulties in pinpointing the precise period of implementation of each investment project, two thirds of investment in the period was approved in the last three years of the decade, and three quarters of it was allocated to Mozal (an aluminium smelter). Given this level of concentration of investment in the last period of the decade and in one project, the use of panel data would not add much more information or analytical power to the descriptive analysis made in chapter 3.

Finally, the fact that the thesis does not contain at least one full and detailed case study (of one industry or branch) may also be questioned. However, it should be emphasised that the thesis researches fundamental dynamics of industrialisation in Mozambique. Therefore, it would have been very difficult to find one case study that could illustrate all fundamental aspects related to industrial policy in Mozambique that are discussed. Even more difficult, if at all realistic, would be trying to develop three or more case studies in order to illustrate such points. The main points made in the thesis are illustrated through descriptive statistics and/or reasonably detailed examples of different industries, mainly sugar, basic metals, metal engineering and cashew processing.

1.2 Structure of the thesis

The arguments of the thesis are developed over five chapters. Chapter 2 discusses critical issues in industrial policy and provides the theoretical background and the analytical basis upon which the thesis is developed. This chapter includes an overview of the literature about industrial policy and industrialisation, a discussion of definitions of industrial policy and an extensive comparison of opposing views about industrialisation and industrial policy. The chapter makes four main arguments that are particularly relevant for this thesis: (i) industrial policy is intrinsic to any process of industrialisation, irrespective of its coherence and degree of success; (ii) industrial policy is better understood, and more likely to succeed, if it is drawn from the underlying economic and political relations upon which the process of industrialisation depends; (iii) therefore, the focus on linkages, agencies and their dynamic relationship is a powerful analytical framework for the study of industrial policy; and (iv) in this connection, the "state versus markets" debate between "orthodox" and "developmental state" scholars is mostly inadequate as state and markets are similarly subject to socio-economic and political pressures and forces, and states operate through the market.

Chapter 3 presents and discusses patterns of industrialisation and investment, mainly from a historical and empirical point of view. This chapter provides the main empirical basis upon which the thesis is supported. Apart from a section entirely devoted to explaining and discussing the process of generating the data, this chapter includes a brief periodization of the process of formation and development of the manufacturing sector in Mozambique, a structural characterisation of the manufacturing sector, an analysis of the dynamic links between manufacturing and macroeconomic conditions, and a study of the patterns of investment in the economy and the manufacturing sector over the past decade. The chapter argues that the productive capacity of the manufacturing sector is excessively narrow, which results in weak intra- and inter-sectoral linkages, strong import dependence of production, unstable and weak export capacity, and periodic crisis of accumulation associated with the fact that expansion of the manufacturing sector and trade balance are inversely related. It is also argued that this structural and dynamic characteristics of the manufacturing sector have been consolidated through the patterns of investment.

Chapter 4 describes the socio-economic pressures that influence the direction and pace of manufacturing development in Mozambique, discusses how the core and dominant stabilisation and liberalisation programmes influence the role of industrial policy in Mozambique and analyses critically the most influential studies and reports about the manufacturing sector and whether they respond to the pressures and characteristics of the

sector and of the economy as a whole. Chapter 5 moves into the detailed analysis of the official industrial policies. It also includes a discussion of five crucial areas of policy, in which policy practice and dynamic developments are contrasted with official policies. These two chapters argue that the more influential studies of the manufacturing sector and the official industrial policies adopted fail to understand the actual dynamics of industrial accumulation. They also argue that a relevant and coherent industrial policy should be based upon the actual conditions of industrialisation and respond to the pressures identified in a way that is consistent with the overall goal of industrialisation of the Mozambican economy.

Chapter 6 summarises the findings and debates already outlined and identifies and explores, in a systematic way, fundamental concerns and possible directions of policy formulation and implementation, taking into consideration the process of building the relevant capabilities.

CHAPTER 2

CRITICAL ISSUES IN INDUSTRIAL POLICY

This chapter, which is organised in five main sections, discusses the literature on industrial policy in order to set the theoretical framework for the analysis of industrial policy in the context of the Mozambican economy. Its main argument is that the analysis of industrial policy should be guided by the understanding of the underlying economic and political relations upon which the process of industrialisation depends, because these relations govern the specific economic formation that policy targets. In this context, the chapter suggests the adoption of the linkages-agents analytical framework for the study of the dynamics of industrialisation and industrial policy formation and implementation. This framework consists of the identification of economic pressures (or linkages) and agents (and their interests and relations) that foresee and implement (or not) potential linkages, as well as the analysis of how linkages and agents combine dynamically to shape the process of industrialisation and policy decisions.

The chapter is organised into five main sections. The first introduces the main themes in the industrial policy analysis and debates. It argues that despite the large variety of issues discussed and analytical traditions, the literature on industrialisation and industrial policy can be organised around two major pegs: (i) the role and nature of the *agents* of industrialisation; and (ii) the *linkages* between economic activities in the process of industrialisation and economic development as a whole. It also criticises the fact that most of this literature is focused on either agents or linkages, rarely discusses the dynamic relationship between the two, and consequently is strongly influenced by the narrow "state versus market" debate.

The second section discusses definitions of industrial policy. It argues that the way industrial policy is defined reflects different perceptions of the process of industrialisation and role of policy in it, as well as the interests of different agencies involved. It also argues that industrial policy can only be adequately defined in a broader context of analysis of the socio-economic conditions of industrialisation in specific cases and time periods. Besides, it is argued, this is what the richness of information made available by detailed case studies shows.

The third section discusses opposing views of the process of industrial development and the role of policy. Orthodox arguments, based on neo-classical economics, separate markets and economics from states and politics, emphasise the positive role of the market and the pervasive role of the state, and restrict industrial policy to the sphere of transactions and to a choice between two artificially separated, and inadequately defined trade regimes – import substitution (ISI) and export orientation (EOI). These views are opposed by heterodox arguments from proponents of industrial policy, which are based upon different groups of structuralists, institutionalists and other analytical traditions that reject the perfect competitive model of economics. The heterodox views are generally focused on the production side of industrial policy, criticise the ISI versus EOI interpretation of the industrial process, but often accept the terms of the debate when it comes to the state versus market controversy, although the heterodox views emphasise the other side of the coin, the positive role of the state.

The fourth section summarises and criticises this debate, particularly the state versus markets controversy that transforms industrial policy into the reversal of the orthodox concept of markets. It argues that there is no abstract case for industrial policy, as there is no industrial policy in abstract. Industrial policy is more adequately developed not from beliefs concerning the relative efficiency of markets or states in delivering potential economic linkages, but from real socio-economic conditions, problems and alternative solutions, that involve agents and potential and real linkages and their dynamic relationship. The fifth section defines how the main conclusions developed in this chapter will be used to analyse and discuss the Mozambican case of industrialization and industrial policy.

2.1 Themes of the industrial policy debate – an overview of the literature

The vast and increasing literature on industrial policy covers a wide range of thematic issues, such as technological acquisition and capabilities, innovation, industrial organisation and networks, privatisation, finance, globalisation and foreign direct investment, trade policy, exports, institutions, inter-sectoral linkages, studies of specific industries, environment and gender, to mention just a few.¹

¹ See, for example, Lall 1992a and 1992b, 1993a and 1993b, 1994 and 1996, and Wangwe 1992, 1994 and 1995 (for technological change and capabilities, exports and trade policy associated with industrialization); Amsden 2001 and 1992 Chang and Rowthorn (eds.) 1995 (for late industrialisation and the role of the state); Amsden and Euh 1990, Akyuz and Gore 1996 and Akyuz and Kotte 1991 (for finance and industry); Amsden 1989, Jones and Sakong 1980, Dore 1986, Johnson 1982, and Chang 1996 (for institutions and government-business relationships); Fine and Rustomjee 1996, Karshenas 1995, Hirschman 1958 and 1981 (for economic linkages and inter-sectoral linkages); Alcorta 1998, and various articles in Chandler et al (eds.) 1997, in Aoki and Dore (eds.) 1994 and in Ebers (ed.) 1997 (for

Many studies describe country and sector experiences of industrial policy in great detail, thus contributing to a much better understanding of how industrial policy works (or not) in particular cases.² Other studies focus on incentive mechanisms associated with industrial policy – whether through the market mechanism or policies put in place by the state to help, encourage or force firms to invest, cooperate and comply with policy priorities – and on the identification of main economic and political factors that influence investment decisions and the behaviour of investors.³ Another group of studies analyses the relationship between industrial policy and the economy as a whole, in particular in the context of macroeconomic stabilisation and adjustment and market and price liberalisation.⁴ Finally, a smaller number of studies discuss how development goals and policies emerge from the relationships between agents, institutions and economic conditions.⁵

Despite this variety of themes and angles of approach, it is possible to organise this literature around two pegs: the *agents* of development, in which the state versus market debate is the dominant form; and the mechanics of development, or *linkages* between sets of economic activities that that generate growth and development.

Agency literature

The *agency* literature is strongly influenced by the state versus market debate, which reflects and receives its major influences from two opposing sides. On the one hand, orthodox economics argues that economic growth and industrialisation are determined by the degree of freedom that markets have to allocate resources according to comparative advantages, and

industrial organization, scale and scope and networks); Kumar 1998, 1996a, 1996b, and 1995, and various articles in Michie and Smith (eds.) 1998 (for globalisation and foreign direct investment); Bayliss and Fine 1998, Bayliss and Cramer 2001, Castel-Branco and Cramer (forthcoming), Cramer (2001) and 1999, Fine 1997a (for privatisation and industrial policy).

² See, for example, Johnson 1982 and (ed.) 1984, Dore 1986, Chang 1996, Jones and Sakong 1980, Jenkins 1991a and 1991b, Amsden 1989, Lall and Wignaraja 1996, Edwards 1995 and Wade 1990.

³ See, for example, Lall 1992a and 1993b, Cramer 1999, Jenkins 1991a and 1991b, Edwards 1995, and Chandler, Amatori and Hikino (eds.) 1997.

⁴ See, for example, Corden 1980, Rodrick 1986 and 1995, Akyuz and Gore 1996, Nixson 1986, Helleiner 1992, Stewart 1992a and 1992b, Doriye and Wuyts 1993, Wuyts 1997, 1995 and 1989, Amsden 1993, Fine 1997b, Ocampo and Taylor 1998. For an orthodox analysis of how sound macroeconomics enhance the conditions for industrialisation, see World Bank 1994, 1993 and 1989.

⁵ See, for example, Amsden 1985, Bairoch and Kozul-Wright 1998, Grabowski 1994, Fine 1997b, Fine and Poletti 1992, Fine and Rustomjee 1996, Fine and Stoneman 1996, Kim 1997, Khan 1995, Kholi 1994, Rodrik 2000 and 1995, Stein 1994b.

individuals enjoy to take investment and other business decisions that maximise their welfare according to market signals and competitive conditions. Market efficiency is inversely related with state intervention such that the role of the state should be restricted to minimising market failure. This could be done through public provision of social capital, social and economic stability, a competitive business environment and static coordination to correct for information failure.⁶ This is the influence behind the Washington consensus, which emphasises stabilisation, liberalisation and privatisation, and behind the post Washington consensus, which also includes the need for specifically located state interventions to correct for information failure and uncertainty at different levels and in various sectors.⁷

On the other hand, proponents of industrial policy argue that dynamic and sustainable growth and development are not achievable through market forces alone because of the need to distort market signals, to coordinate decision-making and reduce uncertainty, encourage learning and innovation, and to implement strategies that yield higher social than private returns. These conclusions arise from the belief that economic growth is driven by a process of creating market imperfections in production (economies of scale and scope, product differentiation, innovation, firm and/or industry specific assets, knowledge and skills, externalities, linkages, vertical integration), which are conducive to social construction of new productive capacities and assets.⁸ Besides, the understanding of development as a process that violates the fundamental assumptions of perfect competition renders the neo-classical argument inadequate. In this context, growth and liberalisation may not be associated, and if they happen to be, causation is more likely to run from growth to liberalisation. This is because production experience enables firms, industries and economies to acquire competitive advantages and the knowledge needed to penetrate new markets, and only when firms have done so will they need to be free to explore to the full their newly acquired market influence. However, free markets do not drive the process by which firms acquire competitive capacity because firms are not born efficient.⁹ In this view, development requires the hand of the developmental state in dynamic interaction with markets and private firms, where the former provides performance related incentives for dynamic accumulation according to perceived priorities and opportunities, coordinates competing and complementary investment, nurtures sunrise industries, helps mature industries at crucial turning points and coordinates the

⁶ See Balassa 1990 and 1988, Krueger 1998, 1990a, 1990b and 1974, Lal 1984, Tirole 1997.

⁷ See Fine 1997b and various articles in Fine, Lapavistas and Pincus (eds.) 2001 for a critical comparative analysis of the Washington and post Washington consensus.

⁸ See Amsden 1997 and 1992, Bayliss and Cramer 2001, Chang 1999 and 1996b, Evans 1995.

process of structural adjustment of sunset industries to minimise social costs and maximise the opportunities for productive re-allocation of labour and capital.

In this context, two strains emerged from the agency literature. One is concerned with the theorization of the market mechanism and firms (theories of industry and strategy, imperfect competition, imperfect information, privatisation and (de-) regulation, etc). The other is focused on the theorization of the state and other so called non-market institutions (political economy of the state, institutionalist and capability interpretations of the state, networks, social capital, etc.). The "market literature" evolved into two directions: (i) the quantity theory of competition, which argues that no matter how imperfect the market is, more market is better than less market;¹⁰ and (ii) the imperfect theory of competition, that envisages the market mechanism systematically achieving sub-optimal solutions due to imperfect information and uncertainty.¹¹ The "state literature" also developed into two branches: (i) the "institutional", which studies the state as a process of organizational capacity building, how it links with systemic market failure and its role in promoting developmental policies;¹² and (ii) the "political economy of the state". The latter evolved into three alternative directions: (a) the political economy of state failure, from which have emerged the notions of informational failure, state capture by organized capital and labour, rent-seeking and the notion of the predatory state;¹³ (b) the developmental state, which looks at how state autonomy (from class and/or other socio-economic and political pressures) can be built to ensure economic efficiency of state intervention;¹⁴ and (c) the dialectical state, which discusses the state from the point of view of the political and socio-economic pressures that act with and upon it, and its dynamic relationship with other agents within specific processes of accumulation.¹⁵

⁹ See, for example, Amsden 2001, 1997, 1993 and 1992, Amsden and Euh 1990, Chang 1999, 1998a and 1996, Cramer 2001 and 1999, Hirschman 1958 and 1981, Hirway 1998, Leahy and Neary 1999, Mukhopadhyay 1998, Nelson and Pack 1999, Ocampo and Taylor 1998, Shafaeddin 1994.

¹⁰ The concept of "quantity theory of competition" was first critically introduced by Weeks 1994. Amongst others proponents of this theory see Krueger 1998, Lal 1984, World Bank 1997, 1996a, 1995a, 1994 and 1993a. In addition to Weeks, for a critique of the theory see Bayliss and Cramer 2001.

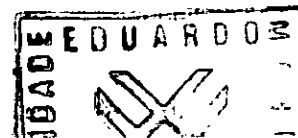
¹¹ See, for example, Sing 1992 and Stiglitz 1998 and 1996. See Fine 2001b for a critical discussion of the information economics background of the post-Washington Consensus.

¹² See, for example, Amsden 2001, 1992 and 1985, Chang 1996, Somel 1993.

¹³ See, for example, Krueger 1974, 1990a, 1990b and 1998. Chang 1996, Deyo (ed.) 1987, Khan 1995 and Kholi 1994 provide useful critical discussions of this literature.

¹⁴ See, for example, Evans 1995, Hamilton 1983, Jenkins 1991a and 1992b.

¹⁵ Fine and Stoneman 1996, Jenkins 1991a and 1991b, Jones and Sakong 1980, Kim 1997, Wade 1990.



Linkages literature

The "linkages", or economic, literature discusses the relationship between economic activities in the process of development. The definition of linkages varies from the narrow, technically established input/output relationships (backward and forward, downstream and upstream linkages), to broader concepts that define linkages existing whenever an ongoing activity gives raise to economic or other pressures that lead to the taking up of new activities¹⁶ (e.g., from manufacturing production to development of technology, specialised financial and marketing institutions, technological capabilities, and education and training schemes; or from import substitution to learning, scale, competitiveness and exports; or from exports to market expansion, knowledge acquisition, development of transports and other infrastructures; inter-sectoral linkages beyond input/output,¹⁷ etc.).

This literature is diverse but can be categorised into two main strains according to how they understand the importance and the process of linkages. One branch sees all economic happenings coming from balances between supply and demand through the linkage of the market, following Say's law that supply creates its own demand. This branch of the literature, which comprises pure versions of the neo-liberal model, defines linkages narrowly in terms of input/output relationships, minimises the developmental role of linkages, particularly with respect to domestic linkages,¹⁸ and instead focuses on individual project efficiency and optimisation of investment decisions according to comparative advantages.¹⁹ It also includes neo-liberal versions of endogenous growth models that recognise the role of linkages in economic growth (for example, between exports and accumulation of knowledge, or between accumulation of technological inputs and the rate and pattern of economic growth), but see the market as the only efficient mechanism to reveal potential linkages and through which such linkages may materialise.²⁰ Lucas, for example, discusses the positive external effects of skilled labour upon the level of productivity of unskilled labour, of returns on various technological and social infrastructures upon the marginal productivity of capital, and of

¹⁶ Hirschman 1958 and 1981, Sender and Smith 1986, Stewart and Gani 1981.

¹⁷ For example, the agriculture/manufacturing linkage can be narrowly defined in terms of supply of raw materials and equipment; or, more broadly, as encompassing transfer of financial surplus, shifts in labour allocation, provision of cheap food and technological development, and change in social structures and dynamics. For a debate, see for example Karshenas 1995 and Dasgupta 1980.

¹⁸ Conscious effort to promote domestic linkages is seen as market distortion. Since linkages are narrowly defined in terms of input/output relationships, promotion of domestic linkages is seen as import substitution.

¹⁹ Athukorala and Santosa 1996, Krueger 1998 and 1990b, Little and Mirrless 1974.

²⁰ Bayoumi, Coe and Helpman 1996, Eaton and Kortum 1995, and Lucas 1990 and 1988.

structural adjustment of the economy upon training needs. However, he assumes that these linkages result from the optimisation of the market mechanism and exchange. According to this literature, the policy concern with linkages, if any, should focus on enabling markets to operate well enough to perform the linkage between economic activities, but linkages are not a central concern of economic policy.

Another branch of the linkage literature argues that development is essentially a process by which one economic activity leads to others and to pressures for socio-economic and technological change. Thus, linkages become a central part of the growth process, and development policies and experiences are assessed partly by the way they promote and guarantee dynamic, developmental linkages. Common themes in this literature include, amongst others, Hirschman's model of unbalanced growth and development creating economic pressures that generate linkages;²¹ the infant industry argument;²² the technological capacity debate;²³ the literature on the role of the manufacturing industry in creating dynamic and cumulative linkages;²⁴ the inter-sectoral linkages literature;²⁵ and the finance-investment-growth *nexus*.²⁶ This literature sees the state as the central agency involved in the realisation of linkages potential, in part because linkages play the central role in the determination of rates and patterns of economic change and growth, and also because linkages typically yield higher social than private returns and require the coordination of enough complementary investment. Therefore, linkages require strategy, and a crucial component in the design of strategy is to identify and coordinate the sequence of events such that a chain of successive, positive linkages is actually generated.

For example, it is generally accepted that macroeconomic and industrial performance are linked through export earnings and employment, demand, investment, savings, interest and exchange rates, balance in the main factor markets. However, it can be argued that macroeconomic and industrial policies are organically separated, positive links occur naturally as a result of "sound" macroeconomic policies and free trade, and to materialise these externalities little more is required apart from stability, flexible business environment and removal of market distortions.²⁷ Alternatively, coherence between macroeconomic and

²¹ Hirschman 1958 and 1981.

²² Amsden 2001, Chang 1996, Nelson and Pack 1999, Ocampo and Taylor 1998, Wangwe 1995.

²³ Lall (ed.) 1999, 1993a and 1992a, Lall and Wignaraja 1996, Teubal 1996.

²⁴ Kaldor 1967, 1961 and 1957, or Weiss 1985 (for a comprehensive review of this classical literature).

²⁵ Karshenas 1995, Nixon 1986, Nelson and Pack 1999.

²⁶ Akyüz and Gore 1996, Amsden 1993, Amsden and Euh 1990, Borenstein, Gregório and Lee 1995.

²⁷ Corden 1980, World Bank 1981 and 1989.

industrial policies can be perceived to be crucial to policy, such that macroeconomic policy is shaped to respond to the needs of industrial strategy, and industrial strategy is formulated to take account of and improve macroeconomic conditions. Linkages are no longer market determined but a result of dynamic and developmental policy.²⁸

Conclusions

The agents and linkages analysis has helped to uncover a huge variety of experiences and detailed accounts of successful and unsuccessful development processes, and to sharpen the theories and analytical methodologies in use. Nonetheless, there are two major problems with this literature.

First, the debate usually takes agents or linkages as given, depending on whether it is focused on linkages or agents. Moreover, it rarely discusses the dynamic relationship between agents and linkages. Rather than simplifying and focusing the debate, the analysis of agents and linkages independent of each other obscures the debate. Furthermore, this analysis requires strong assumptions about the ability and willingness of agents to pursue given developmental linkages. It also makes linkages (or economic processes and pressures) independent of political conditions and socio-economic interests, and agents autonomous of economic processes and conditions.

Hirschman's attempt to relate agencies and linkages is constrained by the limits of his own model. He establishes that the implementation of potential development linkages that emerge from economic pressures requires agencies capable of foreseeing the opportunities and taking it. Shortage of entrepreneurial capabilities constrains growth and development. However, he envisages that the supply of linkages increases the supply of agencies through demand pressures upon the existing stock of entrepreneurial capabilities. Therefore, agencies become the linkages themselves, and the model cannot exactly explain where the ability and willingness of agents comes from.

Second, the analysis is usually geared around the narrow boundaries given by the "state versus market" debate. The terms of this debate are misleading because states operate through and with markets, and states and markets are subjected to the influence of, and also influence, the same agents and economic conditions.

²⁸ Amsden 1993, Amsden and Euh 1990, Bird 1999, Hirschman 1958 and 1981.

2.2 Definitions of industrial policy

One of the crucial and yet unresolved problems in the study of industrialisation is the role played by economic and industrial policy and strategy in it. As briefly argued above, the role given to policy depends upon the interpretation of how development processes occur and linkages and agents interact, as well as the interests of groups that are influential in policy making. Before moving forward to a detailed analysis of how these issues are discussed in the literature it is worth pausing for a definition of what is meant by industrial policy, and for an analysis of what are the implications of, and what can be learned from, the debate about the meaning of industrial policy.

The concept of industrial policy varies widely in line with different theories and ideas about the processes of industrialisation, and the interests that are reflected through the state. This has obvious implications for theoretical analysis, interpretation of the evidence, generalisation of lessons from experience and for policy making.²⁹ The definitions of industrial policy tend to be single-issue oriented (thus, changing over time with new development fashions) or all-embracing (thus, being rendered insensitive to changing conditions, and therefore irrelevant).

The single-issue industrial policy is usually focused on trade (ISI, EOI or some combination of the two)³⁰ and/or, more recently, on technological change, innovation, development of technological capabilities and productivity growth.³¹ These differences have implications for analysis and policy formulation because they study different aspects and areas of state policy and economic development, and tend to emphasise one aspect at the expense of another.

The trade-based industrial policy analysis tends to discuss barriers to trade, factor price distortions and costs of exchange, the absence or presence of which are indicative of more or

²⁹ See Chang 1996, Fine 1997b, Fine and Rustomjee 1996 and Johnson (ed.) 1984, for a discussion of different definitions of industrial policy and their analytical and practical implications.

³⁰ Because of early debates around the infant industry argument, the general debate concerning trade theory and the comparative advantage/specialisation of nations, and more recent debates about economies of scale and scope. Orthodox economists have restricted the debate on industrial policy to transactions, namely the creation and/or reduction of market failure in exchange, as well as the choice between import substitution and export-oriented industrialisation. See Boon 1982, Krueger 1998, Lall 1993b, Little, Scitovsky and Scott 1970, Martin 1999, Ocampo and Taylor 1998, Rodrik 1995.

³¹ Because of the dynamics of technological change in the presence of economies of scale and scope, externalities from technological innovation, technological complementarity and interdependence, and asset specificity. See Amsden 1997, Chang 1999 and 1996, Jomo, Felker and Rasiah (eds.) 1999, Johnson 1982, Lall 1994a and 1993b, Leahy and Neary 1999, Nelson and Pack 1999.

less market distortion and policy. This approach separates ISI and EOI trade regimes on the basis of the direction of factor price distortions or neutrality. The technology-based industrial policy analysis is focused on the organization of, and incentive for acquisition and mastering of new technologies and knowledge, increasing factor productivity, managing scope economies and product differentiation, and creating new productive assets. The achievement of these goals is usually considered to require selective, firm and/or industry specific strategies that encourage investment, technology transfer, learning and innovation.

On the other hand, there is the all-embracing industrial policy analysis, which acknowledges that all relevant economic policies influence the pattern of industrialisation, no matter how remotely and indirectly, such that specific and selective industrial policies are not required.³² This type of definition of industrial policy suffers from two major shortcomings. First, it is too general to be useful in promoting industrial development of any specific form, or helping to understand it. Second, it does not address fundamental issues directly related with the construction of productive assets and capabilities, such that it is of little significance for the purpose of building industrial capabilities.

Chang (1996) suggests an alternative definition of industrial policy that is neither all-embracing nor single-issue:

We propose to define industrial policy as a policy aimed at particular industries (and firms as their components), to achieve the outcomes that are perceived by the state to be efficient for the economy as a whole. This definition is close to what is usually called "selective industrial policy" (pp. 60).

This definition has its own purposes, not least to prove the extent of state intervention in East Asian industrialisation through the identification of all specific and selective forms of intervention, formal and informal, directed at particular industries, and firms as their components. Chang's definition of industrial policy, which is based upon the detailed analysis of the South Korean experience, is particularly useful in three ways: (i) it identifies ways in which the state and the market interact to solve problems that emerge from the process of industrialisation, and the rich detail associated with the many different tasks and forms of intervention that characterise the practice of industrial policy; (ii) in relation to this, it helps to

³² As Chang 1996 (pp. 59) puts it, "...industrial policy is used as a catch-all term for policies affecting industrial performance, that is, effectively, any economic policy. Such a practice *overloads* the concept of industrial policy, rendering the concept meaningless". For proponents of this view, see Corden 1980 and World Bank 1994, 1993a and 1989.

codify experiences for the purpose of learning; and (iii) it demolishes the vague and meaningless concept of industrial policy "accepted" by the World Bank in its "Asian Miracle",³³ in which it is argued that as far as industry is concerned, state intervention should be restricted to the general provision of infrastructures, human capital and an enhancing and neutral private business environment.

According to Chang, industrial policy involves two major components. The first is related with what he calls the coordination problem in a static dimension: ensuring economies of scale, avoiding overcapacity, guiding structural adjustment of mature and sunset industries and protecting the losers of adjustment. As he argues, the most frequent component of industrial policy in South Korea was the coordination of competing investment, in order to avoid excess competition and social waste of resources.³⁴ The second component is concerned with what he calls the dynamic dimension of industrial policy that emerges from the infant industry process. This process involves learning and acquisition of technology, coordination of interdependent investment and technical change, the evolution of industries and policies along the business cycle, and the overall socialisation of risk.

He not only identifies a large variety of forms of state intervention that nurture or guide the construction and structural adjustment of industries, but also calls attention to four fundamental aspects that constitute necessary conditions for successful industrial policy:

- *selectivity* – as industrial policy involves positive discrimination because its purpose is to promote some industries, firms and technologies, penetrate some markets, using some tools of policy instead of others, and support firms and industries differently along their natural business and product cycles;
- *flexibility* – as strategies should be changed when circumstances change and/or when the strategy is no longer necessary or is proved wrong, or when the nurtured firms and industries fail to comply with the conditional performance targets;
- combination of *social* and *firm/industry* specific goals – the strategies and policies are aimed at specific industries and firms in order to achieve social goals; and
- the system of *performance related incentives*, whereby firms and industries are promoted in order to achieve specific and concrete targets of efficiency previously

³³ World Bank 1993.

³⁴ Chang 1999: pp. 6-7.

defined,³⁵ and are generously rewarded for complying with such targets and severely penalised if the targets are not achieved.

Therefore, industrial strategies and policies are chosen to achieve very specific economic growth and development goals, under circumstances dictated by the existing managerial, labour, technological and financial capacities, the ability to upgrade and create new capacities, and the trends and future opportunities in real and selected markets and industries. Therefore, industrial policies should not be set to help "sunset" industries and firms to survive at any cost, but to create and nurture "sunrise" firms and industries and help "sunset" firms and industries to adjust and change at the lowest possible social costs.

Chang also discusses the development of the necessary informational, technological, managerial and institutional capabilities around the core themes of industrial policy. Capabilities are endogenous to industrial policy, rather than constraints, not least because of the learning-by-doing effect involved in policy-making and implementation. This is a very important contribution to the debate because of three factors: (i) it puts industrial policy at the centre of a capacity building process, in which the creation of capacity is a function of strategic thinking, organization and action and has specific, rather than general, purposes; (ii) it emphasises the dynamic content of industrial policy; and (iii) it demolishes the argument of opponents of industrial policy, who argue that lack of capacity should prevent LDCs from adopting industrial policies. For Chang, the creation of capacities is a central aim of the strategy and policies and is more efficiently done under clear strategies and policies. Even more emphatically, he argues that the capabilities to identify and pursue strategic goals, and formulate and implement policies can only be developed through a learning-by-doing process guided by industrial policy.³⁶ In other words, organizations (governments or others) learn to make policy through policy-making, improve their institutional and informational capabilities through policy implementation and evaluation, and develop their social credibility by interacting with the private sector and providing strategies and information that improve economic performance. Thus, between policy-making and capabilities there is a symbiotic and reinforcing relationship.

³⁵ Whether through the adoption of a specific technology, the penetration of, or expansion into specific industries and markets, the creation of additional or different managerial, technological or financial capabilities, the achievement of specific efficiency targets associated with exports, productivity, quality, costs, research and development, etc. For detailed case studies of the target related incentives in East Asia see, for example, Amsden 1989, Jones and Sakong 1980, Wade 1990.

³⁶ Chang 1999 and 1996.

Although Chang's contribution is very important, his focus continues is on the instrumental or functional component of industrial policy: what it can do to bring about higher levels of efficiency than the market would be able to achieve on its own. This is an important limitation in the argument because it abstract from the process of policy formation determined by specific economic, social and political conditions. Although Chang acknowledges the need to set developmental goals and performance targets to guide the content and implementation of industrial policy, he assumes that these goals are determined mainly by the ideological and intellectual foundation of the state. Therefore, Chang's model requires the autonomy of the state relative to socio-economic groups and interests, as well as the ability of the state to impose discipline upon the private sector.³⁷

Industrial policy is, in Chang, an instrument to implement development goals perceived by the state. The process of industrial policy analysis collapses into the study of the efficiency path of industrial policy: given the goals, what is the best path for industrial policy and how can the state follow it. This analysis fails to address the "politics" or "dynamics" of the process of industrial policy: where the development goals come from; why the state would take one specific course of action, for example the nurturing of "sunrise" industries, instead of another, for example the protection of the survival of "sunset" industries; which and how interest groups influence and are influenced by the policies adopted, and how the interaction between the state and markets, and between the agents and linkages evolve and affect the relative efficiency of policy.

As pointed out by Fine and Rustomjee (1996), Chang's definition (of industrial policy)

...continues to suffer from seeking a general categorisation of industrial policy whereas we judge this goal to be inappropriate. For if the way that industrial development takes place (and can be steered) is to be analytically targeted, then this must be the starting-point. From our general framework of linkages and agencies, and their dynamic interaction, it is essential to identify underlying economic and political relations upon which the form of industrialisation will depend. (pp.236)

They argue that how industrial policy is defined, quite apart from how it is formulated, implemented and monitored, reflects competing economic and political interest that choose to highlight some aspects of policy at the expense of others. As a result, they see industrial policy and strategy as a process of negotiation through different political and economic

³⁷ Chang 1996: pp. 121, 123 and 129.

pressures and interest groups, which may help to coordinate different aspects of economic and industrial growth and development in a coherent manner. They also acknowledge that all policies of any significance have an impact on industrial performance. Macroeconomic policies affect demand, interest rates and exchange rates, all of which have a direct impact on industrial performance through access to markets and finance, cost of capital and international competitiveness at the margin. Labour policies also have a direct effect on industrial performance through their impact on industrial relations, wage rates and the skill of the working force. However, rather than devaluing the role of selective, industry and firm specific policies, they incorporate such policies within a much broader and global understanding of general economic conditions of capital accumulation, which calls attention to three inter-related aspects. First, industrial policy is situated within the context of the economy as a whole and responds to a strategy and path of industrialisation that can only be adequately understood in the context of the dynamics of the economy as a whole, including the social and economic interests that influence policy-making. Second, there are several factors that determine which specific policies are adopted or chosen to be mentioned, and to determine why similar policies may yield significantly different results over time and across countries, industries and firms. Third, industrial policy takes place within the framework given by specific economic and political structures and dynamics of capital accumulation.³⁸

Different industrial problems under different economic dynamics and structures may call for distinct strategies, policies, sequencing, instruments, institutional settings, etc. It follows that the definition of industrial policy, drawing upon the wide range of options available, should be specific to the problems addressed, which have to be identified and justified. Industrial policy needs to be set in a much broader context, which requires an assessment of the economy and the role of industry within it. This is the only basis upon which industrial policy can be adequately formulated.³⁹

Fine and Rustomjee (1996: pp 236) conclude:

"...industrial policy should not be generally defined, no matter whether on broad or narrow canvas of issues and/or policy instruments. Rather, it should be drawn from the conditions specifically governing the economic formation under consideration".

³⁸ See Fine 1997b for a detailed debate that covers these points.

³⁹ Fine 1997b: pp. 16, Fine and Rustomjee 1996.

2.3 Opposing views of industrial development and industrial policy

The fundamental tensions in the debate about industrial policy result in the first instance from different views on how economies develop, the role of industry in economic growth and change, how industrialisation takes place, and the relative efficiency of markets and states (and of industrial policy as the expression of this debate) in implementing potential economic linkages. Most of the literature is about the nature of economic change, as determined by the role of agents of development and the economic linkages that form the fabric of a given development path. As will be shown, the different views have fundamental implications for the notion of industrial policy, its relevance and focus.

Does industrialisation matter?

The answer to the question "*does industrialisation matter?*" for development is crucial for the subsequent analysis of processes of industrialisation and of formation and implementation of industrial strategy and policies. This question arises from the debate about causation and linkages in economic growth and development, and is historically based on the fact that developed economies have succeeded in creating dynamic manufacturing sectors and systems of innovation and technological progress linked with the manufacturing sector.

The arguments against the special role played by manufacturing, and subsequent attacks on the relevance and desirability of industrial strategies and policies come from orthodox, free-market economists inspired by the neo-classical model of perfect competition, the Austrian "creative entrepreneurs" and the factor endowment-led international specialisation trade theories.⁴⁰ Thus, allocative and financial efficiency of individual projects is more relevant than the prioritisation of any single activity or sector per se. It follows that industrial policies and strategies are unnecessary, as Pareto optimal allocation of resources can be achieved through the market mechanism, and/or perverse, if they distort resource allocation away from market determined comparative advantages. Besides, free-market theorists argue that sustainable industrialisation flows directly from efficient allocation of resources in its own time. Accelerating or promoting industrialisation is by definition a signal of inefficient allocation. These theories are not concerned with the function, structure and dynamics of the economic system and its specific sectors, because they see the economy as a discrete sum of

⁴⁰ See, for example, Balassa 1990 and 1988, Krueger 1998, 1990a, 1990b and 1974, Lucas 1990 and 1988. Refer to Chang 1996, Cole, Cameron and Edwards 1991, Edwards 1985, Fine 1997b, Greenaway 1991 and Wangwe 1992 for a critical presentation of theories and arguments.

individual markets for specific factors, goods and services, which will interact with each other in ways determined by relative prices. Therefore, industry matters as much as any other sector, as long as its development is in line with market signals.⁴¹

The opposing view, which claims that industrialisation is the driving force, or engine, in the process of economic growth and development, comes from a much more heterogeneous group of heterodox scholars who argue that the manufacturing industry is the only sector that yields dynamic increasing and cumulative returns in addition to general demand and pecuniary linkages also generated by others sectors.⁴² Dynamic increasing returns are defined by the following six characteristics. First, increases in productivity of capital and labour are continuous and irreversible because of technical change, learning and organizational improvements at the firm and industry level. Second, the manufacturing sector determines the productivity of the economy as a whole through the development and provision of cheap capital and intermediate goods that embody new technologies and knowledge that translate scientific and technological progress into the ability to increase productivity, quality and income. Third, the network of suppliers that develops around the manufacturing sector creates a symbiotic and dynamic link between productivity gains in manufacturing and in the economy as a whole. Fourth, while productivity increases are inversely related to labour employment in agriculture and services, in the manufacturing sector productivity improvements, cumulative output and employment expansion are positively related, such that manufacturing can absorb surplus labour from the other sectors.⁴³ Fifth, the manufacturing sector is the guarantor that economic expansion does not generate continuous balance of payment difficulties. Sixth, this sector is the most dynamic source of income, demand, savings and foreign exchange that are crucial for its own development, and for the development of the economy as a whole. Thus, the development of a competitive manufacturing sector determines the ability of an economy to develop.

⁴¹ See, for example, Lal 1984, Little and Mirrless 1974, Lucas 1988 and Krueger 1998.

⁴² Kaldor 1967, 1961 and 1957, Sraffa 1972 and Verdoorn 1980. Weiss 1985 presents a comprehensive summary of these classical debates about the role of manufacturing as engine of growth. See also Cole, Cameron and Edwards 1991, and Edwards 1985, for a critical analysis of these debates from the point of view of different schools of economic thought.

⁴³ The argument is that agricultural expansion is constrained by the supply of land such that technical change that increases yields and labour productivity runs against employment expansion. The expansion of services is determined by GDP, such that given the rate of growth of GDP productivity change in services also runs against employment creation. However, in the manufacturing sector productivity increase is directly translated into more investment because of cost reduction, more demand for services, agricultural and industrial goods, and cheaper capital, intermediate and consumer goods, all of which contribute to improving productivity, reduce costs and expand output, but not the employment, in the other sectors. See Dasgupta 1980 for a critique based upon that social interests determine how surplus resulting from higher productivity is appropriated and utilised.

The de-industrialisation and post-industrial society debates have questioned the role assigned to the manufacturing sector as the engine of growth, which seems to be in part supported by the evidence regarding the declining employment and GDP shares (measured in constant terms) of the manufacturing sector in developed economies. However, critics of this debate argue that the falling manufacturing share of employment and nominal GDP is explained by the leading role of manufacturing in productivity increase and, subsequently, the relative cost-inflation in the services sector due to its lagging productivity growth relative to manufacturing. The fact that manufacturing share of real national expenditure has remained fairly stable supports the argument that manufacturing plays the leading role in productivity growth. Furthermore, with a growing share of (non-tradable) services in the economy, compensating productivity growth in manufacturing is needed for a country to maintain its income level without falling into balance of payment problems. Finally, it is also argued that economies that have neglected manufacturing have lagged behind in productivity and income rates of growth. Increasing returns to investment have been associated with technological progress that is determined by scientific, technological and industrial capabilities and activities. Thus, de-industrialisation of employment is not necessarily an indicator of manufacturing decline, and seems to result predominantly from the leading role of manufacturing in productivity growth, technical change and income expansion.⁴⁴

Linkages and strategy

If industrialisation does matter, does it imply that industrial strategies and policies should be adopted and implemented to ensure that industrialisation takes place?

Orthodox views: market efficiency versus industrial policy

A. Market efficiency and derived path of growth

The major theoretical arguments against industrial strategy and policy come from three different, but closely related, sources. Neo-liberal economics state that in a world where individual agents are small in the sense that a unilateral action of a single agent is unable to change the aggregate outcome, there is no interdependence between agents and therefore

⁴⁴ See Chang 1996, various articles in Johnson (ed.) 1984, and Rowthorn and Ramaswamy 1997 for a detailed critical analysis of the de-industrialisation and post-industrial society debate.

there is no need to coordinate their activities.⁴⁵ The Austrian school of thought, despite its sharp criticism of the model of perfect competition,⁴⁶ argues that dynamic economies are best left to the talent and animal spirit of entrepreneurs, because no single individual has the required knowledge and cognitive ability to bring about, deliberately, results that are otherwise achieved by the uncoordinated combination of fragmented pieces of knowledge existing in different minds.⁴⁷ Orthodox trade theorists argue that countries maximise their production and consumption possibilities by specialising according to their comparative advantages, which in turn are revealed if prices are allowed, through free markets, to represent real economic costs of factors (or relative factor intensity). The mobility of capital and goods associated with free trade, it is argued, accelerates growth and economic transformation, and in the long run results in factor-price and growth path equalization.⁴⁸

As long as all markets are free from exogenously created distortions, each of them, and by simple addition the economy as a whole, will be in equilibrium because relative prices will reflect the relative abundance and scarcity of factors and individual, rational agents will automatically react to adjust their choices and assets accordingly. No coordination, besides price mechanisms, is required for the economy to follow a steady state growth and development path determined by its factor endowments, because all agents know all the relative prices at all times and how to react to them, all resources are mobile, no significant learning outside readily available and transferable codified knowledge, or blueprints, is necessary, and there are no significant adjustment costs and demand rigidities.⁴⁹

Under special conditions, market imperfections may arise, such that for equilibrium to be regained the *market-friendly* intervention of an exogenous and visible hand, the state, is required. State intervention is, thus, the exception rather than the rule, and such intervention

⁴⁵ See, for example, Lal 1984, Krueger 1998 and Tirole 1997.

⁴⁶ As Hayek puts it, "...the statement that, if people know everything they are in equilibrium is true simply because that is how we define equilibrium" (1949a: pp.46). Hayek argues strongly against the very concept of perfect competition: "...a state of affairs which economic theory curiously calls 'perfect competition', that is, a situation in which all the facts are supposed to be known, leaves no room whatever for the activity called competition" (1978: pp.182). He argues that "...the peculiar nature of assumptions from which the theory of competitive equilibrium starts stands out very clearly if we ask which of the activities that are commonly designated by the verb 'to compete' would still be possible if those conditions were satisfied... Advertising, undercutting and improving (differentiating) the goods or services produced are all excluded by definition – perfect competition means indeed the absence of all competitive activities" (1949b: pp.96) (all quoted from Chang 1996: pp. 62-3).

⁴⁷ See Chang 1996: pp.72-3 and Fine and Rustomjee 1996: pp.234.

⁴⁸ See, for example, Balassa 1990 and 1988, Krueger 1998 and 1974 and Lal 1983. Edwards 1985 and Wangwe 1994 include a detailed, critical discussion of orthodox trade theories.

⁴⁹ See, for example, Tirole 1997, and refer to Chang 1996 and Ocampo and Taylor 1998 for a critique.

has to be guided by, and evaluated against, two related measures: what markets would have achieved in the absence of imperfections, and how far the intervention of the state is from hypothetical market outcomes. If the state pursues significantly different goals from markets, the resulting resource allocation would be inferior to market efficiency. This is because the market mechanism, if free, allows individuals to trade according to their endowments and preferences such that a Pareto efficient steady state is achieved where no more exchange is possible without making someone worse off. Thus, any goals and outcomes that differ from what the market mechanism offers, or would offer in the absence of imperfections, are by definition less efficient because they could always be improved. Economic efficiency is measured by market efficiency, which in turn is defined by the degree of regulation – if markets are inherently efficient and non-market mechanisms are inherently less efficiency or inefficient, then the degree of regulation is inversely related with economic efficiency.

Revisionist orthodox economists, associated with information economics and some versions of new growth, new industrial and new institutional theories, adopt these elements of an anti-industrial policy stance, particularly against targeting and selectivity. However, they acknowledge the need for government intervention to provide infrastructures, human capital and an enhancing, neutral business environment (the fundamentals), and to correct market failure that arises in the presence of economies of scale and scope, high fixed and sunk costs, information failure and high private coordination and information transaction costs.⁵⁰ More recently, social capital, as a determinant of trust and networking, and a formal and/or informal tool to reducing information failure and ensure efficient transactions, was brought to the fore as another possible justification for public policy.⁵¹ In brief, revisionists accept the need for more state intervention because they identify more market imperfections, while retaining the same overall orthodox framework. The revisionists are, then, faced with a paradox since they distrust the state but when they envisage the need for intervention they assume that the existence of a liberal, benign-technocrat state.

B. Industrial policy and trade

One of the logical results of these theories is the prediction that there is only one path to a steady state growth pattern, and that as a result successful industrialisation processes follow

⁵⁰ See, for example, various articles in Krugman (ed.) 1995 and Krugman and Smith (eds.) 1994, Page 1994, Rodrik 2000, Teal 1999, Stiglitz 1998 and 1996, World Bank 1995a, 1994 and 1993a and Zebregs 1998. For a critique, see Chang 1996 and 1999, Fine 1997b, various articles in Fine, Lapavistas and Pincus (eds.) 2001 and Harriss, Hunter and Lewis (eds.) 1995.

⁵¹ See various articles in Baron, Field and Schuller (eds.) 2000 and Fine 2001a and 2001c for a detailed discussion and critique of the concept of social capital and its uses.

the (neo-classical) predicted pattern of development from labour to capital-intensive industrial structures. In essence, developmental linkages, according to the orthodox view, are market-determined outcomes that result from a gradual and natural process of factor intensity change. These theories reduce the meaning of industrial strategy and policy to a second best way to mitigating market and information failure and reducing transaction costs such that producers and consumers continue to receive correct signals (relative prices) from the market to guide their sovereign decisions and choices. This is because orthodox economists discuss industrial strategy and policy exclusively at the level of exchange of factors and goods, given that the focus of their economic analysis is the structure of relative prices viewed as a reflection of relative scarcity and marginal productivity and as a guide to resource allocation. Because of this approach, they restrict the concept of industrial strategy and policy to the notion of trade regimes and consider import substitution (ISI) and export oriented (EOI) patterns of industrialisation as distinct, mutually exclusive trade and industrial regimes⁵².

ISI is defined as the strategy that enables the emergence of domestic industries that produce for the domestic markets goods that would otherwise be imported. These industries would not have emerged in the absence of policy-driven trade "distortions", because they are not in line with endowed comparative advantages. EOI is defined as a path of industrialisation that takes advantage of the market signals and requires no non-market incentives to emerge and develop. Therefore, ISI is market distorting and EOI is market conforming, or neutral.

EOI is efficient by definition because it responds to signals from competitive markets (which are assumed competitive in the absence of state made distortions). By encouraging trade, EOI also accelerates the acquisition of knowledge and information from the existing world stock, and therefore accelerates the rate of growth of the economy by increasing the rate at which knowledge is accumulated.

This contrasts with ISI that is, by definition, inefficient for it requires the creation of market imperfections and distortions that inevitably lead to inefficient use of scarce resources. In particular, ISI slows down economic and industrial growth because it increases the trade deficit and foreign exchange scarcity by reducing exports and increasing imports due to its deviation from endowed comparative advantages and bias against exports. It also increases capital intensity and in so doing widens the savings gap, worsens unemployment and prevents market expansion because of bias against exports, agriculture and unskilled labour. As a

⁵² See Balassa 1990 and 1988, Krueger 1998, Lal 1984, and a series of World Bank reports, such as 1997, 1996a, 1995a, 1994, 1993a and 1989.

result, ISI generates non-competitive markets, size inefficiency at firm level and/or under-utilisation of installed capacity. Furthermore, this strategy reduces consumer and non-supported producer welfare because of forcing domestic prices of consumer, capital and intermediate goods to rise. Because of its anti-trade bias, ISI prevents the economy and its agents from having access to the world stock of knowledge and information, such that it slows down innovation and technical change. Finally, this strategy also increases bureaucratic power and encourages rent seeking because state intervention empowers bureaucrats to decide about resource allocation and creates rents.⁵³

Heterodox views: industrial policy, linkages and capability building

A. Markets and states

Opponents to orthodox arguments question, in the first place, the notion of hypothetical, competitive markets. The simplistic reduction of the notion of the market to a sum of transactions between atomistic individuals and firms, which collapses into the analysis of how free these individuals and firms are to trade their endowed assets, excludes from the debate all issues that are relevant for economic and industrial growth and transformations. These are, namely, the socio-economic processes of mobilisation and deployment of resources to create new capacities, of acquiring production experience that translates into competitive advantages and trade, of innovation, technical change, training and learning, of shifting labour and capital from less productive to more productive sectors, etc. This renders the orthodox argument inadequate for the analysis of socio-economic processes of economic change. Additionally, the notion of the market's superior allocative efficiency is simply a construction that depends upon unrealistic assumptions about the economic process, institutions and agents, and the exclusion, from the analysis, of the essential components of the economic process. Furthermore, the conclusions about market superiority are based on comparing hypothetical optimal outcomes from abstract markets with hypothetical and real non-market outcomes.⁵⁴

Second, states and markets work together and are influenced by, and influence, the same socio-economic forces, problems and dynamic relationships. Additionally, policy is not restricted to the state – large and small firms and global corporations, economic groups and professional or industrial associations, networks and unions, all influence, are influenced by,

⁵³ See, for example, Kruger 1998, 1990 and 1974, and Tollison 1982.

⁵⁴ See, for example, Amsden 1997 and 1993, Chang 1996, various articles in Chang and Rowthorn 1995, Fine 1997b, Gore 1996, Hirschman 1958 and 1981, Prasad 1996, Wade 1990.

formulate and participate in the implementation of policy and strategies. Often, the state is the mediator between firms and corporations to organise networks and cartels through which strategies and policies, from the state or elsewhere, are discussed, analysed, adopted, changed, abandoned, implemented. Whether it is through the state, with the state, encouraged by the state, or otherwise, the important question is that policy and strategy is a form of negotiating, setting priorities and directions, deciding about allocation of rents, etc. In any case, whether it involves more of the state or more of other agents and forms of organization, the evidence is that it is policy and strategy, not free abstract markets, which seems to be the norm.⁵⁵ Markets exist in or are embedded in policy negotiation, conflict and coordination. This raises the question of power to influence, establish, reinforce and implement strategies and policies.

B. Different paths to industrialisation

Third, new (endogenous) growth theories explain economic development as a function of accumulation and deployment of capabilities created through investment in science, technology, learning, access to the world stock of knowledge and mastering the best managerial practices. This view, within the limits of the neo-classical framework, accepts the possibility of systematic market failure due to market imperfections associated with information failure, economies of scale and increasing returns to capital, technological externalities and a positive difference between social and private rates of return on various types of economic, social and scientific infrastructures and capabilities. These characteristics of the growth process explain the observable long-term variation and divergence of growth paths and specialisation of different economies, as opposed to the theoretical orthodox prediction of factor price and growth path equalisation. This creates the need for strategy to prevent sub-optimal investment.⁵⁶ For example, Nelson and Pack (1999) argue that development is essentially a process of increasing labour productivity by shifting labour from low to high productivity sectors, which depends upon entrepreneurial ability to foresee and realise potential opportunities, ability to absorb and master new skills and technologies, supply of skilled labour and strategies to minimise risks. Neary and Leahy (2000) argue that selective strategies are required to ensure that firms acquire first mover advantages and time preferences change towards long term investment, as well as to counteract wasteful strategic behaviour by firms vis-à-vis the state and other firms.

⁵⁵ See, for example, Castel-Branco and Cramer (forthcoming), Cramer 1999, Fine 1997b, Fine and Rustomjee 1996, Khan 1995, Kholi 1994, Kim 1997, Leahy and Montagna 2000.

⁵⁶ See Lucas 1990, Mayer 1996, Nelson and Pack 1999, Rodrik 1995, Zebregs 1998. See Fine 1998 for a critical assessment of endogenous growth models.

Not only do new growth theories raise the theoretical possibility of sub-optimal steady-state paths of economic growth, and of the existence of a variety of successful growth paths, but they also challenge orthodox propositions on three other grounds, namely: (i) the shape of the production function, which differs significantly across countries, industries and firms because of differentiated access to technology; (ii) economies of scale (thus, non-competitive markets) being reinforced by technological progress, product differentiation and economies of scope; and (iii) returns on capital (therefore, the direction of capital flows) resulting from the quality of human capital and externalities from various infra-structures and capabilities, rather than simply by factor intensity.⁵⁷

It follows, that restricting industrial policy and strategy to a process of regulating or changing market signals in transactions is of little use for the purpose of understanding and influencing the process of creating productive and competitive capacities.⁵⁸

C. ISI and EOI revisited: infant industry

Fourth, ISI and EOI are not adequate descriptions of trade regimes, because most goods, firms and industries may simultaneously substitute imports and enter foreign markets, and domestic and foreign markets are not organically separated but are part of the global market. Additionally, the price neutrality that orthodox economists argue is required for a strategy to be export oriented can be achieved through dual distortions, for example through selective liberalisation that lowers the relative price of capital to consumer goods to facilitate investment, but also nurtures sunrise industries through protection.⁵⁹

Even if ISI and EOI could adequately be defined as trade regimes, they would not necessarily be mutually exclusive. While there is no doubt that export growth is a crucial link between short term and long-term economic strategy and growth, fast and sustainable diversification and growth of exports require, above all, significant improvements in productive capacity. Exchange rate devaluation may shift production around and increase imports on the margin, but this does not increase production, expand markets and create new capacities. Additionally, exchange rate movements have only a one-off effect on the price level. Thus, export growth is

⁵⁷ Lucas 1990 and Zebregs 1998.

⁵⁸ See Amsden 1997 and 1993, Chang 1999 and 1996, Gore 1996, Grabowski 1994, Prasad 1996 and Wade 1990.

⁵⁹ See Amsden 1993, Gore 1996, Grabowski 1994, Greenway 1991, Ocampo and Taylor 1998.

not only a matter of trade policies, but mostly of creating new and competitive productive assets and capabilities.⁶⁰

The acquisition of competitive advantages results from production experience, learning and scale economies. This means that firms cannot become competitive before they start production and that there is a time lag between the two that represents the processes of acquiring production experience, learning, mastering new production processes and techniques and building scale economies. In addition, sustainable and accelerated growth of exports require more than competitive advantages: it requires knowledge and experience about foreign markets and industries, finance to support competitive efforts, reputation, networks, and eventually establishment of foreign representations. All these conditions result in a time lag between the acquisition of the competitive advantages and becoming a regular and successful exporter.⁶¹ The magnitude of the time lag depends on the technological complexity and market conditions of the industries concerned, as well as the relative domestic industrial experience and technological capabilities and gap vis-à-vis the world. This means that time lags are larger for industries with more room for fast and sustained innovation and export growth because of knowledge and innovation intensity of production and managerial processes. Even when the technology concerned is not new to the world but is new to the specific economy or firm, time lags are present because existent knowledge, experience and organization are not readily transferable and acquirable nor fully codified in blueprints.⁶²

Therefore, helping domestic firms to initiate production, master new technologies, acquire competitive advantages and become exporters is not simply ISI or EOI, but a more general process of creating new industrial capacities to compete in a global market. It might even be possible that a quick, too early move towards export expansion hinders long-term fast and sustainable export expansion, as the economy may become trapped into a narrow pattern of specialisation that provides little hope for innovation and growth.⁶³ Being outward oriented does not necessarily mean being an exporter and or importer. It means paying constant and deliberate attention to industrial, technological and trade happenings outside the country; remain in touch, absorb the latest technology, acquire experience, catch-up and become

⁶⁰ See, for example, Amsden 1997 and 1993, Canitrot 1993, Fine 1997b, Prasad 1996.

⁶¹ Amsden 1997 and 1993, Gore 1996 and Grabowski 1994.

⁶² Amsden 1993, Amsden and Euh 1990, Lall 1993a and 1992a, Lall and Wignaraja 1996, Nelson and Pack 1999, Ocampo and Taylor 1998, Prasad 1996.

⁶³ Hirway 1998, Ocampo and Taylor 1998, Prasad 1996. See various articles in Wangwe (ed.) 1995 for concrete examples that illustrate this point with respect to various Sub-Saharan African economies.

competitive. This involves selective policy, including protection, subsidies, contests for information and rents, organization of networks, encouragement to vertical integration, etc.⁶⁴

Nurturing the development of domestic productive capabilities and engaging aggressively in export markets are not only not in conflict, but are linked components of the same process that helps firms to acquire competitive advantages through production experience, learning and scale economies, creates the ability to expand into the global (domestic and foreign) market, and improves the access to finance, foreign exchange and knowledge that is necessary for continuous growth and change.⁶⁵

The infant industry argument, as discussed above, raises the question of policy and strategy on the following grounds. On the one hand, time lags between investment, production, competitive advantages and exports represent a risk, increase uncertainty and may result in sub-optimal investment. The magnitude of risk and uncertainty is greater the more demanding the industry and technology and the weaker the existent experience and technological capabilities. Policy and strategy play a crucial role in reducing risk and coordinating complementary and competing investment to ensure that firms foresee and take advantage of potential opportunities and linkages.

On the other hand, the fundamental economic questions in the process of industrialisation – particularly in economies that do not have the first mover and/or the technology leader advantage – are associated with the coherence between macroeconomic and investment strategies, and with the ability to mobilise and deploy cheap finance for capital investment in order to create new productive capacities (industries, firms, entrepreneurial and labour skills, technological capabilities, etc). Crucially important are how finance, demand, trade, employment, exchange and interest rates are organised to promote industrial and economic growth and transformation; and how industrial strategy fits in with the macroeconomic conditions and the development of the economy as a whole.⁶⁶ Cheap capital is vital for firms and industries in economies that do not have the advantage of being technological leaders, but at the same time it is important that industrial programs enable the creation and mobilisation of more capital (for example, through incentives associated with re-investment of profits and export targets, and by making sure that firms are profitable and generate more resources than

⁶⁴ Gore 1996.

⁶⁵ Amsden 1993, Gore 1996, Grabowski 1994.

⁶⁶ Fine 1997b.

they use).⁶⁷ Furthermore, consistent industrial and financial strategies may also be required to ensure long-term, cheap availability of finance to firms, particularly in the presence of financial volatility generated by short-term inflows of speculative foreign capital or preference of domestic capitalists for domestic speculation with financial assets, which can easily be the case under financial liberalisation.⁶⁸ Credible growth strategies may also mobilise cheap finance even from the market if targets are clear, project efficiency is enhanced by policy, and the strategies of firms and investment strategies are adequate to build competitive advantages.

Selective protection (or selective liberalisation) can accelerate capital accumulation in industry because it may increase domestic savings (e.g., through taxation and positive discrimination in favour of profit re-investment), reduce the cost of capital relative to consumer goods, generate economies of scale and reduce costs of production (which is an incentive for further investment) and create a business environment that favours investment in productive assets rather speculation with financial assets.⁶⁹ These questions can only be properly addressed through policies and strategies that are embedded in specific socio-economic and industrial conditions, and that establish coherent and consistent links between the different components of the economy.

Moreover, sunrise infant industries that operate in small markets run the risk of failure also because of overcapacity and subsequent price wars, in which investors are likely to waste resources to acquire market rents. This risk, particularly high under asset specificity, high sunk costs and constrained access to international markets, is likely either to result in sub-optimal investment, or to lead to considerable waste of resources, unless competing investment is coordinated. Potential development linkages between industries and economic activities may not occur because not enough complementary investment is made if private firms fail to foresee the opportunities and to cooperate – cooperation may result from concentration of market power through mergers, cartels, networks and vertical integration, or from deliberate state policy.⁷⁰

Mature and sunset industries need to adjust at particular critical points with minimum possible social costs and social waste. This requires a process by which industries and firms cooperate

⁶⁷ Amsden 1997 and 1993, Amsden and Euh 1990, Gore 1996, Grabowski 1994.

⁶⁸ Fine 1997b, Fine and Rustomjee 1996, FitzGerald 1997 and 1996.

⁶⁹ Amsden 1993 and 1997, Ocampo and Taylor 1998, O'Rourke 2000.

⁷⁰ See, for example, Chang 1999, 1998b and 1996, Amsden 1993 and 1997.

to adjudicate adjustment targets and compensate the losers so that resistance to change is minimal and change actually takes place. It is irrelevant to argue that resources will automatically be re-allocated from sunset to sunrise sectors. Before bankruptcy (at which stage all resources are lost and no adjustment is available) competing firms have no incentive to adjust, because the first mover loses and improves the chances that no adjusting firms profit from market rents.

Foreign direct investment (FDI) is claimed to be an alternative source of savings and foreign exchange, managerial and marketing skills, experience and networks, as well as technological and productivity linkages to domestic firms. This is another area of crucial importance for policy, particularly in economies that depend heavily upon foreign capital for investment and do not have the bargaining power of large markets and technology intensive economies. One aspect of policy is the organization of domestic firms and the state to negotiate investment agreements that realise the potential for linkages and technology transfers. Another is the management of incentives systems such that the economy maximises benefits and minimises the social cost of attracting private investment, and makes use of FDI to help build a specifically defined industrial path (e.g., to reinforce inter-industry links, accelerate export growth rates and diversify and upgrade manufacturing's productive base). This requires a strategy for economic growth and industrialisation, as well as a good understanding of the corporate motive to undertake investment, and the use of cost benefit analysis to determine the worthiness of FDI projects. Furthermore, the negotiation of labour conditions is important from the point of view of welfare, income and technological linkages. Finally, the different types of FDI (actual equity and portfolio investment, mergers and acquisitions, financial speculation) may be treated very differently according to industrial priorities and macroeconomic conditions and policies.⁷¹

A logical and obvious conclusion from the infant industry argument is that even if one accepts the possibility that industrialisation follows a pattern of upgrading from labour to capital intensity – despite the fact that theory predicts and evidence shows the existence of different paths and paces of industrialisation, equally successful or unsuccessful – this does not validate a market-friendly vision of the development process. Neo-classical economics predicts (rightly or wrongly) a given path of development, but the process by which such a path is followed is not neo-classical in nature for the reasons discussed above⁷².

⁷¹ See, for example, Agosin and Mayer 2000, Aitken and Harrison 1999, Bird 1999, Borensztein, Gregório and Lee 1995, Chang 1996, Chuang and Lin 1999, Dunning and Narula (eds.) 1995, Kumar 1998 and 1995, Leahy and Montagna 2000, Rasiyah 1998 and 1995, Weiss 1998.

⁷² See, for example, Amsden 1989, Chang 1999 and 1996 and Hirway 1998.

D. Labour

Fifth, the structure and dynamics of the labour market are intrinsically and mutually associated with the structure and dynamics of the economy as whole, particularly with respect to the process of industrialisation. This is not only a matter of how fast the economy grows, how much aggregate investment is undertaken and how skilled the workers provided by the market are. It is also a matter of what forces are driving the economy and how they organise access to labour; which sectors are being promoted and which demands they impose on skills, technology and investment; how industrial relations are developed and how they affect productivity and continuous education and training; and how much, what type of, and under which institutional conditions new employment is created. None of these issues is even conceived, let alone addressed, under the notion of flexible labour markets, and industrial strategies and policies are necessary to coordinate the labour market with the central and more general goals of the economy.⁷³

E. Technological change

Sixth, the requirements of technological change, identification and choice of technique, learning and acquisition of specific skills constitute another argument for industrial policy⁷⁴. Technological development change the competitive environment and the chances of survival: labour productivity and input efficiency increase, costs fall, quality increases, variety may develop together with increase in the flexibility of the production process (economies of scope). Technological change tends to create rents that, added to economies of scale, give advantages to firms that innovate. If firms are not sure that they can appropriate rents, they will not innovate. Coordination of competing investment is required for rents to be

⁷³ See Fine 1998a for a comprehensive, critical discussion of labour market theory. Flexible labour theories describe the labour market as a sum of individual transactions between an infinite number of workers and capitalists, the amount of which (how much supply and demand for labour) being determined by relative prices of labour vis-à-vis capital. Recent development in labour market theories have seriously questioned the notion of flexible labour markets in such fundamental grounds as: (i) no significant relationships has been found between the level of employment and the introduction of the minimum wage, and when such (weak) relationships is present it is not negative; (ii) flexibility pressures on one side of the market, for example the ability to reduce the wage rate or lay-off workers easily, may induce rigidities on other sides of the markets, such as constraints to labour turnover, training and absorption of new technologies; and (iii) flexible employment may actually increase the size of labour reserves in surplus labour economies.

⁷⁴ A sample of the hugely vast literature on technological change and learning include Alcorta 1994, Amsden 1986, 1989 and 1996, Chang 1996 and 1999, Fine 1992, Freeman and Heggedorn 1994, Hobday 1995, Lall 1992, 1992b, 1993a, 1993b and 1996, Lall and Wignaraja 1996, Leahy and Neary 1999, Teubal 1996.

appropriated by organisations that innovate. Rents tend to be transitory, unless they are guaranteed by the state. So that, long term, sustained innovation depends more upon deliberate strategy than simply upon pure market power. On the other hand, if the capital stock is interdependent in use but divided in ownership, coordination of interdependent investment is also required or innovation may not take place. When it comes to industry, technological innovation is also goal oriented, which requires industrial strategy to maximise the linkage potential of innovation. The fact that there might be many sources of innovation, and innovation is a chase after a moving target, points to the need for new forms of policy targeting, compensating for capital market failures that may put the follower firm in disadvantage, and encouraging related and coordinated investment in research by a variety of sources (firms, universities, etc).

Technological change requires investment in capability creation, collective and organisation-related learning, acquisition of specific skills, learning non-codified (tacit) knowledge that results from experimentation and adaptation. General education policies are not sufficient to address industrial need of skills, experience and institutional learning. The role for industrial policy targeting with respect to learning is associated with the need to allow time for learning to take place, the institutionalisation of performance-based incentives that ensure that firms actually learn, and the targeting of specific skills that benefit firms that invest in learning. It has been acknowledged that there are huge economies of scale and scope associated with the creation of technological capabilities, in areas like training, R&D, engineering, etc.

Seventh, in order to realise economic linkages from manufacturing to the economy as a whole, the potential for linkages has to be identified and agents need to be capable of taking advantage of them. General provision of infrastructures and education is insufficient, particularly when dynamic economic change is involved, asset specificity is important and linkages are specific to certain projects, skills and agents. Social and project returns on public investment are more likely to be higher under targeting than under a policy of general provision of infrastructures and education. Moreover, industrial policy restricted to general provision of infrastructures and education is likely to be wasteful and to create patterns of growth that are inflexible and inadequate. This, of course, in addition to the fact that education and infrastructures are not inputs but reflect and respond to social pressure and socio-economic conditions.⁷⁵

⁷⁵ See Fine and Rose 2001 for a critique of the concept of human capital and education as a provider.

F. Institutions and networks

Eight, the development of institutions and networks is another argument for industrial policy, given that technological change and the business cycle generate new challenges for the established institutions (property rights, money and financial institutions, firms and industrial organisation, state/business relationships, etc.).⁷⁶ Industrial policy can be a peg around which institutions and networks, that may help the formulation and implementation of industrial policy, are developed. The argument that the fundamental role of policy in institutional building is to provide regulation and competitive conditions is at best weak (regulation for what and of what?) and, probably, highly inappropriate as shown in earlier discussion of rents and innovation, infant industry, technology change and learning.

For example, Chang (1996) relates the development of industrial institutions and networks, and informational and technological capabilities to the deliberate effort to formulate and implement industrial policy. Recent debates about East Asia have linked the financial crisis to the way financial institutions were liberalised and re-directed from their selective growth-oriented goal to a static stabilisation goal.⁷⁷ Stein (1994) links resistance to privatisation with costs of unguided adjustment. Chang (1996 and 1999) and Dore (1986), show how institutional arrangements developed around industrial policy facilitate structural adjustment by helping the "losers" of the process to adjust (retraining schemes, financing of re-allocation of investment, compensation for sunk cost incurred, etc). Cramer (2001 and 1999) associates failures of privatisation with the absence of a coherent industrial policy that results in incompatible institutional change. Fine (1997b) links industrial policy and the ability of the state to deal with the power of the minerals-energy complex and large corporations in South Africa also with an improved statistical and information structure, as well as better trained and more motivated civil servants. It is the deliberate effort to formulate and implement specific industrial strategies and policies to pursue selective development goals within specific sets of social, political and economic conditions that shows the direction and priorities that capacity building should follow.

⁷⁶ Stein 1994 and Chang 1996.

⁷⁷ Wade 1998 and Chang 1998a.

State ability, political economy and consumer welfare

Another dimension of the debate on industrialisation and industrial policy is whether the state has the ability to deliver successful strategies. This part of the debate is focused on the state for three main reasons. First, it follows logically from the linkages debate, in which the state, as agents of linkages, was a given value. Second, policy and strategy are perceived as belonging to the domain of state activities, and whilst it has been possible to show that policies and strategies may be required for linkages to develop, it is now necessary to discuss whether states can actually deliver such policies and strategies. Third, proving the existence of systematic state failure, as opposed to market failure, is the last line of orthodox defence against state intervention.

Orthodox economists question the state's ability to govern the economy, particularly through selective policies, on three main grounds: informational and skill failure; inability to pursue efficient developmental goals due to rent seeking and to define efficient development goals due to predatory instincts; and the loss of consumer welfare associated with the departure of the economy from market equilibrium and price neutrality. Thus, the argument is no longer that markets are inherently efficient, but that no matter how inefficient markets are, the state is worse.⁷⁸

State ability

The first line of attack on the state focuses on the (in)ability of the state to identify, let alone decide, implement and monitor the impact of precise policy targets. State inability results, in the first instance, from civil servants and state organizations not having enough information for the task of detailed policy making, and from the severe information asymmetries that generate a principal-agent problem, such that the state is not capable of ensuring that firms cooperate and comply with policy targets. The second cause of the state inability to engage in detailed and successful policy making is the shortage of skills amongst civil servants relative to private firms.

These orthodox arguments can be challenged on several grounds. First and foremost, if state capacity is weak it does not mean that the private sector is stronger and readily mobilised.

⁷⁸ See, for example, Krueger 1974 and 1990a, various articles in Krugman (ed.) 1988, Lal 1983 and Tollison 1982 (for a survey on rent-seeking). See Chang 1996 Weeks 1994 for a critique.

Therefore, the answer to a state with low capacity is to build state capacity. Second, it is true that the state needs detailed information upon which to justify its goals and policies and pursue their implementation, monitoring and revision. Information problems can and should be minimised, but the presence of imperfect information is an argument for action rather than inaction, not least because planning and coordination are justified as means also to cope with information failure and resulting uncertainty. In most of the literature, uncertainty and risk, which are increased in innovative and dynamic patterns of industrialization, are central to the argument for selective industrial policy. Thus, theoretically selective industrial policy is ever more necessary as an economy develops. The state cannot know everything, but the adoption of strategies and policies can help manage information on a selected set of issues.

Furthermore, data requirements and the collection and analysis of information necessary for successful state policies are not necessarily larger and harder than what is needed by private companies. Data requirements for sound public policy in manufacturing (which orthodox economists oppose) are not larger and harder to manage than data requirements for sound public policy in education, health and infrastructures, or for sound macroeconomic policy (which orthodox economists demand from the state).

Additionally, the state may have institutional advantages over the private sector with respect to information, because of its access to various sources of information,⁷⁹ its control over information systems, and ability to establish legal procedures and mechanisms to collect information that can be reinforced in different ways, including, for example, contracts. Moreover, as far as information is concerned, the state does not have to work against markets and the private sector, but with them.

On the other hand, orthodox and revisionist economists have emphasised the problem of systemic market failure due to information failure and subsequent uncertainty.⁸⁰ Therefore, information deficiencies are not exclusively associated with the state.

It is also true that developmental policies are not always easy to identify, nor is their whole impact in terms of benefits and costs always clear. Thus, the state, as private companies so often do, may choose wrong courses of actions. This is hardly an argument against state policy and strategy. On the contrary, the presence of policy and strategy based upon sound data collection helps to prevent or minimise disasters and surprises because a planned course

⁷⁹ Census, surveys, firms, reports from a large number of institutions and organizations, access to other governments' information, multilateral agencies, informal contacts, etc.

⁸⁰ Stiglitz won his Nobel prize in economics for his work about information failure.

of action could be more efficiently monitored and quickly revised than a random one. On the other hand, any relevant and significant policy exercise is bound to impose pressures to improve data collection, as well as policy implementation and monitoring mechanisms. Moreover, as part of policy formulation and implementation, the state can and should use social cost benefit analysis to identify all possible benefits and costs and compare alternatives to find the most effective, easiest and less costly, but that also provides equal certainty about outcomes. The exercise of industrial policy is also a learning process for the institutions and agents involved, from data collection and analysis to formulation, implementation, monitoring and revision of policy. Policy formulation also works as guidance for research (which questions to ask, which patterns to look for, etc). It is only logical and likely that over time the quality of institutions and policies improves as long as institutions involved in relevant policy making are committed to learning.⁸¹

Significant lack of skilled people hampers the state's ability to collect and analyse information and formulate, implement and monitor policies successfully. Skill requirements increase with the complexity of the economy and public policy. Thus, a state committed to economic and industrial policy should acknowledge and tackle the problem of shortage of skills very rapidly. However, the existence of the skill problem within state organizations is not an argument for deregulation and liberalisation. On the one hand, it is very likely that the entire economy suffers from skill shortages, not only the state. Thus, it may happen that the first and most immediate problem to address through policy is the raising of standards and skills across the economy through education, training and promotion of spillover effects from skilled workers to less skilled ones, and between investing and innovating firms and institutions. This would require a system of incentives and institutional settings that favour long-term commitment to skill and technological development. This system cannot be brought about within the notion of free markets because of the magnitude of the task, investment and coordination required, and because of market imperfections associated with and created by capacity building externalities (static and strategic uncertainty, free-riding, higher social than private returns, economies of scale and scope, etc). On the other hand, the fact that the state engages in relevant economic and industrial policy is an incentive to tackle the skill problem because of dynamic pressures, and helps to tackle the skill problem through deliberate and targeted effort and commitment to learning. It is only logical and likely that the shortage of skills in the state and the economy as a whole will be more efficiently eliminated if education and training are goal oriented.⁸²

⁸¹ Chang 1999 and 1996 and Fine 1997b.

⁸² See Fine 1997b for a similar discussion with respect to South Africa.

It is also interesting to notice that orthodox economists demand from the state the organization and provision of universal education, and yet they do not acknowledge the ability of the state to address its own skill shortages. They also consistently underestimate the skills and knowledge requirements for successful formulation and implementation of massive privatisation and liberalisation programs.

Influences upon the state and the predatory state

A. Rent seeking

The second orthodox line of attack on the state is focused on the politics of state intervention, or political economy of the state. It is argued that state selective policies create rents and rent seeking, such that private agents have an incentive to waste resources unproductively to capture the rents. Rent seeking not only is a resource wasting exercise but it also creates anti-competitive behaviour and non-competitive markets, which inevitably lead to allocative inefficiency. Thus, even if the state solves the ability problem (information and skills), its policies are likely to lead to wasteful and inefficient allocation of resources. Furthermore, bureaucratic power and competitive rent seeking create an opportunity for the predatory instincts of the state to be revealed, which leads to policy targets and goals reflecting the interests of the civil servants rather than the social good.

The proposition that rents are created by state intervention is misleading and has its foundation on the assumption that in the absence of the state and/or unavoidable market imperfections, the market would operate so perfectly that no rents would be possible. This proposition is at odds with the evidence that modern capitalism is based upon, and driven by, large, powerful corporations that organise investment, production and trade at world level.⁸³ Additionally, rents exist even when private property rights are perfectly allocated, and the struggle for property rents is obvious in processes like large privatisation programs, mergers and acquisitions, cartel formation, oligopolistic competition, innovation, advertising and all other activities that are related, in any relevant way, with the notion of competition. Thus, rents are not so much a creation of market imperfections or the state, but are part of the socio-economic process of capital accumulation that happens through the market and state.⁸⁴

⁸³ Chandler 1990, Chandler, Amatori and Hikino (eds.) 1997, Fine and Murfin 1984, Kozul-Wright and Rowthorn (eds.) 1998.

⁸⁴ See, for example, Hirway 1998, Ocampo and Taylor 1998.

Interest groups operate through the state, such that they influence, and are influenced by state strategies and policy. The state has to acknowledge the existence and influence of such groups and develop its capacity and strategies to avoid being captured and to prevent related rent seeking from creating social waste. On the one hand, this may be done better through deliberate policy that allocates performance related rents according to strategy, thus eliminating the market for rents and minimising rent seeking. Strategy and policies may help to create and/or promote alternative interest groups (for example, those interested in industrialisation and exports as opposed to those that develop around speculation with financial assets), to avoid the state capture by old, entrenched and conservative vested interests, or to prevent the concentration of economic power and oligopoly competition.

On the other hand, markets do not mediate adequately between these different interest groups because of being dominated by the stronger ones. Market-friendly theories have little to contribute to solve this problem because of being based on the assumption that economic agents are atomistic and perfect markets self-preserving. If the economy works under perfectly competitive markets, as in the neo-classical models, interest groups do not exist. Furthermore, the push for liberalisation also reflects economic and political interests, particularly from the powerful groups that can reinforce their power through state withdrawal from the management of economic assets. Market friendly reforms also require a strong state that is able to resist pressures against and support pressures in favour of liberalisation, which can formulate, implement, monitor and revise its liberalisation strategies and policies and maintain social order at the same time that income and rents are redistributed.⁸⁵

Finally, the idea that liberalisation eliminates market power and rents is unsound and counter intuitive. It has been demonstrated that once market power has been created and corporations have developed financial, technological, reputation and network advantages, blanket liberalisation may only contribute to provide larger corporations with the opportunity to consolidate and expand their power, preventing other social groups and organizations from having access to these rents.⁸⁶

⁸⁵ See Chang 1996, Fine 1997b, Hirway 1998, Kim 1997.

⁸⁶ See, for example, Amsden 1993 and Amsden and Euh 1990 for the analysis of liberalisation and the power of *Chaebols* in South Korea. A similar discussion can be found in Fine 1997a and 1997b, and Fine and Rustomjee 1996 in the context of capital and goods market liberalisation in South Africa, and various articles in Khan and Jomo (eds.) 2000 about South East Asia.

Therefore, if rents are created through market and non-market mechanisms alike, are an essential component of capital accumulation and are not eliminated through liberalisation, the question is how to reduce waste and unproductive use of resources in the distribution and use of the rents, rather than how to eliminate rents altogether. Eliminating the competition for rents, which is possible to achieve through policy and strategy, can do this.⁸⁷

B. Predatory state

The notion of a predatory state is confusing. It involves the idea that state institutions prey on the society's resources and wealth for the sake of the state and its officials, and that the state has the political capacity and interest to become predatory. The predatory nature of the state is usually measured by the degree of generalised corruption, the magnitude of the fiscal deficit that constitutes a hidden tax on the income of the consumers and other private economic agents, the administrative and military share of public expenditure, etc.

Quite apart from the fact that none of the above indicators is a necessary and sufficient condition for predatory activity, and that the predatory state is ill defined, there are four major problems of logic in this argument. First, orthodox economists accept, and actually demand, the role of the state in the provision of economic stability, infrastructures and human and social capital. How can this role be consistent with the notion that the state is inherently predatory? Or is it that states become predatory only when they engage in selective and detailed industrial policy making? Are orthodox economists convinced that a predatory state will cease preying on the society after trade liberalisation takes place? Why would a predatory state reorganize the economy and society, through liberalisation or any other means, in order to challenge its ability to prey on social resources?

Second, the notion that the state is predatory abstracts from the fact that interest groups operate through the state, and the state operates through the market. Thus, the state may be predatory (whatever this means) to some groups while providing significant services to others. Even if an unusual number of political appointees and civil servants gain more than they should normally do in this process of promoting some interest groups at the expense of others, this process can only be clearly understood within a broader context of social and economic dynamics of private capital accumulation that involve the state and the markets.⁸⁸

⁸⁷ Chang 1996.

⁸⁸ See, for example, Khan 2001, 2000a and 2000b, and various articles in Khan and Jomo (eds.) 2000.

Third, a state that is systematically predatory creates tensions and pressures that will force it to be reformed or/and destroyed by social conflict and opposition. Unless political officials and civil servants have a short-term time preference for private accumulation, a pure predatory activity is counter intuitive.

Fourth, the state is heterogeneous and complex in many different ways: in its social composition, its regional and sectoral development, its organizational, institutional and political settings, its activities, the interest and lobby groups that operate through it, etc. It would require very strongly simplifying assumptions to argue that the state is homogeneously predatory. The state is more likely to be a field of social construction, conflict and change than to have a "personality" insulated from the society in which it is embedded.

Although some could claim that recent experiences in some Sub-Saharan African and Asian countries prove the existence and impact of predatory states and show how difficult it is to reform the state, one is forced to acknowledge the existence of three problems that apply to almost every case that is presented. One, the description of a state as predatory is an abstraction from the socio-economic and political conditions of development of political and institutional setting of which the state forms part. It is this "ability" to take the state out of its context that allows ill-defined concepts such as "predatory" to become analytical categories. Two, in identified examples of so-called predatory states, the state and the market work together to create and/or support immensely powerful political and economic interests and accelerate capital accumulation at the expense of the working people and other social groups – thus, the state operates for and on behalf of specific interest groups rather than itself. In many, if not all of these cases, the state organises labour reserves, surplus extraction and allocation, property transfers and protection of private as opposed to social property in favour of fractions of domestic and international capital. What the state actually does, in these cases, is to help powerful private interest to prey on labour.⁸⁹ Three, those powerful interest groups, which are not necessarily created by, albeit supported through the state, may adopt "predatory" processes of capital accumulation and operate through the state to pursue their goals. It is not necessarily the state that is predatory, let alone predatory for its own sake; what matters is how states and markets interact within specific processes of capital accumulation.

⁸⁹ See, for example, First 1983, O'Laughlin 1981 and Wuyts 1980a for the case of Mozambique and South Africa, Gomez and Jomo 1999 for Malaysia, various articles in Khan and Jomo (eds.) 2000 about South East Asia, and Evans 1995 and Jenkins 1991a and 1991b for a comparison of cases in Latin America, Asia and Sub-Saharan Africa.

Consumer welfare

The last line of attack on the state from the orthodox point of view is that because state policies, no matter how efficient they are, represent a departure from Pareto optimal market allocation of resources, state led industrial accumulation reduces consumer welfare. This is because such policies create artificial scarcity and price inflation, and they tend to transfer rents to policy-supported producers at the expense of consumers and non-promoted producers. Inflation, trade barriers, and unbalanced goods and factor markets are hidden taxes on private incomes and, therefore, welfare reducing outcomes of state policy.⁹⁰

Quite apart from critiques of the concept of Pareto optimality and of propositions concerning the inherent welfare reducing outcomes of state policy, the orthodox arguments about consumer welfare can also be successfully challenged on other grounds. First, consumer welfare is not only associated with the price individuals pay for their consumer goods and services, but also with the income they are entitled to and the institutional setting of industrial and other socio-economic relations they are part of. If liberalisation reduces net employment, eliminates minimum wages, reduces real wages and creates employment uncertainty, the welfare of the consumer, particularly of the working people and the poorer, will be reduced in both static and dynamic terms. In static terms, they will afford less than before, or nothing at all, irrespective of the level of prices. In dynamic terms, aggregate demand may fall and with it will fall the incentive for investment and innovation, for long-term commitment to education and training, and a poverty equilibrium trap of low investment, low productivity, stagnation and unemployment may be established.⁹¹ As argued by Hirway (1998), experiences from LDCs show that labour is hurt first by liberalisation because of unequal bargaining power, and also because most processes of adjustment and stabilisation through privatisation and liberalisation aim at raising the rate of profits and reducing labour costs by lowering real wages. These processes of economic reform are usually not sustained by a growth accelerating industrial strategy, and as a result productivity grows slowly (if it grows at all), such that labour costs cannot fall independently of a fall in real wages. Adjustment thus becomes a process of shifting income towards the owners of capital and away from labour. Naturally, this will also require political and institutional changes that affect industrial relations and other conditions of the capital/labour relationship.⁹²

⁹⁰ See, for example, Krueger 1998, Lal 1984 and Tirole 1997.

⁹¹ See Fine 1997b and Ocampo and Taylor 1998.

⁹² See Ocampo and Taylor 1998 for a similar point, and Fine 2000, 1997a and 1997b for a discussion of these points in the context of political, social and economic change in South Africa.

Second, quite apart from not helping the poorer, liberalisation may well benefit the consumers at the upper level of the market because their consumption patterns are more import intensive, and imports may become cheaper, at least in the short run, if trade is liberalised. Cheaper imports may or may not be sustained, and may or may not help the expansion of competitive production, depending on whether scarce foreign assets are productively invested, used to finance imports of essential wage goods or spent by the upper group of consumers in luxuries.⁹³ Because discriminating policies in favour of investment are not consistent with blanket liberalisation and deregulation, and foreign exchange is therefore freely available to those who can afford to pay, it is unlikely that cheaper imports will be readily translated into cheaper capital and intermediate goods for production.

Liberalisation may be accompanied, or followed, by exchange rate depreciation because of balance of payment deficits. This may not deter the upper market consumer, and may well reduce investment further. Irrespective of what happens to the exchange rate, the price effect of liberalisation on imports is once for all – liberalisation does not tackle inflation but changes the price level. Therefore, liberalisation is more likely to hurt the consumer than to improve welfare, particularly those consumers at the lower middle and bottom of the income scale. If economic reform intends to tackle poverty and consumer welfare, it is better that it does so directly through various measures of income distribution, employment promotion, improving industrial and other socio-economic relations, and implementing policies that guarantee the virtuous circle of high investment, high productivity and high growth rates. None of these is provided through unregulated market forces.

2.4 Critical summary of the debate

This chapter has argued that industrial policy is very much part of the social experience of, although not a sufficient condition for, successful and unsuccessful industrialisation alike. It has also argued that the definition, characteristics and relative efficiency of industrial policy in achieving its defined goals vary considerably depending on the political, social and economic conditions under which industrialisation takes place, and developmental goals and industrial policy and strategies are defined and implemented.

⁹³ See Mukhopadhyay 1998.

Proponents of industrial policy have demonstrated that orthodox arguments for *laissez-faire* are inadequate for industrial development, but they have often failed to make a clear and strong case for industrial policy. However, if organizational, political and informational inefficiencies of non-market institutions and relations cannot justify the adoption of the free-market analytical framework, following the same logic and avoiding double standards it can also be said that the case for industrial policy requires more than the demolition of orthodox propositions and the theoretical construction of a rationale for industrial policy.

This debate, insulated from reality and narrow in scope and objectives, is often circumscribed to the analysis of best practices in policy-making (selectivity, flexibility, priority of social goals, firm and industry specificity, performance related incentives, etc.), and to the identification of situations in which policy should be used (static coordination, dynamic learning, etc.). If industrial and economic policies are understood as a set of rules and practices, then the temptation to establish blueprints (or universal policy prescriptions) is too great to resist. If, on the contrary, industrial and economic policies are drawn from the specific socio-economic conditions that in the first instance have determined their adoption and implementation, then the lessons are no longer sets of policy prescriptions and lists of hypothetical possibilities, but questions and analytical methodologies that help to put the debate about paths to industrialisation into specific socio-economic and political contexts.

Industrial policy is not an institution that exists, full stop, insulated from specific socio-economic conditions. Industrial policy results from the interaction between the state and the other different agents of the economic process, and the interaction between agents and linkages. Industrial policies operate through markets and influence, and are influenced by, the same agents and other socio-economic conditions that act upon markets. Therefore, it should not be necessary to make a case for abstract industrial policy, as it is only the fact that orthodox economics insulated economics from policy and politics that creates the (misleading) debate about states versus markets (or some combination of the two). Furthermore, the debate about industrial policy should not be wasted on theoretical constructions of abstract rationale for policy, because what matters is how the policy responds to specific socio-economic conditions and answers questions such as: which industrial policy? Which manufacturing industry? Which problems are to be addressed? Which goals are to be pursued? How is it part of the broader socio-economic process? How does it link the different aspects, sectors and activities? How does it coordinate or engage different agents and takes advantage of potential linkages? Who participates, gains and loses? Which mechanisms are in place to guarantee implementation and the achievement of defined targets? How is it going

to be assessed, monitored, revised? If these questions are not asked how could a relevant assessment of industrial policy decisions, and a case for industrial policy, be made?

If the case for industrial policy is to be made in abstract terms – in line with article titles like “...does the bell toll for industrial strategy?”⁹⁴, or “...theory of government intervention in late industrialisation”⁹⁵ – then industrial policy becomes the reversal of the orthodox notion of market forces, and equally inadequate for the purpose of understanding and guiding economic and industrial growth and transformation.

In the real world the state operates through and with the market, and is influenced by, and influences, the same forces and dynamic processes of social conflict and capital accumulation that are present in the market. It does not mean that there are no conflicts and tensions within state policy, and between state policy, the wide range of heterogeneous interests of other market forces and the complexity of socio-economic challenges and problems to be solved. However, these conflicts result from the existence of different and conflicting interest groups and economic pressures, as well as alternative solutions, outcomes and paths of development. In most cases, such conflicts cannot be solved without systematic formal and informal negotiation between the state and other agents – policy and strategy are crucial negotiation tools – and what the state does, or does not do, also depends on the various influences (agents, socio-economic linkages and other economic conditions) that operate upon the state.

Whether the intervention of the state is perceived to be efficient and conducive to virtuous circles of continuous growth and development, or inefficient and conducive to vicious circles of predatory behaviour, rent seeking or welfare reducing, the state responds to economic and political conditions that are socially structured. Therefore, its relative (in)efficiency has little to do with any inherent and immutable characteristics of the state (or markets). It is, therefore, misleading to attribute success or failure to varying degrees of market (de)regulation, market-orientation of public policy, or public guidance of markets. Even if it is possible to accurately measure such degrees of market or state orientation, they would have to be explained by the socio-economic and political conditions that operate upon the state and markets.

Besides, in most of the literature discussed, industrial policy is presented as the practical implementation of state strategies to create and nurture, and to rationalise and reorganise, markets, linkages, private agents and capabilities. In this context, it would be absurd to think

⁹⁴ See Lall 1994b.

⁹⁵ See Amsden 1992.

of states and markets as inversely related, static, self-contained and autonomous entities concerned with a never-ending process of marginally improving resource allocation. It would equally be absurd to believe that socio-economic conditions, including those that result from state and market negotiation, are not going to affect the state and the markets and their relationships. An example of this is the process of creation of the large corporations of the minerals-energy complex in South Africa⁹⁶ and the *Chaebols* in South Korea,⁹⁷ how these processes have been driven by specific socio-economic interest and conditions, and how they have helped to change the power balance between the state and different groups of capital, and between capital and labour.⁹⁸

This critique applies not only to the notion of states, markets and the relationships between them. Linkages are also specific to socio-economic conditions and do not autonomously occur in practice only because the potential for linkages exists, or because abstract models show that one sector is more prone to create linkages than another. It is one thing to argue that industrialisation may provide the economy with the ability to continuously upgrade its productive and technological conditions; it is an entirely different thing to make it happen in practice. Therefore, the arguments about developmental linkages that result, or not, from industrialisation and are delivered by states and/or markets cannot be adequately presented in isolation from real socio-economic conditions and contexts. What is the point of arguing that FDI establishes growth-enhancing linkages with domestic firms if the latter are so weak that they can barely survive, or if incoming FDI to a particular economy is only interested in minerals processing? How can it be argued, in abstract terms, that infant industry is the springboard for the conquest of foreign markets if nothing is done, apart from protection from foreign competition, to improve technology and productivity, and to promote entry into foreign markets? Or if protection is introduced with the only goal of guaranteeing that certain interest groups, for example sunset industries, survive irrespectively of any concerns about industrial progress? What is the face value of trade regime reforms, or state managed export-related subsidies or other incentives, both thought to increase exports, when the economy does not have competitive productive capacity and the transport and marketing systems are seriously deficient?

An example of the agent-linkage problem can be derived from the process of privatisation. It has often been argued that the failure of massive privatisation programs in LDCs to accelerate

⁹⁶ See Fine 1997a and 1997b, and Fine and Rustomjee 1996.

⁹⁷ See Amsden 1989, Jones and Sakong 1980 and Kim 1997.

⁹⁸ See articles in Khan and Jomo (eds.), which discuss these issues with respect to South East Asia.

and diversify industrialisation is due to the lack of a coherent framework that would be provided by growth oriented economic and industrial strategies and policies. As good and important as this argument is, however it fails to explain why this happens. For this argument seems to be focused on the analysis of how reality diverges from an optimal path, and to assume the efficiency of industrial policy as selective action to promote certain goals along an assumed path of industrialisation of the economy. Because the argument idealises the goals (industrialization) and the instruments (industrial policy), rather than drawing them from the actual process of privatisation, then it does not consider selective inaction, or selective action to achieve different goals, as industrial policy.⁹⁹ Therefore, the performance of privatisation is assessed comparative to idealised policies and goals; and it is assumed that the mere existence of a formal industrial policy would improve the results of privatisation.

This raises three interesting and important issues for research. First, while the outcome of privatisation may be seen as a relative failure if compared to the ideal path, it may not be so if understood from the alternative point of view of the forces and processes that have generated such process and outcome. Second, while, from the point of view of the ideal path, the relative failure of privatisation may be thought to result from absence of a coherent industrial policy, the same process, from the alternative point of view, may explain unguided privatisation as part of a different (from the ideal) industrial policy under specific socio-economic dynamics¹⁰⁰. Third, if the two previous points are accepted, then it becomes clear that the starting point for the analysis of privatisation and industrial policy is the way it takes place under specific economic and political circumstances, rather than how it conforms with an ideal definition or design of industrial policy and its individual components at the outset of the analysis.

Therefore, the case for industrial policy cannot be made in abstract terms, neither from the point of view of potential linkages, nor from the viewpoint of hypothetical relative efficiency advantages of states or markets. The case for industrial policy – involving agents and linkages and how they inter-relate – can only be adequately supported from the perspective of the real problems to be addressed in each set of socio-economic circumstances, because industrial policy, states, markets and linkages do not exist outside such specific circumstances.

⁹⁹ This problem is not distant from the more basic orthodox mistake of confusing industrial policy with aggregate price distortions through taxation and subsidies, the absence of which signals the presence of free markets. Nor is it essentially different from believing that market liberalisation is a guarantee of efficiency for the newly privatised firms. See Castel-Branco and Cramer (forthcoming), Cramer 2001 and Fine 1997a for the debate of these issues related to privatisation in Mozambique and South Africa.

¹⁰⁰ See Castel-Branco and Cramer (forthcoming), Cramer 2001, Fine 1997a and Fine and Polletti 1992.

2.5 Implications for the analysis of the Mozambican case

How will this chapter help the study of industrial policy in Mozambique? First and foremost, the chapter provides the analytical tools based upon the linkages-agents framework. On the one hand, rather than comparing degrees of efficiency between the state and the market, the study of industrialisation in Mozambique researches the interaction between the state and the market. On the other hand, the study should start by identifying the underlying socio-economic characteristics, pressures and conditions of industrialisation and industrial policy in Mozambique. In this research, it is crucial to keep in mind that agents and linkages form part of a symbiotic and dynamic relationship that determines the shape they take and the path that industrialisation follows.

Second, the analysis of industrialisation is more adequate if it is integrated within the analysis of the ways the economy, as a whole, functions. Third, the research will be focused not only on official policies and their shortcomings. It will investigate what actually happens with respect to economic decisions that affect industrialisation, and which forces and pressures determine that such decisions are taken and which outcomes are achieved.

CHAPTER 3

PATTERNS OF INDUSTRIALISATION AND INVESTMENT IN MOZAMBIQUE

In the previous chapter, it was argued that the analysis of industrial policy is more adequate if guided by the understanding of the underlying economic and political relationships upon which the process of industrialisation depends, because these relationships govern the specific economic formation that policy targets. This chapter provides the empirical foundation for such an understanding, as its aim is to identify the fundamental economic characteristics, conditions and relationships that govern the process of industrialisation in Mozambique.

By constructing a unique set of long-term time series and cross-section data, it is possible to establish the structural and dynamic patterns of development of the manufacturing sector and investment, and how they are integrated in an economy that is strongly influenced by its relationship with South African capitalism and by dependence upon foreign capital for financing of investment. The chapter argues that manufacturing has not performed the role of engine of growth and economic change; production and exports are narrowly specialised around a few sectors; and import substitution has not taken place in a systematic and significant way.¹ Therefore, intra- and inter-sectoral linkages are limited and narrow, and manufacturing value added (MVA) as a share of GDP is small and has not increased much over the last four decades.

¹ In orthodox literature, import-substitution is defined as a trade regime that protects domestic markets and discourages exports, and its presence is measured by the degree of market protection that domestic producers for the domestic market enjoy (Balassa 1990 and 1988, Krueger 1998, 1990a and 1990b, Lal 1984). This definition is not only simplistic and narrow but also flawed, because: (i) it focuses on exchange and excludes production and the development of productive capabilities from the analysis (Amsden 2001, Ocampo and Taylor 1998); (ii) it does not take into consideration the difficulties in measuring market distortion (Greenaway 1998, Greenaway, Morgan and Wright 1998); and (iii) it organically separates the domestic and world markets and does not consider that capable firms may produce for domestic and world markets as part of a single market expansion strategy (Gore 1996). A more accurate definition of import substitution is the replacement of imports by means of creating domestic capacities to produce what is imported (Hirschman 1981 and 1958, Fine and Rustomjee 1996, Gore 1996, Ocampo and Taylor 1998). Therefore, import substitution is a process by which the productive capacity progresses through linkages usually from a narrow set of final consumer goods to intermediate and capital goods, and diversified and consumer goods of higher quality. This process has not happened in Mozambique.

The output of the manufacturing sector and of individual industries has fluctuated significantly. This instability, with periods of rapid expansion followed by periods of rapid contraction, calls attention to the need to study how the characteristics of the manufacturing sector affect, and are affected by, the performance of the economy as a whole. It is argued that weak linkages make output expansion dependent upon imports particularly as manufacturing production diversifies away from simple, semi-processing of primary products. Given the narrow export base of the sector, and of the economy as a whole, output expansion depends upon inflows of foreign capital – be they aid, external borrowing or FDI – and the general health of the current account. Hence, manufacturing growth tends to be unsustainable and short-lived. Investment expansion, in particular FDI, tend to reinforce the existing characteristics of the manufacturing sector because of the limited industrial capabilities of the economy and the political and economic interests that develop around, and form the basis, of the existing productive conditions.

The data also show that the characteristics identified have remained essentially unchanged over the past four decades despite radical policy changes that have occurred in the period. This calls attention to the fact that policy, by itself, is not sufficient to promote change and to explain economic performance, and is not autonomous from socio-economic pressures – be they linkages or agencies.

The chapter is organised into six sections. The first consists of explanatory notes about the data. The second, a brief periodization of the formation of the manufacturing sector in Mozambique, provides the historical framework for the analysis that follows. The third illustrates the main structural characteristics of the manufacturing sector and its role within the economy by analysing trends in GDP, MVA and exports. The fourth discusses the dynamic link between manufacturing production and macroeconomic conditions by analysing the relationships between investment, growth, the trade balance and financing of investment. The fifth analyses patterns of sectoral and regional allocation of investment over the period 1990-1999 and its current and prospective socio-economic impact. The last section identifies and summarises the main empirical questions that are raised for the analysis of the manufacturing sector in Mozambique and formulation of industrial policy and strategy.

3.1 Notes about the data

The discussion in three of the sections of the chapter is mainly based upon graphical representation of the data, rather than the presentation of the actual raw data. This is due to

three factors: (i) graphics can be clearer with respect to capturing and showing trends, change, dynamics and movement that are present in the data; (ii) graphics allow for the selection, out of large data sets, of the fundamental relationships that are to be considered in the study; and (iii) some of the data sets are large and without careful and close analysis would make little sense for the reader. The actual data and data sources are presented as annexes at the end of the chapter.

The empirical analysis in this chapter involves no formal, econometric techniques. Modelling was considered inappropriate for the following reasons. First, data sets have been constructed and used for descriptive statistical analysis as a basis for clarifying the structure and dynamics of the Mozambican economy and main lines of enquire for the thesis. Second, despite the fact that the data sets constructed may be the best available for long-term and disaggregated analysis, they still suffer from several problems of estimation and accuracy, which are partly illustrated by the description, below, of the process of constructing the data sets. These problems can be summarised in four main points: (i) sample size and methodologies adopted to collect and organize official data vary significantly over short periods of time, and the changes made are not always explained; (ii) it was not possible to make all sets cover the entire period of analysis because of problems of aggregation and presentation of the original data; (iii) many different sources of data, and methods of introducing consistency into fragmented series, had to be used to cover for missing data, inconsistent units and series and confusing classification of industrial activities (e.g., production of batteries is recorded, in different periods, under the chemical industry or electrical machinery; vegetable cooking oils appears under chemicals or food; cement is sometimes under construction or non-metal minerals). Thus, there is some trade-off between long-term consistency and short-term accuracy; and (iv) significant changes in policy regimes during the period of analysis have caused structural breaks in the series (e.g., prices and exchange rates) that have resulted in reduced accuracy of estimates. Despite these shortcomings, the data sets constructed give a solid enough indication of structure, characteristics, trends and dynamics that are the basis of the type of descriptive statistical analysis followed in the thesis.

More generally, modelling was considered inappropriate because of the absence of stable structural equations and parametric values.

For the purpose of this thesis, consistent long-term time series and cross section data sets were constructed. Long-term time series help to identify fundamental qualitative patterns, relationships and trends that in the short run may be difficult to observe or may be distorted

by the occasional random or other effects. Thus, the thesis is mainly concerned with long run patterns and trends and how short run variation fits in with the long run.

Time series data sets were constructed out of fragmented and inconsistent information. Preference was always given, whenever possible, to official sources (GOM/Statistics 2001 to 1961-72) as opposed to data used by individual researchers and isolated studies. However, individual studies were also used when the data sets were consistent with official data and trends and/or when they helped to cover holes and build consistency between fragmented periods. Most of the data about the manufacturing sector in the colonial period comes from official statistics yearbooks (GOM/Statistics 1973 and 1961-1972), but the construction of the 1959-1974 economic series was helped by complementary data (consistent price series, data on MVA for years not covered by official series, GDP and MVA series) produced by Pereira Leite (1989) and Pereira de Moura e Amaral (1978).

Data for the period after independence were based upon GOM/Statistics 1975-84 through to 2001, complemented by various joint reports involving the government (GOM, IMF and WB 1988 through to 1999; GOM and UNIDO 1993), and reports by multilateral agencies (UNDP 1995 to 1998a and 2000; UNIDO 1987; World Bank 1995b, 1995c, 1993b, 1992, 1990a and 1990b, and 1985). The analysis of the period of transition from the end of colonialism (1973-1978) was built with the help of Pereira de Moura e Amaral (1978) and Wuyts (1989 and 1984), which provide short series of data on the volume of output, which helped to link series in the absence of information on price series. Data for the period between 1979 and 1985 benefited from the studies by UNIDO (1987) and World Bank (1990a, 1990b and 1985), mainly because of the disaggregation of manufacturing output provided in the UNIDO study and the estimates of GDP and MVA figures made from data on gross material product (GMP) and global social product (GSP).² Additionally, the level of aggregation of official data varied over the periods, such that it was necessary to use specific studies (Pereira Leite 1999 and 1995, Sousa Cruz 1994, and various isolated policy studies from government departments) to fill in the gaps and construct series with the required level of disaggregation. From 1987, there was an attempt to standardise the presentation of official data and avoid constant changes. However, sample coverage and methodologies of measurement continued to change and affect the actual statistics. This leads, for example, to continuous and often inconsistent retrospective revision of the data, so that no two three-year periods are methodologically

² GMP and GSP methodologies, used by former COMECON countries, were used in Mozambique from late 1970s to the beginning of neo-liberal economic reforms in 1987. These methodologies are not consistent with GDP. For 1980-1986, GOM/Statistics (1975-1985), UNIDO (1987) and World Bank (1990a and 1990b) produced estimates for GDP by converting GMP and GSP data. However, the results of these publications differ from each other.

consistent. In some cases, such as employment, the official published data became useless. In other cases, such as exports, imports and macroeconomic aggregates, the quality and organisation of the data were significantly improved.

With the exception of Pereira Leite, who analyses 40 years of industrial development in Mozambique under colonialism, most of the other studies analyse relatively short-term and very specific periods. For example, Wuyts (1989 and 1984) focuses mostly upon the period of transition and the rise and collapse of the large investment strategy (1975-78 and 1980-83), and UNIDO and the World Bank present data for the period of the big collapse of the Mozambican economy prior to the introduction of the Economic Recovery Program (PRE) (1981-1986).³ To construct long-term consistent series out of partial, fragmented and inconsistent data sets, it was necessary to find common denominators that overlapped so that the periods could be bridged and consistency maintained. Overlapping price series, output indices and real rates of growth, and isolated information on specific sectors, were used as the main common denominators to introduce consistency into the series. For example, the data on the rate of growth of volume of output found in Pereira de Moura e Amaral (1978) and Wuyts (1989 and 1984) were used to "deflate" GDP and manufacturing output for the period 1975-1983. Once this series was built, it was possible to use price series that overlapped with one or more years of this period to extend data series forward (to 1986) and backward (to 1970). Large inconsistencies were found in official data sets in 1997 relative to 1996 with respect to measurement of output at constant prices, mainly because the methodology and sample coverage were changed. However, using a consistent official real rate of growth it was possible to continue the series until 1999 (the last year with enough data to work with), and then work the series backwards from 1999 to 1959 to test for consistency.

Despite the problems described, it is very likely that the trends and relationships shown by the data are very close to the true trends and relationships, as they are consistent over time and with official data and main historical periods of economic development over the past four decades. A lot more statistical work is required to build completely consistent and more accurate time series data sets for the entire economy at the highest level of disaggregation that is possible and useful. Such a project is, however, far beyond the possibilities, aims and needs of this thesis.

³ PRE is a classical World Bank/IMF program of stabilisation and structural adjustment, introduced in Mozambique in January 1987. Different versions of the program have been adopted in the last 14 years.

Cross-section sets were constructed from the analysis of 1,300 investment projects approved between 1990 and 1999, which are listed in the database of the investment promotion centre (CPI).⁴ This list only includes investment projects that were submitted to CPI in order to benefit from investment incentives. It is likely that the list is biased against small and micro, local projects as these are less likely to have information about the system of incentives and to be able to benefit from it. However, despite the possible bias, the patterns of investment described in this chapter should be very close to the true patterns because: (i) they are consistent with fragmented information from other sources (the central bank, commercial banks, multilateral institutions and financial surveys); (ii) more than two thirds of the projects listed are small or micro, and yet they make little impact upon the analysis of dominant patterns of investment; and (iii) the total sum of the missing small and micro projects may be too small to make a difference.

The analysis of patterns of investment could have been done using panel data in order to discuss changes in allocation of investment over time. The main reasons why panel data analysis was not adopted are: (i) there is an unknown time lag between the approval and implementation of investment projects, which can vary between a few weeks and a few years – this would increase the unreliability of the data analysis had panel data been used; (ii) in the last three year of the period considered, the value of investment approved was more than twice as high as in the previous seven years and 50% of manufacturing investment was allocated to one project. Given the extreme levels of concentration of investment, gains from using panel data to analyse change over time would be minimal.

3.2 Formation of the manufacturing sector – brief periodization

The purpose of this section is to provide a brief historical background of the development of the manufacturing sector in Mozambique that helps to explain its dynamics and structure. The historical process of formation of the manufacturing sector in Mozambique has been described or analysed in several studies or official reports.⁵

Brum (1976) is the first known systematic attempt by a Mozambican economist to describe the fundamental structural weaknesses of the manufacturing sector in Mozambique and their historical origin. He classifies industries into three main categories: (i) export oriented, semi-

⁴ The author would like to thank CPI and its officials for providing the list of projects and facilitating the access to information required for the analysis.

⁵ See Pereira Leite 1989 and Wield 1977a and 1977b for a list and discussion of such studies.

processing of primary inputs (one third of the manufacturing sector and 80% of total exports of goods); (ii) inward oriented, import dependent industries (approximately 40% of the manufacturing sector); and (iii) inward oriented, resource based industries (mainly sugar, cereal milling and vegetable oils). The study identifies two interesting trends in manufacturing. On the one hand, industries that contribute a larger share to manufacturing output tend to have lower value added than the average manufacturing firm. This may be explained by the fact that large, semi-processing, resource-based industries add little value to their output. On the other hand, the MVA share of total manufacturing output tends to decline as manufacturing expands, which may be explained by the gradual diversification of the manufacturing productive structure towards import dependent, inward oriented industries in the later stages of colonialism.

Brum's paper identifies three fundamental structural weaknesses of the manufacturing sector in Mozambique, namely: (i) its narrow specialisation – 85% of total manufacturing output is due to eight industrial branches, and the semi-processing of 10 agricultural products represents 50% of total output; (ii) weak inter-sectoral linkages due to absence of capital and intermediate goods industries; and (iii) concentrated location of the industry in two harbour based cities, Maputo and Beira, mainly because of the import dependence of the manufacturing sector. The paper argues that these characteristics destabilise the rate of industrial accumulation, create macroeconomic constraints to expansion of productive capacities, reinforce the dependence of economic growth upon a narrow set of semi-processed exports and hold back technological progress and the level of productivity.

Despite his interesting contributions to the analysis of the manufacturing sector, Brum failed to understand the historical context in which the manufacturing sector was created and the dynamics of the existing pattern of industrialization. Particularly, he did not pay much attention to the political and economic interest and dynamics that are formed around, and also constitute the basis of, the existing patterns of production and trade. Therefore, his analysis points, wrongly, to simple solutions to problems of industrial accumulation in Mozambique: adequate planning and large capital investment.

Pereira Leite (1989), on the other hand, presents a very detailed study of the manufacturing sector in Mozambique since the late 1920s through to the early 1970s. Her study is remarkable with respect to data sets created, as well as the detailed historical analysis of legislation and policy documents formulated by the colonial government and how they affected the manufacturing sector in Mozambique. Unlike Brum, she identifies the role and influence of political and economic pressures upon the policy regime. However, her study is

so focused on how political and economic pressures in Portugal affected policy regimes and economic developments in Mozambique that she overlooks the importance of the dominant role played by South African and other regional capitalist pressures and interests in shaping the Mozambican economy and manufacturing sector, and the forms of integration of the Mozambican economy within the region.

Wield (1977a and 1977b) and Wuyts (1989, 1984 and 1980a) develop a similar historical periodization and interpretation of the process of economic and industrial development in Mozambique. Wield is more focused on the periodization of industrial development whereas Wuyts is particularly concerned with the periodization of the colonial economy as a whole. The Wield-Wuyts periodization and analysis are summarised in table 3.1.

They identify three major periods in the development of the colonial economy (top half of table 3.1) and five equivalent periods in the development of colonial manufacturing industry (bottom half of table 3.1). In the first period (1885-1926), the colony was rented to foreign (non-Portuguese) capital. Mozambique became an economy of services (providing migrant labour to South African mines and transport services particularly to South Africa and South Rhodesia), and controlled by plantations. Migrant labour generated foreign exchange earnings and fiscal revenue for the Portuguese administration, and became the single most important source of finance for, and engine of differentiation of, the peasantry in the South.⁶ Plantations in the Centre and North of the country held formal political and economic power that was also used to protect them against competition for labour from South African mining capitalism. In this period, manufacturing was mainly limited to a few plantation related semi-processing industries (sugar, copra and sisal) and very small cereal milling units.

The second period (1926-1960) corresponds to the emergence of fascism and economic nationalism in Portugal, which introduced the policy of economic integration and specialisation within the Portuguese economic space, and the policy of financial austerity and autonomy in the colonies that would allow investment to be centred in Portugal. Both policies resulted from attempts to respond to political and economic pressures resulting from fiscal and current account deficits, expansion of emerging Portuguese monopoly capital, as well as from the interests of Portuguese settlers and the political liability that unemployed, proletarian peasants and industrial workers in Portugal represented for the fascist regime. The policy of integration led to Mozambique becoming a provider of raw materials for Portuguese industry

⁶ See, for example, CEA 1979a and 1979b, O'Laughlin 1981 and Wuyts 1981.

(mainly cotton), an importer of manufactures from Portugal (consumer, intermediate and capital goods) and a settlement location for more than 200,000 Portuguese citizens.

Economic integration created new pressures and forced new developments. Settlers became relatively powerful interest groups with ability to invest in industry, and agriculture and trading activities could no longer absorb the entire colonial population. The domestic market for manufactures expanded and so did the supply of labour with industrial experience. The restructuring and modernisation of Portuguese industry created a supply market for second hand industrial equipment. On this basis (availability of finance, markets, industrial labour and equipment), import dependent inward oriented industries, which were not allowed to compete with exporting and inward oriented industries based in Portugal, started to develop.

The policy of financial austerity and autonomy forced the Mozambican economy to find alternative sources of finance and, in the process, to become more dependent upon the "export" of migrant labour and transport services to the Southern African region. Three dynamic effects compounded this process of regional integration. First, the policy of integration in the Portuguese economic space contributed to the deterioration of the Mozambican trade balance vis-à-vis the "escudo area", thus sowing the seeds for the crisis in the 1970s and making the Mozambican economy more dependent upon regional integration in Southern Africa. Second, the development of inward oriented, import dependent industries contributed to make South Africa the second trading partner of Mozambique. Third, pressures to increase investment under financial constraints at the end of the period led to the policy of "open doors" to foreign direct investment, which encouraged expansion for some sectors of capital in South Africa and the region into the Mozambican economy.

Finally, economic integration in the escudo and Rand areas forced the rationalisation, institutionalisation and expansion of forced labour, in order to guarantee supply of cheap labour to small and medium farmers, as well as peasants' participation in cash crop production. The colonial administration mediated between different fractions of capital – mining, plantations, small and medium colonial farmers, large and retail traders involved in rural commercialisation – to guarantee that labour would remain available and cheap despite the increasing pressures put by various processes of accumulation upon labour.⁷

⁷ See Bowen 2000, O'Laughlin 1981 and Wuyts 1989 and 1981 for a detailed analysis of the different forms by which the colonial state, together with different fractions of capital, organised the recruitment of labour in order to keep it available and cheap despite competing labour demand pressures.

The third period (1960-1974) was characterised by four distinct factors. First, political pressures, mainly associated with the national liberation war, forced the colonial state to encourage investment in Mozambique and formally abolish forced labour. Labour became significantly more expensive because of the combined effect of abolition of forced labour and very low labour productivity and skills. Increasing industrial and export market demand for local raw materials and consumer goods also intensified the pressure upon peasants to produce more commercial surplus. As a result, labour demand pressures increased, forcing capital to invest in machinery and equipment. However, the war effort had aggravated the fiscal and balance of payment constraints, and Portuguese monopolies could not, by themselves, assume the financial responsibility for the entire development programme.

This led to the second characteristic of the period: the adoption of the "open door" policy to attract inflows of FDI to Mozambique, on its own or in joint ventures with Portuguese capital, mainly for investment in areas where Portuguese capital could not cope by itself. The more widespread form of foreign participation was foreign technical control (for example, patent and turnkey agreements). Of the 13 industries already existent prior to this period, two were developed through joint ventures and four received foreign technical assistance. Of the 12 new industries created during this period, four were developed through joint ventures and eight benefited from foreign technical assistance. Due to particular economic pressures and the regional economic influence of the minerals and energy complex of South Africa, FDI in Mozambique was mainly concentrated in minerals and energy, transport and transport equipment and smelting of basic metals. The mega projects of the period were the oil refinery and the large hydroelectric dam, Cahora Bassa (HCB), located by the Zambezi River, in Tete. Both projects were joint ventures (the majority shareholders of HCB were the South African and the Portuguese governments).⁸

⁸ Despite its size, Cahora Bassa can only generate about 40% of the energy that can be processed and distributed through Motraco, the power station that feeds the large aluminium smelter in Maputo, Mozal. For details about this project, refer to subsequent sections and chapters of this thesis.

Table 3.1: Wield-Wuyts periodization of colonial economic and industrial development in Mozambique.

General Periodization of the Colonial Economy in Mozambique			
1885-1926	1926-1960		
<p>Berlin Conference (Portugal not invited).</p> <p>Colonies rented to foreign (non-Portuguese) capital.</p> <p>Migrant labour to South African mines in the South of Mozambique: revenue of foreign currency, fiscal and finance for agriculture.</p> <p>Development of the Maputo harbour and corridor.</p> <p>Plantations in the Centre of (sugar, sisal, copra, oil seeds): plantations have political and economic power and state organises labour reserves.</p>	<p>Fascism, economic nationalism and the Portuguese spacc economy – the project of economic integration and specialisation within this space.</p> <p>The economic roles of the Mozambican economy: (i) provision of raw materials to Portuguese industry (particularly cotton) and exports; (ii) market for Portuguese manufactures and development of inward oriented import dependent industry that would not compete with Portuguese exports and import substitution industries in Portugal; (iii) absorption of proletarian peasants and unemployed industrial workers from Portugal. The number of Portuguese settlers quadrupled between 1940 and 1960.</p> <p>Financial austerity imposed in the colonies to promote growth of industrial capital in Portugal led to policy of financial autonomy of the colonies; this reinforced dependence of Mozambican economy upon migrant labour and export of services to the Southern African region, particularly South African mines. Forced labour was rationalised, institutionalised and expanded so that small and medium settler farms could have access to labour despite the dominance of plantations and labour migration to South Africa.</p>		
	1960-1974		
	<p>Crisis and restructuring of colonial economy – resulting from political pressures (national liberation movement, de-colonization in Africa, neo-colonial pressures by settlers in Mozambique, international pressures against forced labour). Political pressure in South Africa (Sharpeville) and South Rhodesia (UDI).</p> <p>Need to restructure labour relations and organization because: (i) Labour costs rise because of abolishment of forced labour and low productivity; and (ii) Competing labour demand pressures. Need to modernise.</p> <p>Political and economic pressures lead to policy of "open doors" to foreign capital. Portuguese and non-Portuguese large capital start to merge.</p>		
General Periodization of Industrial Development in Mozambique			
Before World War I	The 1950s	The 1960s	Early 1970s
<p>Growth and consolidation of agro-industries for export</p> <p>Semi-processing of sugar, sisal and copra for export associated with plantations.</p> <p>Basic cereal processing (maize).</p> <p>Large trading companies for export of semi-processed commodities and unprocessed maize, rubber, bee wax, ivory, nuts and coconut.</p> <p>Gold mining – short-lived.</p> <p>Railways associated with plantations and migrant labour.</p>	<p>Expansion and consolidation of inward oriented industries</p> <p>Fast manufacturing output growth in exporting sectors: cashew processing (new), sugar (increases 6 times), tea (3), cotton (6), copra and sisal did not increase significantly.</p> <p>But inward oriented industries diversified and grew much faster than exporting industries: new industries included textiles, paper, chemicals (mainly consumer goods), metals (construction materials and consumer goods) and glass.</p> <p>Composition of manufacturing output changed as the share of exporting industries declined.</p>	<p>Modernisation of industrial capital</p> <p>Manufacturing output trebled, but MVA share of manufacturing output declined. Large investments in capital (second hand equipment)</p> <p>Role of foreign (non-Portuguese) capital increased: FDI, joint ventures and technical control (minerals, energy, chemicals and banking).</p>	<p>Crisis of accumulation</p> <p>Fiscal and balance of payment pressures, as well as the economic and political costs of the national liberation war, lead to constraints to expansion, modernisation and diversification, and eventually to decline, of manufacturing output.</p>

Source: Wield 1977a and 1977b, and Wuyts 1989, 1984 and 1980a.

The third characteristic of the period was that manufacturing output trebled. However, the MVA share of GDP remained relatively stable at about 9%, whereas the services share of GDP increased to about 60%. Services contributed 64% of total export revenue, whereas manufacturing represented only 23%. The manufacturing sector remained narrow and unbalanced: 50% of manufacturing output and 57% of manufacturing exports were due to processed cashew kernels, sugar and molasses, tea and copra. The expansion of the manufacturing sector was also accompanied by strong balance of payment pressures: between 1968 and 1971 the current account deficit reached US\$50 million, despite a positive balance of services of over US\$100 million, and import coverage ratio reached a record low (for the period) of 51% (graphs 3.18 and 3.20).

Hence, the fourth characteristic of the period was the crisis of accumulation at the end of the colonial era that affected the economy as a whole and the manufacturing sector in particular because of its narrow specialisation, weak inter- and intra-sectoral linkages and dependence upon imported equipment, parts, technical assistance, fuels and other material inputs. Between 1974 and 1976,⁹ the economy as a whole, and the manufacturing sector in particular, followed a sharp negative trend. This was due to a combination of factors, namely the crisis inherited from the end of Portuguese colonialism, abandonment and sabotage of productive assets by colonial owners, departure of foreign skilled workers, managers and engineers, de-investment by large FDI based projects and the inexperience of the new government.

The Mozambican government established a recovery programme for manufacturing that aimed at reaching in 1981 the production levels of 1973. The program was focused on reorganisation and rationalisation of the industrial structure, re-establishment of management capacities in the abandoned firms, provision of raw materials and parts and profound reorganisation of labour relations through the creation and empowerment of trade unions. Large and strategic firms were nationalised, other abandoned firms were put under state administration, fragmented production lines were specialised and combined, and import and export state owned companies were created. At the same time, the government initiated the formulation of the accelerated industrialisation program.¹⁰ Between 1977 and 1981, manufacturing output increased by 25%, reaching 78% of the level of production in 1973.¹¹

⁹ Mozambique achieved national independence from Portuguese colonialism on the 25th of June, 1975.

¹⁰ See, for example, GOM 1978.

¹¹ See Castel-Branco 1994b and Wuyts 1989 and 1984.

By 1980, the government introduced the prospective indicative plan (PPI), which aimed at eliminating underdevelopment and building the basis for "advanced socialism" in ten years. The plan consisted of three fundamental programmes: collectivisation of the countryside, accelerated industrialisation and education and training. It was rested upon four assumptions: (i) COMECON would provide the huge amount of financial resources required; (ii) peace would be re-established after the liberation of Zimbabwe, such that normal social and economic activity could be resumed, destruction of productive assets stopped and defence expenditure reduced; (iii) the dominant sources of foreign exchange and employment (migrant labour to South African mines and transport services) would be reactivated; and (iv) economic growth would provide the long-term savings and foreign exchange required for investment. Hence, over-optimistic expectations, which are well captured by the planned increase in the size of the economy by 5 times in 10 years, were created. None of these assumptions materialised¹² which, combined with the oil crisis of the early 1980s, put extreme pressures upon Mozambique's ability to develop.

The ten year investment programme, focused upon mega projects, collapsed after only three years because investment resources, in particular foreign exchange and public savings, were exhausted. Industrial mega projects were either started and not completed (such as Mocuba's textile factory and Beira's agricultural equipment factory) or not started at all. Existing industrial firms were squeezed of resources because of economic decline, the cost of war and the priority given to mega projects that never had the opportunity to produce. By 1986, manufacturing output was 42% of the level achieved in 1981. In 1987, the WB/IMF supported economic recovery program (PRE) was introduced.¹³

3.3 Characteristics of the manufacturing sector

This section illustrates, empirically, the main characteristics of the manufacturing sector and its role within the Mozambican economy, by using long-term time series data sets. The section contains two major parts. The first discusses the data at a more aggregate level in order to situate the manufacturing sector within the economy as a whole. The second

¹² See Castel-Branco 1996, 1994a and 1994b, and Wuyts 1989. Fundamentally, (i) COMECON refused to assume the responsibility to sustain the entire Mozambican development programme; (ii) the apartheid regime in South Africa (a) intensified the military aggression against Mozambique directly and by reorganising and using terrorist guerrilla groups, and also (b) imposed unofficial economic sanctions against Mozambique by reducing dramatically the recruitment of migrant labour and the transit of commodities through the port of Maputo, and by revaluing the terms of trade of gold in the payment of deferred migrant workers' wages; (iii) the economy declined.

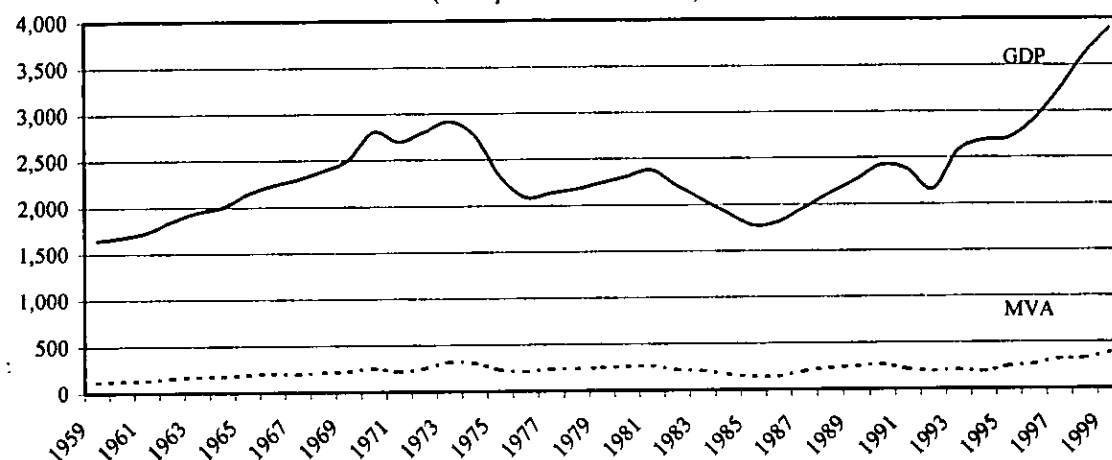
¹³ See Castel-Branco 1996 and 1994b and Wuyts 1989.

disaggregates manufacturing output and exports in order to provide clearer insights into the process of specialisation internal to the sector, as well as into the sources of growth of manufacturing. It also highlights what might be the potential and limitations of long-term growth of manufacturing, by taking into account current trends and past experience.

GDP, MVA and exports – structures and trends

Graph 3.1 shows that the Mozambican economy has been characterised by frequent booms and busts caused by different factors. Economic expansion in the 1960s was followed by balance of payment pressures that forced economic contraction in the early 1970s and again after 1974. The impact of sharp changes in political and economic conditions discussed in the previous section are also observable: decline during transition from colonialism (1974-1976); economic recovery until 1981 that resulted from economic reorganisation and rationalisation; sharp decline following the collapse of the PPI (1982-1985) and intensification of the war; sharp recovery due to increase in aid flows following the adoption of PRE in 1987; decline due to reduction of multilateral aid during the negotiation of a new ESAF (1990-1992); and economic growth that followed the end of war and the intensification of aid and FDI inflows.

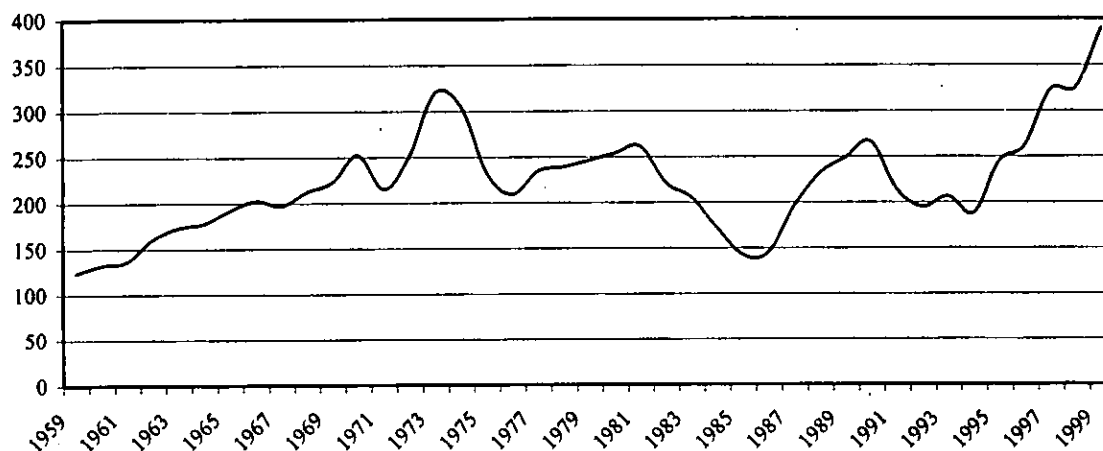
Graph 3.1: Trends in GDP and MVA
(1996 prices - US\$ million)



These trends are significantly more pronounced in manufacturing (graph 3.2). Because of its import dependence, this sector is more vulnerable to the performance of the economy as whole, in particular to factors that determine the ability to invest and import. Its simple production processes, concentration around cities and infrastructures and huge under utilised capacity makes easier for manufacturing to recover faster when finance and foreign exchange are available at affordable prices. Hence, between 1987 and 1989 manufacturing grew much

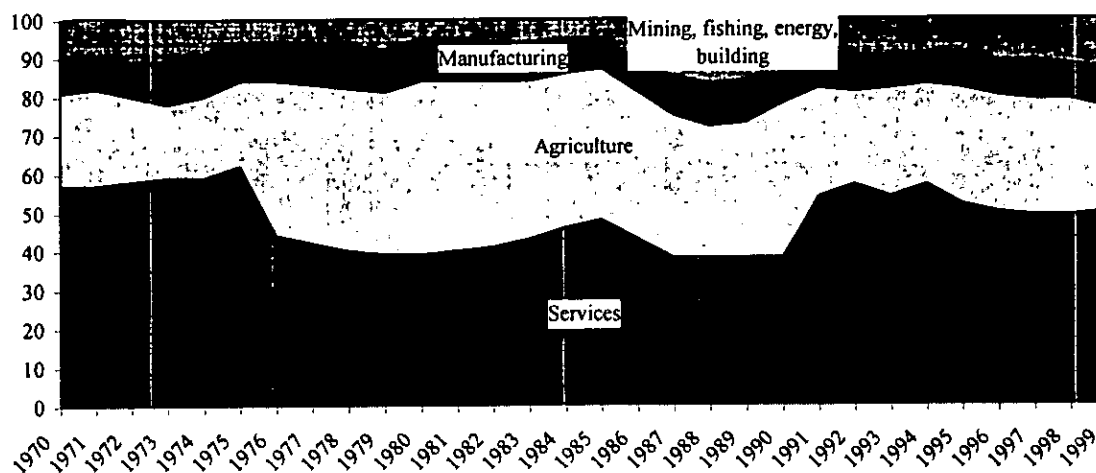
faster than the rest of the economy, which also led to firms building large stocks of final products, particularly in the industries that supplied rural areas.¹⁴

Graph 3.2: Manufacturing Value Added
(1996 prices - US\$ million)



Services constitute the main component of GDP (graph 3.3). Its share declined between 1976 and 1990 mainly because of the impact of the application, by Mozambique, of UN mandated economic sanctions against South Rhodesia (1976-1980) and the impact of the war on rail transport to and from South Africa and Zimbabwe. In the 1990s, after the end of the war, the dominant position of services in GDP was recovered as a result of increase in trade and domestic road transports, and rail transports to and from neighbouring countries.

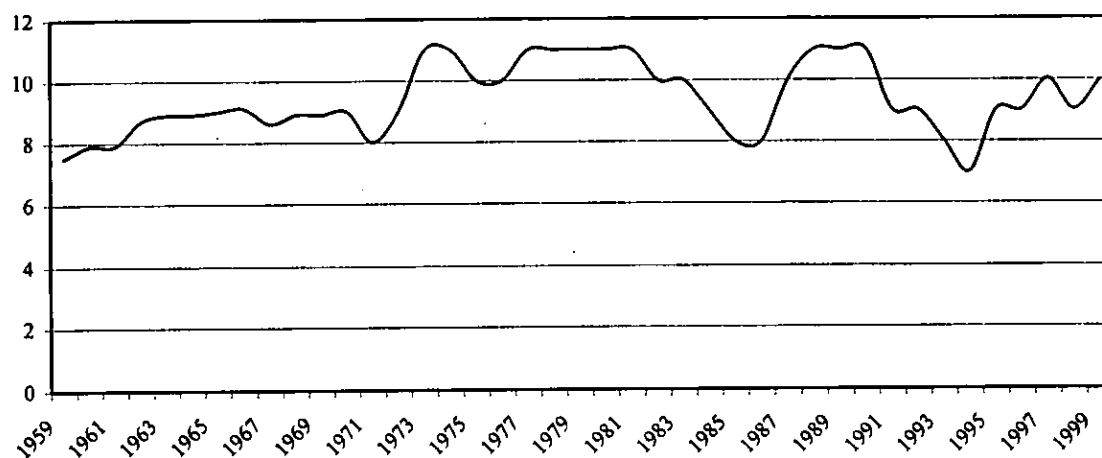
Graph 3.3: Sectoral composition of GDP
(percentage)



¹⁴ Castel-Branco 1994b. For a discussion of under-utilisation of productive capacity and output growth see Biggs, Nasir and Fisman 1999, Castel-Branco 1996 and 1994b, and GOM and UNIDO 1993.

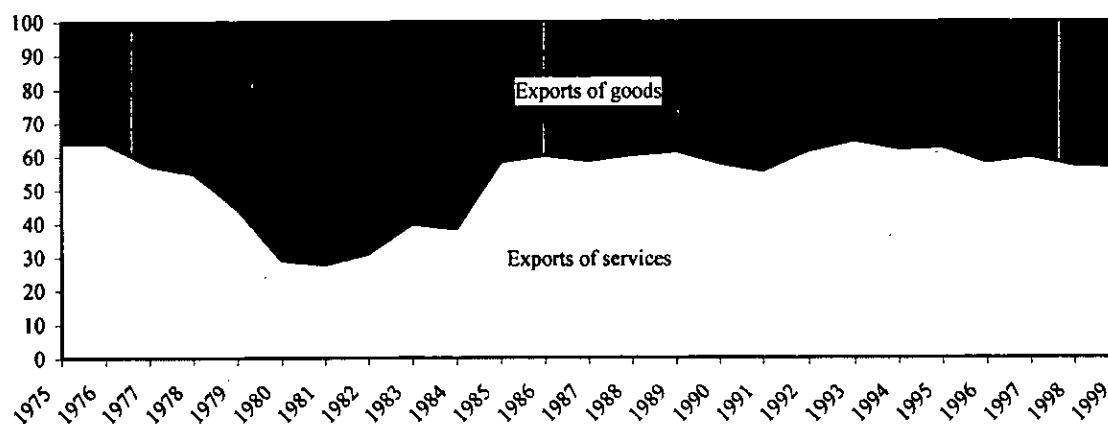
Graphs 3.2 and 3.4 show that MVA share of GDP has fluctuated around an average of 9.5% over the last four decades. Graph 3.4 shows this fluctuation more clearly and over a longer period. It is interesting to notice that MVA share of GDP changes dramatically when the economy moves into periods of negative or positive growth, thus confirming that the instability of trends in manufacturing output is stronger than in the economy as a whole. In two occasions, only, has MVA share of GDP been over 10%. One was between 1977 and 1981, because of the combined effect of a fall in the services share of GDP and the impact on manufacturing output of the dramatic increase in the value of exports of (imported) oil and oil products to South Africa. The other was between 1987 and 1989, because manufacturing was the main growth sector of the economy during the first three years of the neo-liberal economic reform programme (due to the impact of the war on the others sectors, the concentration of manufacturing in the cities and the focus of the economic program on the rehabilitation of existing capacities where security conditions allowed). With the introduction of FDI driven mega projects, such as Mozal (a mega aluminium smelter), it is likely that MVA share of GDP will increase significantly.

Graph 3.4: MVA share of GDP
(percentage)



The dependence of the economy upon services is also demonstrated by the structure of exports. Graph 3.5 shows that, with the exception of the period between 1977 and 1984 (which was influenced by the application of economic sanctions against South Rhodesia and the boom of the value of exports of oil and oil products), services (mainly proceeds from rail transports to and from South Africa and Zimbabwe, but also tourism) have contributed more than 60% of total export revenue despite the war (1976-92).

Graph 3.5: Share of services and goods in total exports
(percentage)



Disaggregation of manufacturing output and exports – structures and trends

Over the last four decades, 70% of manufacturing output has been produced by two industries: food, beverages and tobacco, and textiles and clothing. The share of capital goods industries (metal products, machinery and transport equipment) has declined and the contribution of intermediate goods industries (chemical and oil products and non-metallic mineral products) has fluctuated around a stable percentage (the variation in the share of chemicals between mid 1970s and early 1980s is due to the oil boom). The share of other manufacturing industries has remained fairly constant, which shows that manufacturing has not been able to diversify in a significant way. In the last five years of the period under consideration, the structure of manufacturing production has become narrower (graph 3.6).

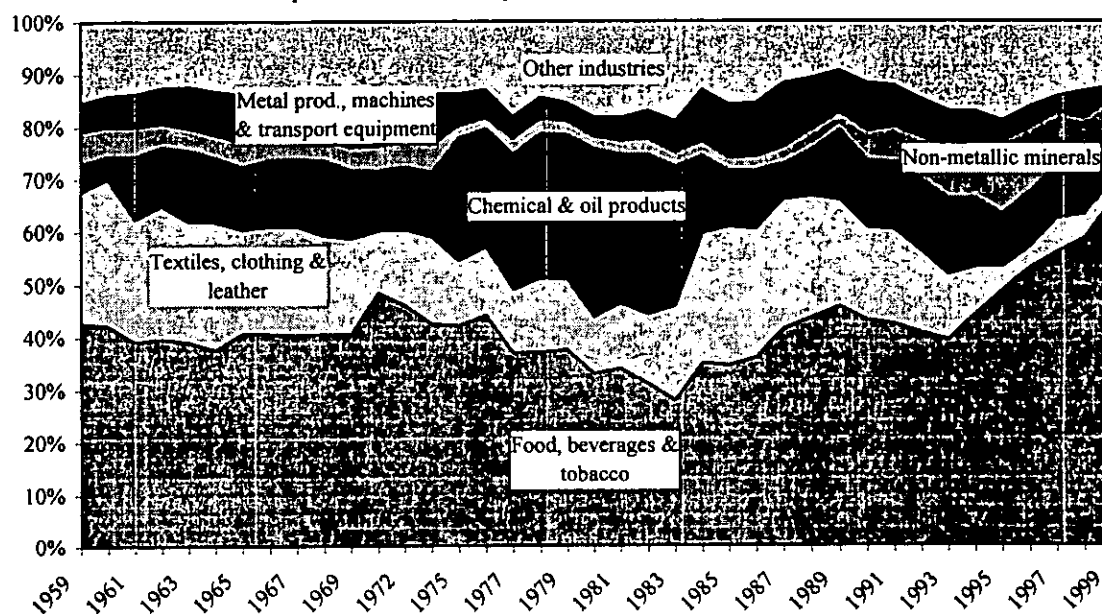
Graphs 3.7 shows that the composition of output of the food, beverages and tobacco industry has changed over time. The most dramatic change is the rise and total collapse of the cashew processing industry and the gradual disappearance of tea as an important component of the industry. Whereas production of tea was destroyed by the war, cashew processing was eliminated through policy.¹⁵ Sugar output also varied significantly mainly because of the war and disinvestment strategies adopted by plantations in the transition to independence (1974-1976).¹⁶ On the whole, beer, cereal milling, soft drinks and sugar represent 70% of the output of the food and beverages industry, and about 50% of total manufacturing output. Relative to the late 1950s and early 1960s, the specialisation of the food industry has become narrower. Despite the growth of the combined share of vegetable oils, copra, pastries and bakery, it can

¹⁵ See discussion in Chapter 5 and Cramer 1999.

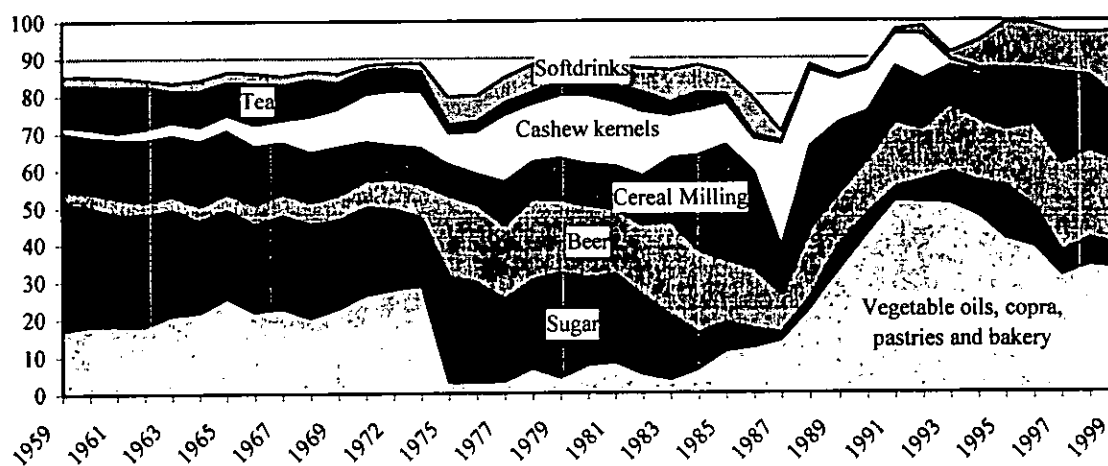
¹⁶ See Chapter 5. On the disinvestments strategy of plantations, see Wuyts 1984 and 1989.

be seen that whereas in 1959 seven industries represented 85% of total output of the sector, in 1999 the share of the main five industries was 95%.

Graph 3.6: Sectoral composition of manufacturing output



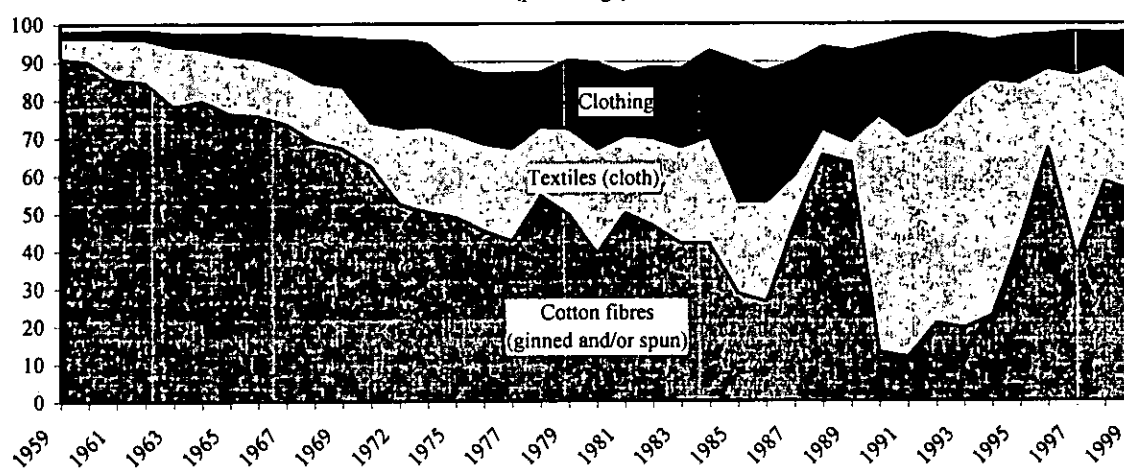
Graph 3.7: Composition of output in the food, beverages and tobacco industry (percentage)



Some degree of diversification has occurred within the textiles, clothing and leather industry, as the share of cloth and clothing increased and the share of cotton fibres declined slightly (graph 3.8). However, it is important to put these changes into context. First, this was one of the last industries to be established prior to independence because of the colonial policy of not allowing the establishment of industries in Mozambique that could compete against exports and import substitution by Portuguese based industries (see section 3.2). Second, over time there has been a significant decline in the industry's share of manufacturing output. The

decline was significantly more pronounced in cotton fibres because of the crisis of the plantation economy at the end of the colonial era and because of the war. After the end of the war (1992), cotton fibres recovered a dominant share of the output of the textile industry. Third, Mozambican officials have acknowledged that a significant share of what is recorded as production of clothing and cloth consists of re-exports, by Mozambican firms, of clothing and cloth imported from India after the labels of origin are changed. This problem, identified in exports of cloths and clothing from Mozambique to South Africa, illustrates that Indian exporters, to avoid protection of Southern African markets that is guaranteed by the rules of origin agreed by SADC, have used Mozambique as a passage into the region.¹⁷

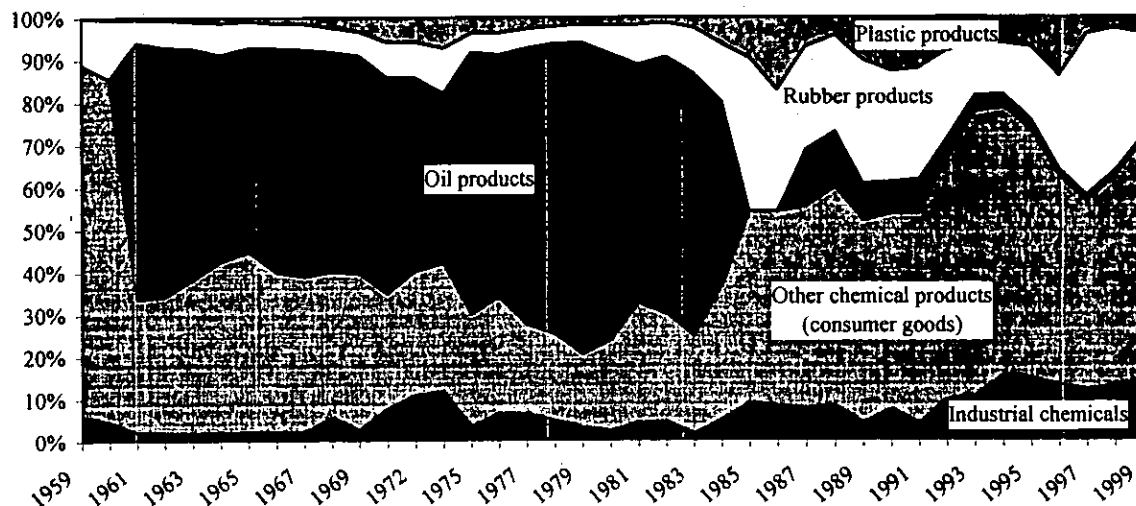
Graph 3.8: Composition of output in the textiles, clothing and leather industry (percentage)



The chemical and oil industry, in addition to being a small and declining share of total manufacturing output, has been strongly dominated by oil and oil products and consumer goods (mainly hygiene products) (graph 3.9). Thus, the contribution of chemicals as material inputs is significantly smaller than it looks from graph 3.6. The oil component of the industry collapsed after the closure of the oil refinery in Matola (outskirts of Maputo). However, Mozambique maintained storage capacity for oil and oil products in transit to South Africa and Zimbabwe, and the value of this transaction continues to be recorded as part of the output of the industry. The share of basic industrial chemicals has doubled over 40 years but is still less than 1% of total manufacturing output. According to GOM and UNIDO (1993) and UNIDO (1987), the Mozambican economy imports 96% of chemical-based material inputs. A significant change in the industry occurred in rubber products, whose composition shifted from simple components for the building industry to car tyres. On the whole, the industry continues to be narrowly specialised and heavily import dependent.

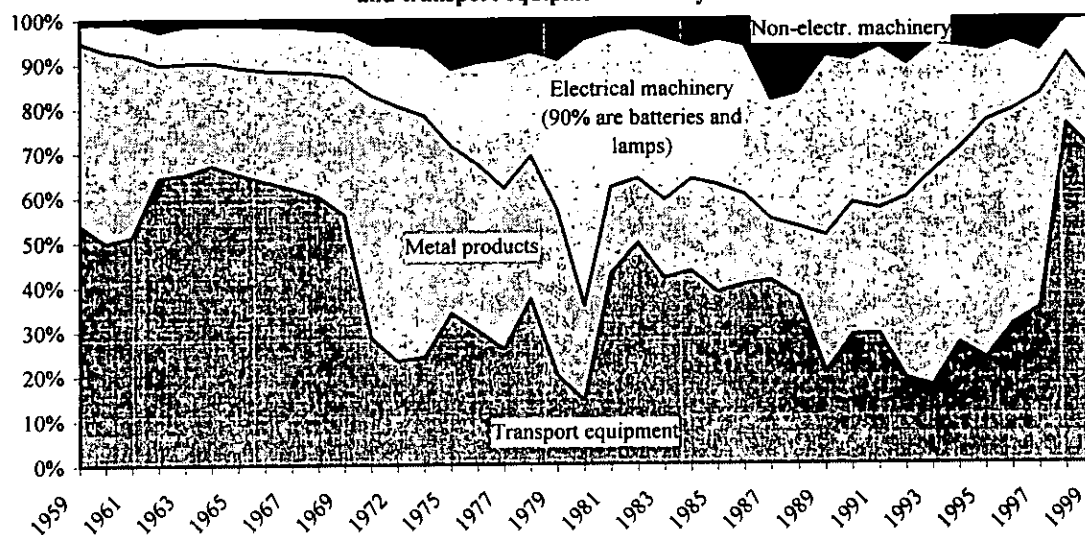
¹⁷ Interview with Luís Siteo, national director in the Ministry of Industry and Trade (MIC).

Graph 3.9: Composition of output in the chemical and oil industry



Graph 3.10 shows that the composition of output of the metal products, machinery and transport equipment industry is skewed towards transport equipment, which has become even more dominant (75% of the output of the industry) in the last two years. About three quarters of the output of transport equipment consists of repairs of ships, trucks, wagons and rolling stock, as well as production of rail track sleepers. There is one factory that assembles vans, buses and tucks, and a few that produce simple parts. The production of machinery is declining. Non-electric machinery, mainly agricultural equipment, collapsed,¹⁸ and electric machinery became narrowly concentrated on the production of batteries and lamps.

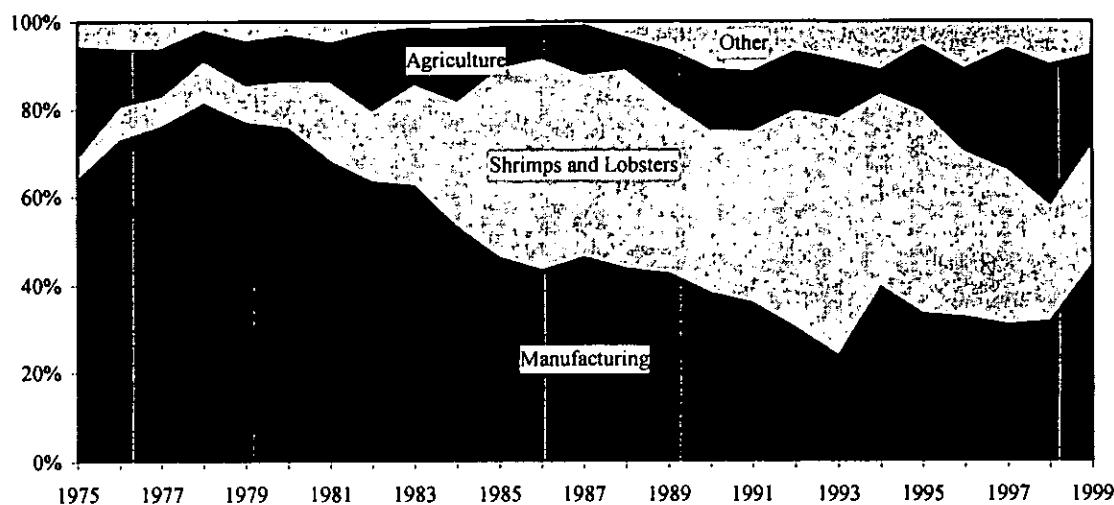
Graph 3.10: Composition of output in the metal products, machinery and transport equipment industry



¹⁸ See the debate in Chapter 5 about linkages.

Manufacturing has played an important role in exports, but clearly not a dominant one. Quite apart from the fact that services dominate total export revenue, the structure of exports of goods is indicative of some of the processes of crisis and restructuring that have affected the economy (graph 3.11). Manufacturing was the single largest exporter of goods until the early 1980s, mainly because of cashew processing (from the early 1970s, and cotton before that) and oil derivatives (graph 3.12). The disappearance of cement, sisal, tea and oil derivatives explains the declining share in exports of manufactures, which, by 1987, were strongly dependent upon cashew processing. The share of manufacturing exports increased again from 1993: the two observable peaks (1993 and 1999 in graph 3.11) are due to cotton (ginned and spun) and the return of oil derivatives (graph 3.12). Two crucial characteristics to notice about manufactured exports are: (i) their narrow specialisation that has been maintained over the long run and has become narrower at the end of the period under consideration, as 80% of manufactured exports in 1999 were due to oil derivatives, sugar, cotton fibres and copra; and (ii) the instability concerning the share of each industry in manufacturing exports, which reflects processes of continuous boom and bust that affect each industry. Both characteristics, which had already been noticed with respect to manufacturing output, confirm that no significant import substitution and diversification have taken place.

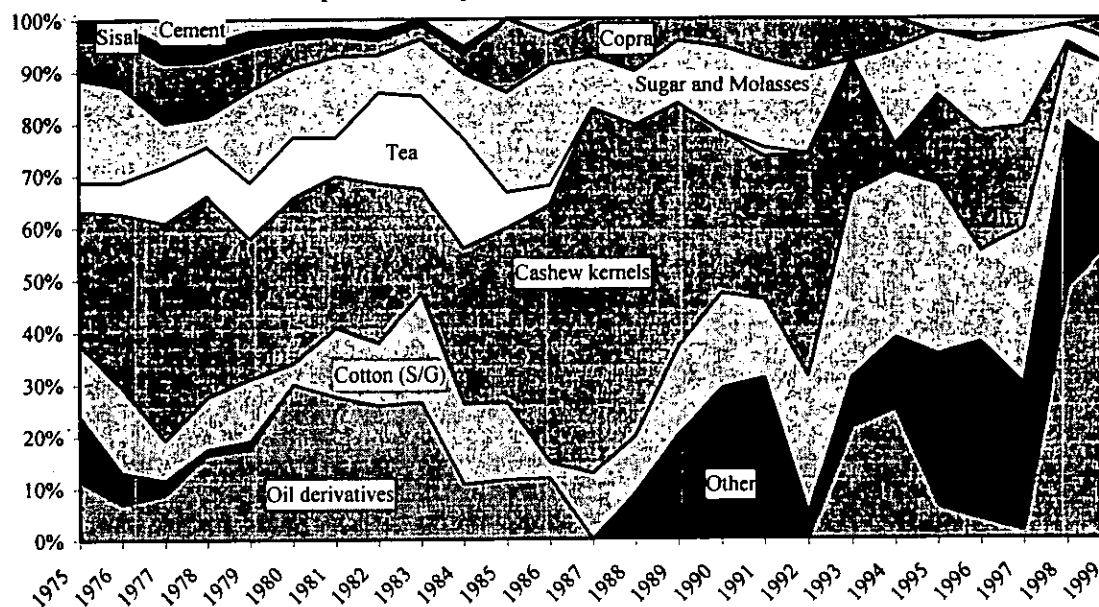
Graph 3.11: Sectoral Composition of Exports of Goods



Unprocessed shrimps and lobsters became the single most important exporting commodity between the mid 1980s and mid 1990s, reaching a peak in 1992 with 50% of exports of goods. The relative decline of its share is mainly associated with the increase in exports of

agricultural and manufacturing goods. The share of agriculture in exports¹⁹ increased significantly from 1994, mainly because of exports of unprocessed cashew nuts that replaced the exports of processed kernels, which collapsed.²⁰

Graph 3.12: Composition of manufacturing exports



To summarise, the manufacturing sector in Mozambique represents a small share of an economy dominated by its forms of integration within the Southern African region. Thus, not only are services the dominant component of GDP and export revenue but dramatic increases in manufacturing have resulted from processes associated mainly with the South African economy: export revenue, oil and oil derivatives and, most recently, massive inflows of FDI in minerals (aluminium and iron) and energy.

The aggregate growth trend of MVA is very unstable, which is indicative of the lack of sustainability of accelerated expansion of the sector due to different political and economic conditions of which macroeconomic pressures seem to be amongst the most important (the next section discusses this point). This instability is even more pronounced in three other trends: the industry composition of manufacturing output; the composition of output inside each industry; and the industry composition of manufacturing exports. This instability at

¹⁹ All agricultural based products that go through some level of industrial processing prior to export (sisal, tea, sugar and molasses, copra, cashew kernels, cotton ginned and spun) are counted as manufacturing exports. Thus, agricultural exports are exclusively unprocessed goods or those whose level of processing is either unknown or insignificant.

²⁰ See chapter 5 and Cramer 1999 for a discussion of this process.

disaggregated level calls attention to the short cycles of boom-bust faced by industries and firms, which contribute to preventing fast and sustainable industrial growth, investment and diversification for long periods of time. This may be due to macroeconomic pressures caused by import dependent expansion, but also by the inability of industries and firms to acquire solid competitive capabilities that accumulate and enable them to develop.

Over time, manufacturing output has become more narrowly specialised and production of capital and intermediate goods had declined even further, both in absolute and relative terms, to about 3% of total manufacturing output. This trend may prevent further expansion of the manufacturing sector because it is likely to increase macroeconomic pressures particularly associated with the trade deficit. Moreover, this type of specialisation may delay technical change and prevent rapid productivity increase that the manufacturing sector in Mozambique needs. The current form of specialisation may change once Mozal and other mega projects (such as the Maputo Steel and Iron Project) initiate operation at close to full capacity. However, it should be noticed that then manufacturing output would become dominated by two projects specialised in production of primary products, only this time the commodities are aluminium and iron instead of beer, sugar and cotton. Whereas the contribution of mega projects to the economy, through their export potential and higher levels of organization and productivity, should not be underestimated, their development potential should not be overestimated particularly because of the lack of complementarity with the rest of the economy and narrow specialisation.²¹

3.4 Investment, growth, trade balance and finance

This section demonstrates the dynamic link between manufacturing production and macroeconomic conditions by describing empirically and analysing the relationship between investment, growth, the trade balance and the financing of investment.

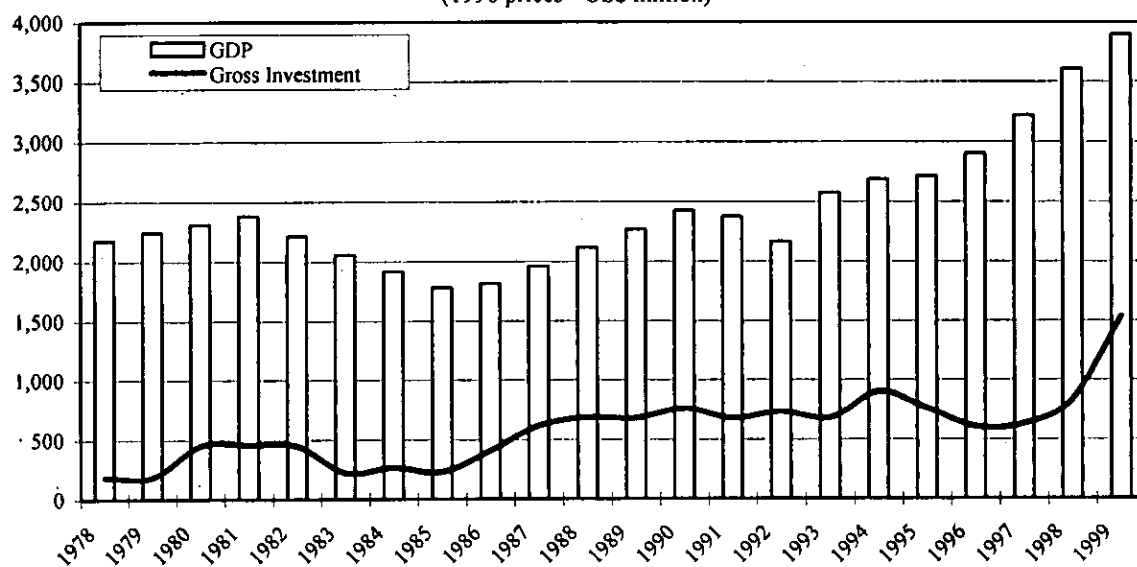
Investment and economic growth

Graphs 3.13, 3.14 and 3.15 illustrate the symbiotic relationship between investment and economic performance, namely growth of GDP, MVA and manufacturing output, and exports of goods. Investment is affected by the export performance of the economy because of the

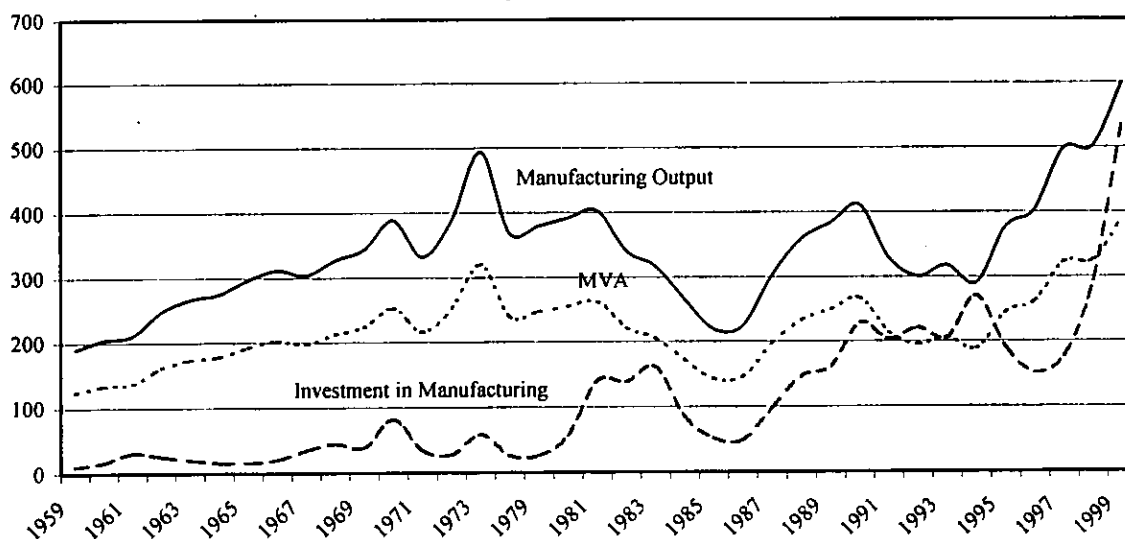
²¹ See discussion in Chapter 5.

need to finance imports upon which investment depends (see graphs 3.22 and 3.25). It is also influenced by economic growth particularly if exports grow and confidence increases. In turn, investment affects economic performance in two ways: (i) positively, by expanding and/or modernising productive capacity; (ii) negatively because of the pressures that economic expansion puts upon the balance of payments, given the import dependence of the productive capacity in Mozambique (see graph 3.22).

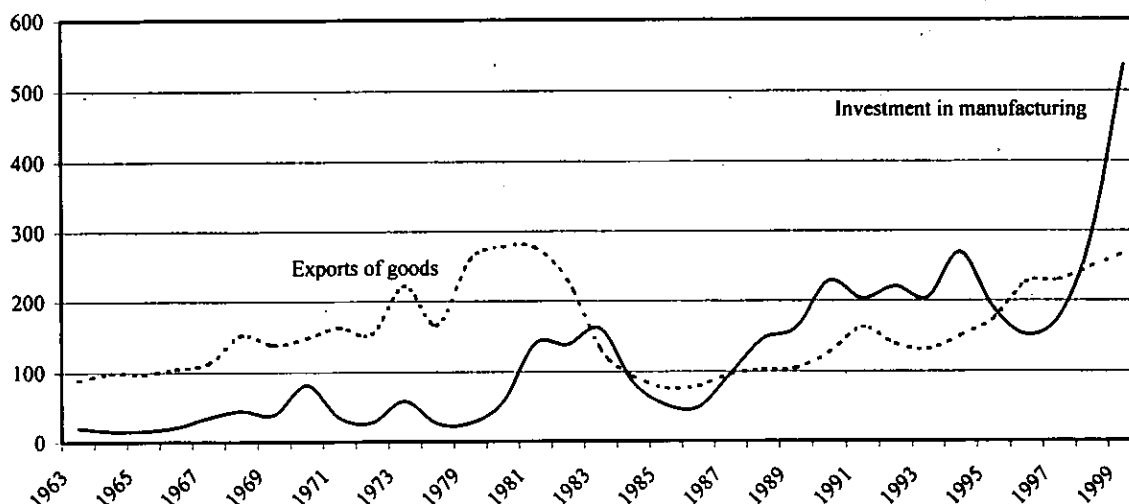
Graph 3.13: GDP and Investment
(1996 prices - US\$ million)



Graph 3.14: Manufacturing output, MVA and investment in manufacturing
(1996 prices US\$ million)



Graph 3.15: Investment in Manufacturing and Total Exports of Goods
(1996 prices - US\$ million)

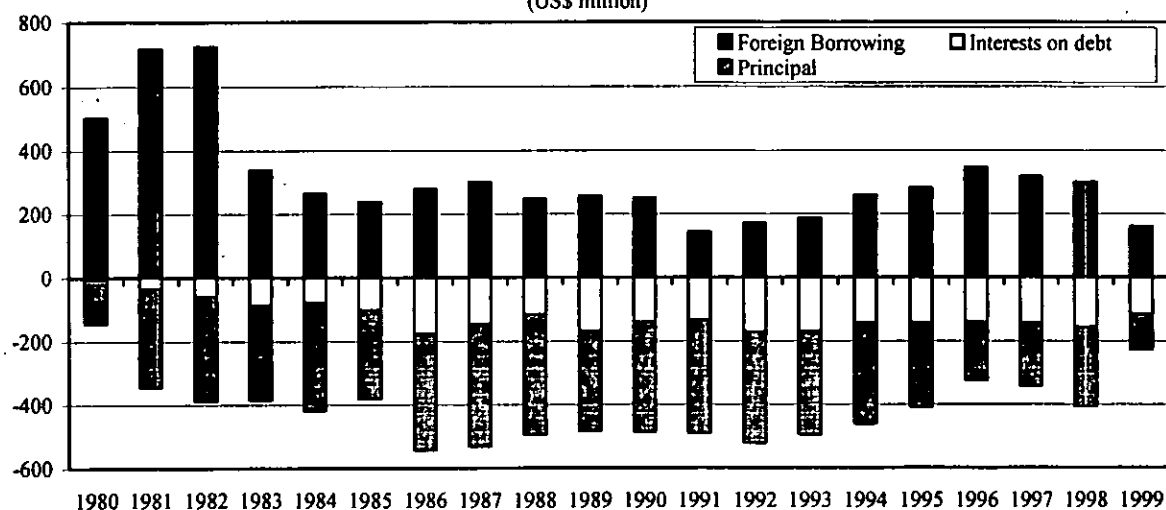


The relationship between investment and economic performance was very close up to 1980: GDP, manufacturing output and MVA grew with investment (graphs 3.13 and 3.14); and investment followed the trend in exports in the previous year (graph 3.15). The close relationship between trends in investment and economic growth was broken around two periods. Between 1981 and 1983, investment and economic growth moved in opposite directions. This was the period of the PPI, which is associated with massive increase in investment in large projects. Quite apart from a time lag between investment and output growth, which is more noticeable with large investment programs, the investment plan for manufacturing had three negative effects. First, it crowded-out finance, in particular access to foreign exchange, for existing small and medium firms, which faced strong constraints in the acquisition of material inputs, fuel and parts. Therefore, existing capacity became largely under-utilised as the average rate of capacity utilisation in manufacturing dropped to 20%.²² Second, most large projects were either not completed or did not receive the material inputs to work at close to full capacity. Third, massive investment financed through foreign borrowing quickly resulted in unsustainable debt service that forced the investment programme, and the projects associated with it, to collapse (graphs 3.14 and 3.16). In 1994-96, recovery in the rate of capacity utilisation involving very little investment explains why output and MVA continue to grow and investment fell. The very pronounced increase in investment after 1997 is explained by the large projects: sugar, cement, beer and, above all, Mozal and Motraco

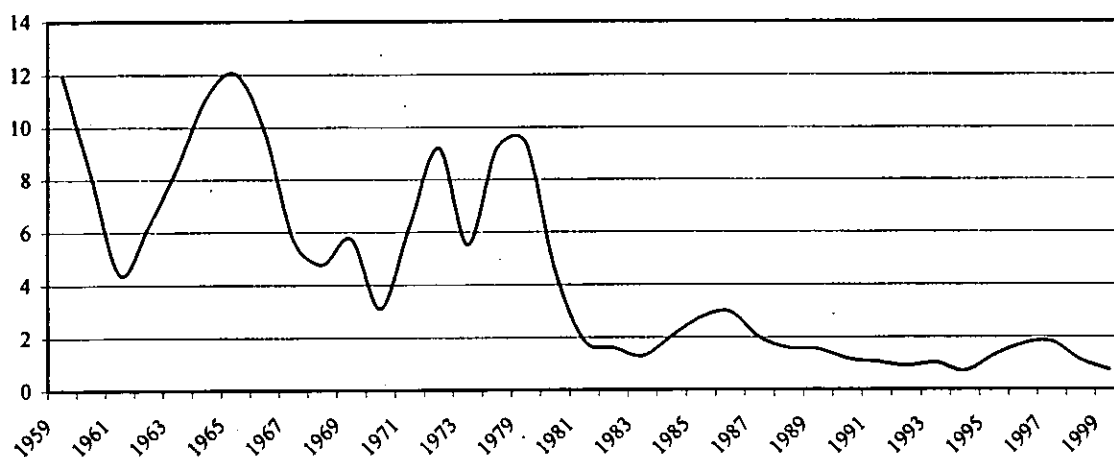
²² See Castel-Branco 1994b, GOM and UNIDO 1993, and UNIDO 1987 for data on under-utilisation of capacity in manufacturing. Doriye and Wuyts 1993 discuss, with respect to Tanzania, under-utilisation of installed capacity that emerges from expansion of capital investment when the economy depends on imports of capital and intermediate goods and faces foreign currency constraints.

(aluminium smelter and its power station). The magnitude of these projects also implies that the time lag between investment and output growth is large.

Graph 3.16: Foreign Borrowing and Debt Repayments
(US\$ million)



Graph 3.17: MVA/Manufacturing Investment Ratio



Graph 3.17 provides a clearer idea about the relationship between investment and MVA growth. The general trend shows that the relative capital intensity of output is increasing.²³ For most of the series (with the exception of 1961, 1964-70 and 1997-99) changes in the capital intensity of MVA have nothing to do with changes in factor intensity of the economy or in technology. Instead, they represent either the time lag between investment and output, or huge levels of under-utilisation of capacity due to sudden and very sharp decline in output. In 1961, 1964-1970 and 1997-1999, the low ratio MVA/investment is determined mainly by increase in investment. Some degree of modernisation and structural change occurred in

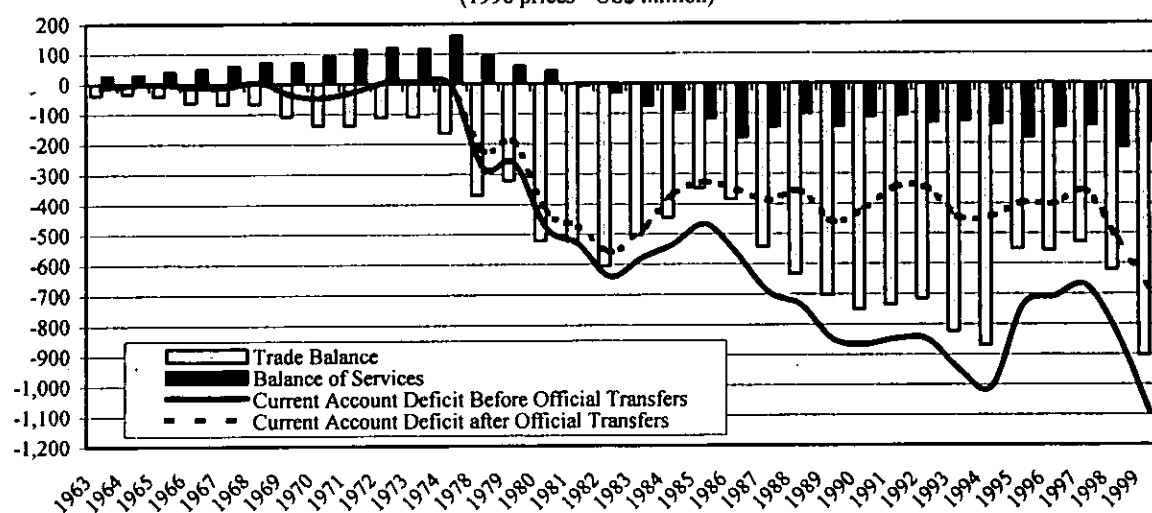
²³ The ratio indicates MVA per unit of investment; as it becomes smaller, capital intensity increases.

association with the establishment of new industries: oil refinery in 1961; railway wagons, fertilizer and agricultural tools in 1964-70; and aluminium and other post-privatisation large investment projects (such as sugar, beer, cement) in 1997-99. The increase in capital intensity between 1979 and 1983 is the result of the combined effect of large increase in investment (1979-82) and a decline in output (1981-83). In essence, the graph is an indication of under-utilisation of capacity. The collapse of PPI is shown in the reduction of capital intensity of output in 1984-1986, which was followed by the rehabilitation programme in which investment grew faster than output (1987-90); a new collapse of manufacturing output (1991-1994); and a short period of very fast recovery of manufacturing output (1995-1997).

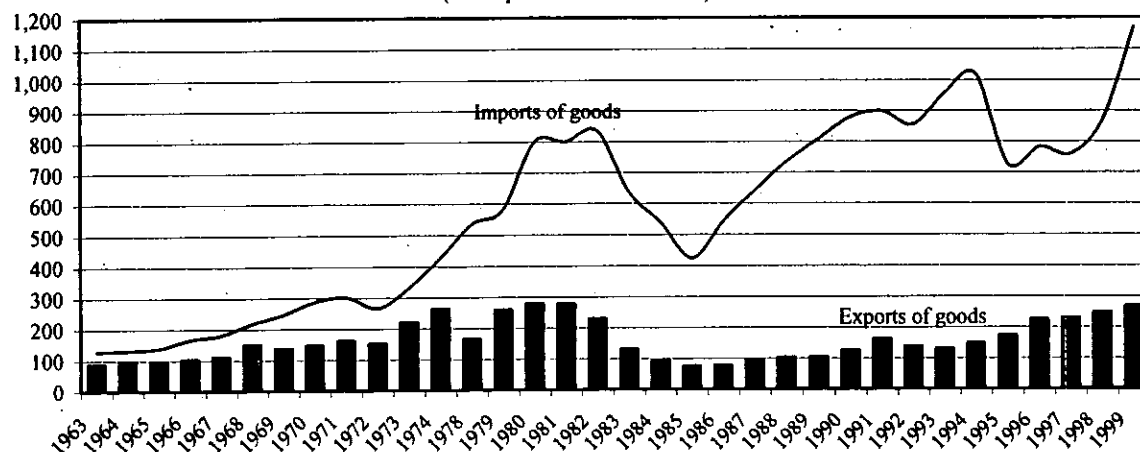
Current account and external trade deficit

Graphs 3.18, 3.19 and 3.20 show the large deficit of the current account that the Mozambican economy runs, as well as the association of this deficit with the size of the trade deficit. The first fundamental feature observable in graph 3.18 is that up to 1976, the current account was balanced by services, associated mainly with rail transport of commodities to and from South Africa and South Rhodesia. This surplus declined and the balance of services started to run a deficit because of the UN mandated sanctions against the UDI regime in South Rhodesia (1976-80), the diversion of the transit of South African commodities from the port of Maputo (1980-92) and the intensification of the war against Mozambique (1981-1992).

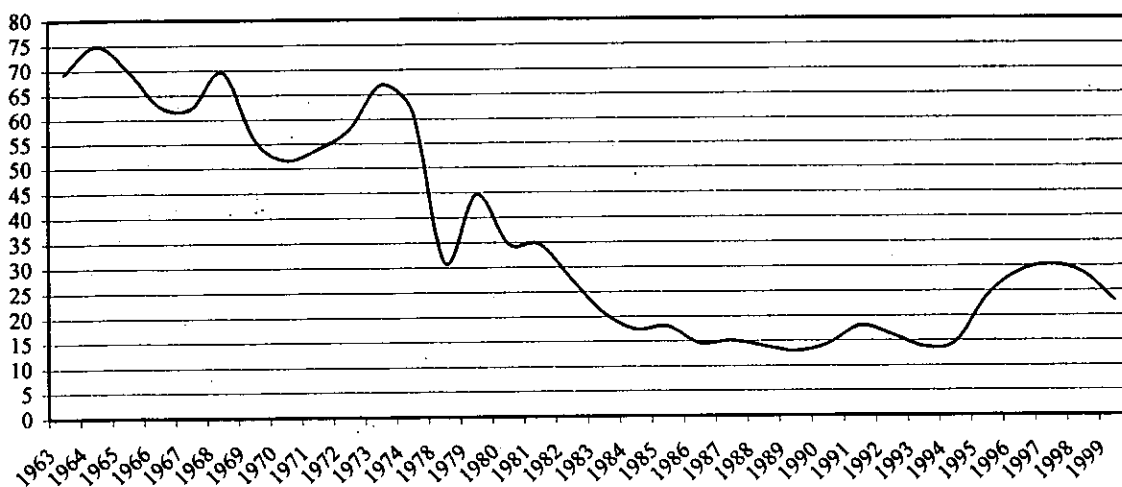
Graph 3.18: Current account balance
(1996 prices - US\$ million)



Graph 3.19: External trade
(1996 prices - US\$ million)



Graph 3.20: Import coverage ratio



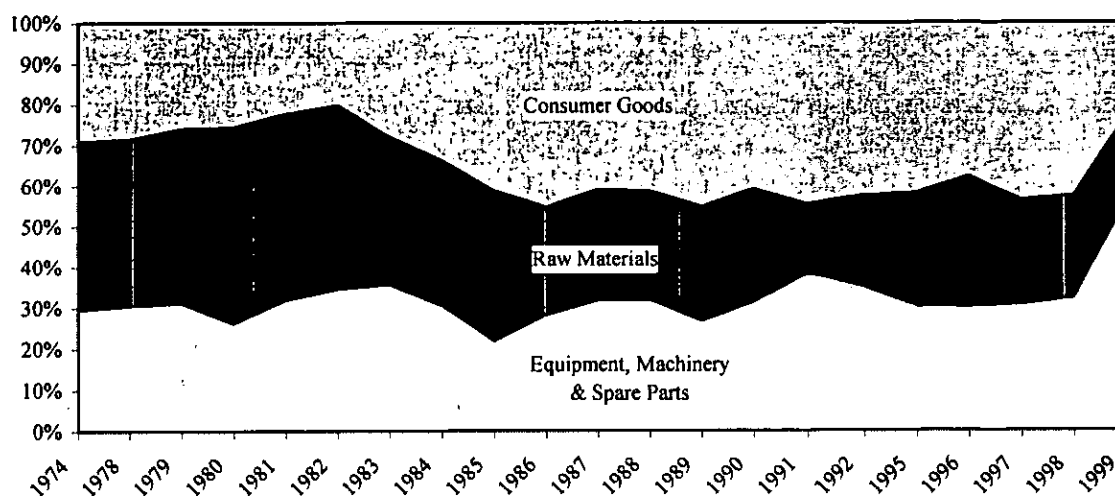
The main feature of the dynamics of the current account is the huge increase in the trade deficit since 1978. The size of the trade deficit started to increase from the late 1960s in association with increase in manufacturing investment and the reduction of the relative size of export-oriented, semi-processing of primary products. In the 1970s, the trade deficit was aggravated mainly because of the impact of imports of oil at higher prices and material inputs for both manufacturing and commercial agriculture. Rural commercialisation was seriously affected immediately after national independence so that the dependence of manufacturing upon imports of material inputs and wage goods increased.²⁴

²⁴ See Wuyts 1989, 1984 and 1981.

Investment, trade deficit and external sources of capital

PPI's investment program, 1980-82, had an immediate and short-lived impact on increase in imports (graph 3.19). The import structure became skewed towards capital and intermediate goods, which, by 1982, represented about 80% of total imports (graph 3.21). Between 1983 and 1985 imports declined because the investment programme collapsed and, as a result, the trade deficit became smaller. Imports of capital goods fell, but imports of intermediate goods declined more dramatically. This was partly due to the falling world price of oil, but also to a general decline in imports of material inputs as, under foreign exchange constraints, these had to compete against capital investment and consumer goods. As a result, the level of under-utilised capacity throughout the economy, in particular in manufacturing, reached its peak.

Graph 3.21: Structure of imports

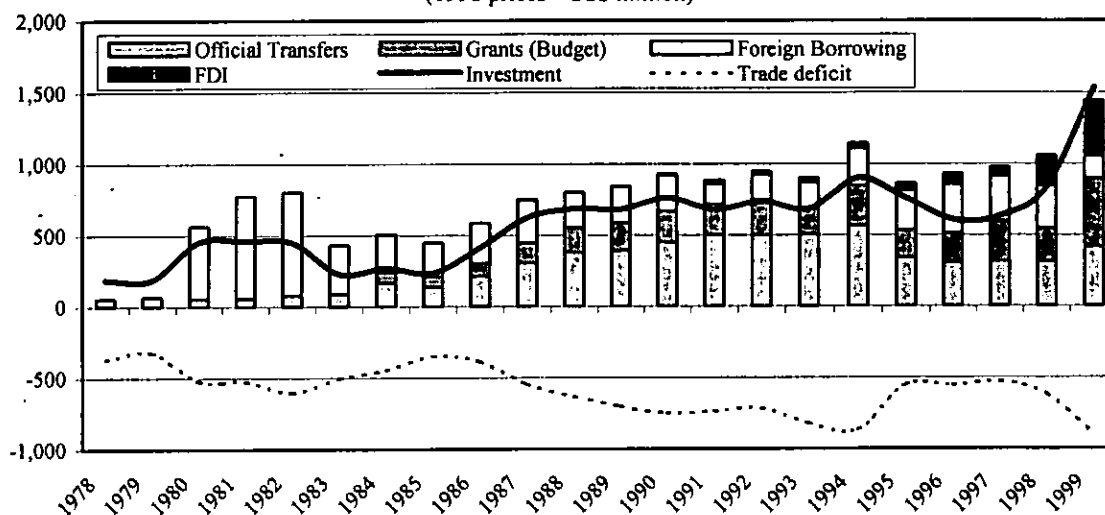


After 1987, the trade deficit increased to its highest level. The main determinant of this process has been the increase in imports, associated with the recovery of capacity utilisation and new investment in manufacturing, as well as luxury, import dependent consumer spending. In 1995-1997, the trade balance improved mainly because imports fell as a result of a decline in investment (graph 3.13) and a slight reduction in imports of consumer goods. On the other hand, exports increased due to cotton, sugar, oil derivatives and shrimps and lobster (graphs 3.11 and 3.12). The impact of large investment projects in the late 1990s is shown in the increase in the trade deficit and in the share of capital goods in total imports.

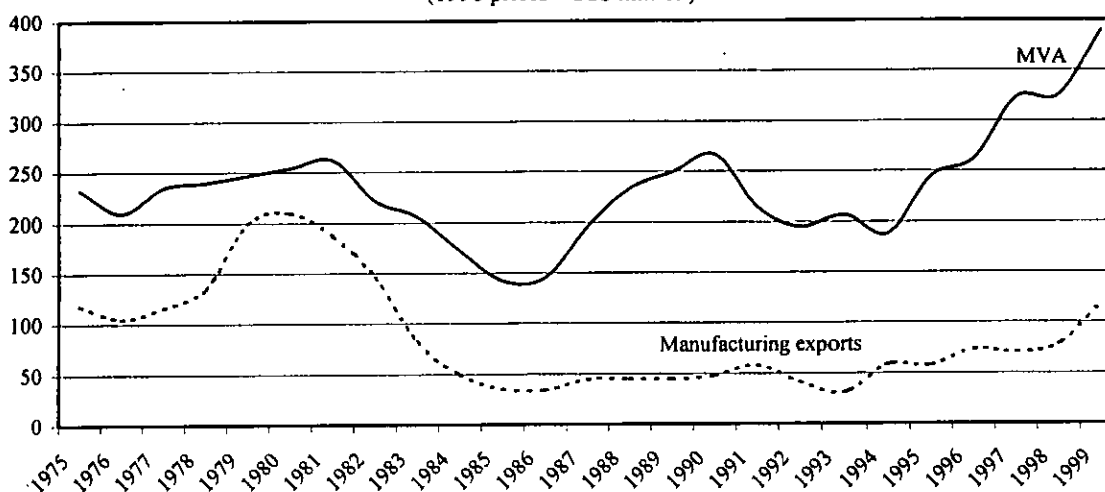
Graph 3.22 shows the link between investment and trade deficit more clearly. With the exception of the period of the oil boom, reflected in the sudden and short-lived increase in manufacturing exports in 1979-81, expansion in MVA has had little effect in the growth of

manufacturing exports. MVA growth, particularly after the 1987 economic reforms started, has been sustained by inflows of foreign capital (grants, multilateral loans and FDI). Exports of manufactures, which are not very sensitive to expansion of manufacturing output, have played a small role in sustaining growth (graph 3.23). This is because of the narrow export base of the manufacturing sector, as well as the fact that industries that have been driving growth of output are mainly oriented to the domestic market (e.g., sugar, beer, soft drinks, cereal milling and cement). Mozal (an export-oriented, aluminium mega smelter owned by international corporations like Billiton and Mitsubishi) may change this relationship between output and exports. However, unless exports diversify, Mozal's impact will be a one-off change of the general level of exports and a narrowing of the already limited export base.

Graph 3.22: Investment, trade deficit and external sources of capital
(1996 prices - US\$ million)

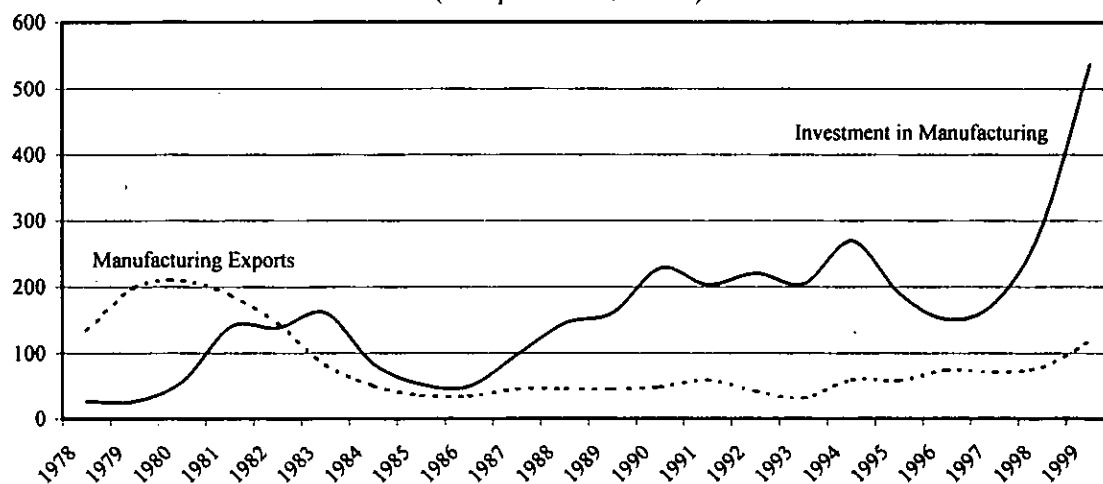


Graph 3.23: MVA and manufacturing exports
(1996 prices - US\$ million)

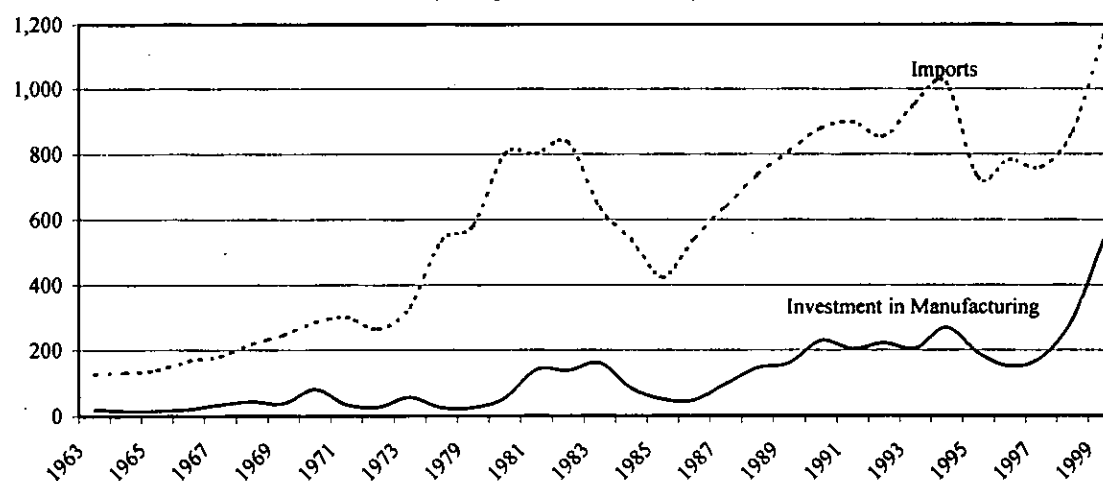


Graph 3.24 shows that investment in manufacturing has not been significantly influenced by, and has not had a significant impact upon, manufacturing exports. Finally, graph 3.25 shows that investment in manufacturing and imports follow a very similar trend, which is indicative of the import dependence of production and balance of payment pressures that economic expansion, given the current structure of production and trade, creates.

Graph 3.24: Investment in manufacturing and manufacturing exports
(1996 prices - US\$ million)



Graph 3.25: Investment in manufacturing and total imports of goods
(1996 prices - US\$ million)



The analysis thus far shows that the very large current account deficit is mainly determined by the size of imports of goods, which in turn are strongly related to investment because of the import dependence of productive capacities. Exports, which cover less than 25% of imports (graph 3.20), have had little effect in the trade deficit. Therefore, orthodox macroeconomic stabilisation may either result in output contraction or only be sustained by inflows of

international aid, and any marginal expansion of output within the existent economic structure is destabilising.

As shown in graph 3.22, investment has been sustained by different sources of foreign savings, namely: short-lived foreign borrowing that collapsed into debt service crisis (1980-82); international (bilateral and multilateral) aid in the form of balance of payment and budget support grants; and the more recent emergence of foreign direct investment (FDI) as the fastest growing and single most important source of finance. Periods of investment reduction are associated with contraction of inflows of foreign capital (1983-85, 1993 and 1995). For the last 15 years, aid has kept investment going by financing the current account deficit that is associated with investment-related imports. This dependence upon foreign sources of finance results from the combination of three factors: limited domestic capacity to invest,²⁵ weak export base and import dependence of domestic production.

Mozal almost doubled imports in the last two years of the period under consideration, but may also have a very large impact on exports. If this happens, economic expansion may actually help to balance external trade. However, as shown in subsequent chapters, if the mega project model is adopted as an alternative to a broader development base, it would be necessary to invest the equivalent of twice the current size of GDP for the current account to balance. Such a strategy would address the issue of supply of exports but not the import dependence of production and weak linkages. As discussed in the following section, FDI pursues excessively narrow objectives that affect the long-term development pattern of the economy. Hence, industrialisation would not necessarily develop out of mega projects.

3.5 Patterns of allocation of investment

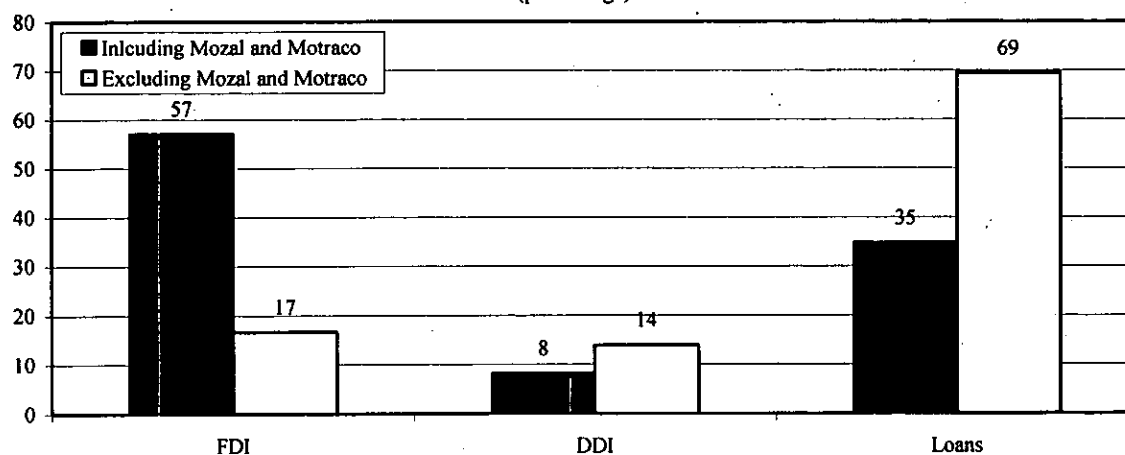
This section discusses the patterns of sectoral and regional allocation of investment approved in 1990-1999 in Mozambique. The choice of the period is based upon three factors. First, data available for this period are more reliable and complete than for previous periods. Second, significantly more investment was made in the 1990s than in previous decades, even if account is taken of the short-lived investment drive promoted through the implementation of PPI. Third, and more important, it is necessary to analyse whether the current pattern of investment, which emerges with neo-liberal economic reforms, addresses the need to change

²⁵ Refer to discussion of finance and industrial policy in chapter 5.

the narrow specialisation and weak intra- and inter-sectoral linkages that characterise manufacturing production and trade.

Each graph used in this section compares allocation of investment with and without Mozal and Motraco. This is done because these two projects are so dominant that they affect very significantly the perception and interpretation of the relative importance of different sources of investment finance and patterns of resource allocation. This is observable from graph 3.26, which shows the percentage contribution of foreign direct investment (FDI), domestic direct investment (DDI) and loans (domestic and foreign bank loans, as well as loans from multilateral agencies that are utilised to finance investment).²⁶ When Mozal and Motraco are included, FDI represents 57% of manufacturing investment. When they are excluded, FDI percentage contribution falls to a modest 17%, barely higher than the percentage contribution of DDI, whereas loans become the most important source of finance (69%).

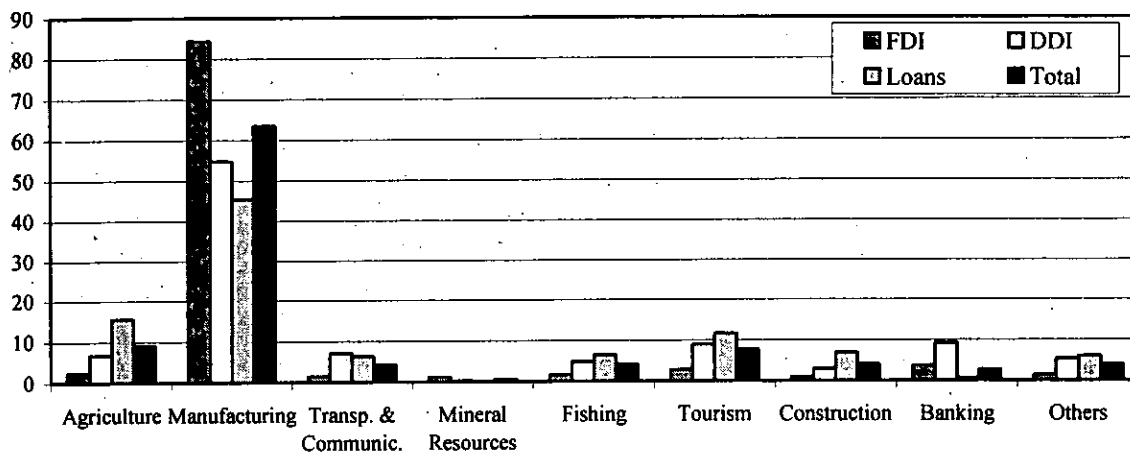
Graph 3.26: Share, by source, of manufacturing investment approved in 1990-1999
(percentage)



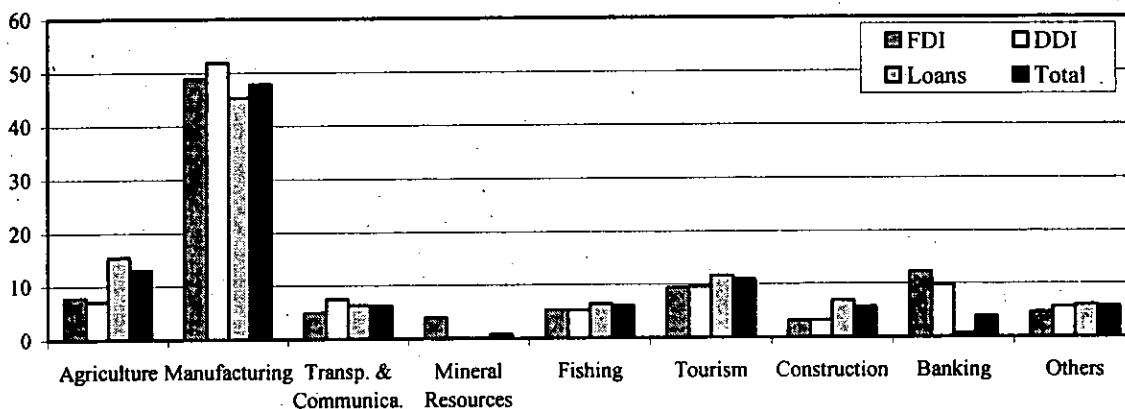
When the analysis shifts to investment in the economy as a whole, the impact of Mozal and Motraco continue to be very strong – with these projects, manufacturing absorbs 84% of FDI and 63% of total investment; without these projects, these percentages drop to 49% and 48% respectively (graphs 3.27 and 3.28). In an economy as dependent upon foreign financing, and as small as Mozambique's is, it is interesting to notice that banking is the second sector with respect to allocation of FDI, the fourth in DDI and the sixth in total investment.

²⁶ According to Banco de Moçambique (various annual reports) and KPMG 1999, the domestic banking system only finances 16% of the bank loans. See chapter 5 for a more detailed discussion of this topic.

Graph 3.27: Sectoral share, by source, of investment approved in 1990-1999
(including Mozal & Motraco - percentage)



Graph 3.28: Sectoral share, by source, of investment approved in 1990-1999
(excluding Mozal & Motraco - percentage)



A disaggregated analysis of allocation of investment within the manufacturing sector shows that all sources of investment are highly concentrated around major FDI driven projects, namely Mozal and Motraco, sugar, cement, beer, soft drinks, cereal milling and textiles and clothing (table 3.2 and graphs 3.29 and 3.30).²⁷ This pattern of allocation of investment confirms the power of Mozal and Motraco and, outside this industry, the dominant role of

²⁷ Mozal/Motraco dominate not only in aluminium and basic metals (very close to 100% of production in these industries) but also in manufacturing as a whole. Billiton and Mitsubishi (two very large multinational companies, MNEs), IDC (South African para-statal investment agency) and the government of Mozambique are the shareholders of Mozal. The electricity companies of Mozambique (EDM), South Africa (ESCOM) and Swaziland (SEB) are the shareholders of Motraco. The sugar industry comprises four estates owned by two large MNEs (Ilvo and Tongat Hullet) and one consortium of Mauritius companies. One Portuguese-owned company, Cimentos de Moçambique, controls three quarters of the market and the entire domestic production of cement. Two foreign breweries and a subsidiary of Coca-Cola own the three breweries and all the soft drink bottling plants. Two foreign owned companies dominate cereal milling. Investment in textiles and clothing is centred around two textile plants and a few cotton spinning and ginning factories owned by foreign dominated economic groups.

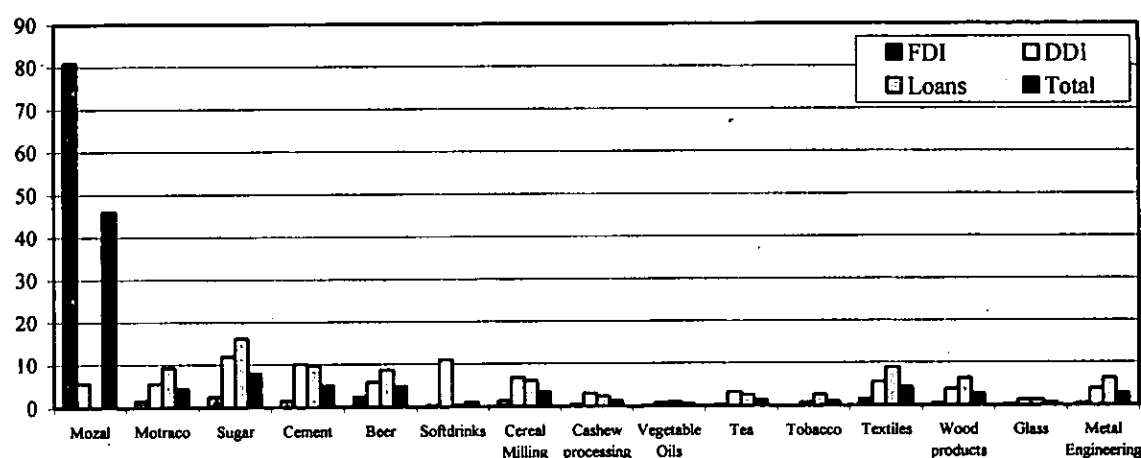
four branches of the food industry in the structure of production of manufacturing. It is interesting to notice that the soft drink industry seems to be DDI driven. The company that owns the bottling plants was set up in Mozambique by the Coca-Cola subsidiary in South Africa, and most of the recent expansion investment is financed through own profits.

Table 3.2: Share of manufacturing investment approved in 1990-1999, by source, allocated to major FDI driven industries, with and without Mozal and Motraco (percentage)

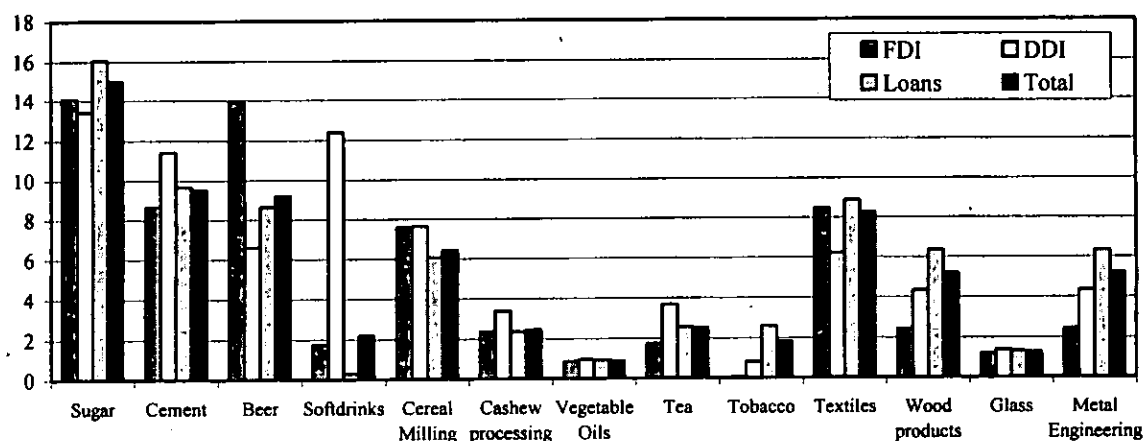
	FDI	DDI	Loans	Total
With	94	74	67	81
Without	65	63	59	58

Sources: Own estimates based upon a list of 1,300 investment projects provided by CPI.

Graph 3.29: Share of manufacturing investment approved in 1990-1999, by industry and source (including Mozal & Motraco - percentage)

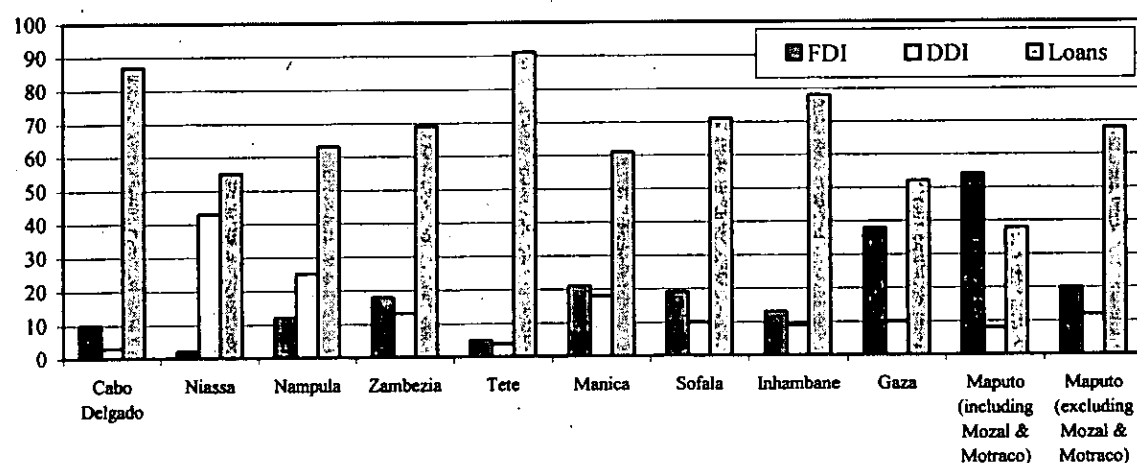


Graph 3.30: Share of manufacturing investment approved in 1990-1999, by industry and source (excluding Mozal & Motraco - percentage)



Graph 3.31 shows how investment in each province is financed. In all provinces, except Maputo when Mozal and Motraco are included, loans are the single most important source of finance. This is particularly the case in Tete and Cabo Delgado, whereas DDI is far more important in Niassa (the poorest province in the country) than in any other. A large cashew-processing plant, Mocita, makes FDI particularly important in Gaza. Maputo (province and city) has two very different patterns of financing of investment, depending on whether Mozal and Motraco are included or excluded. If they are excluded, the relative importance of FDI in Maputo is less than in Gaza and Manica (one textile factory), and similar to that in Zambezia (sugar) and Sofala (cement, cereal milling, beer and sugar). If they are included, Maputo becomes the only province where FDI surpasses all other sources of finance.

Graph 3.31: Financing of investment approved in 1990-1999 in each Province, by source (percentage)

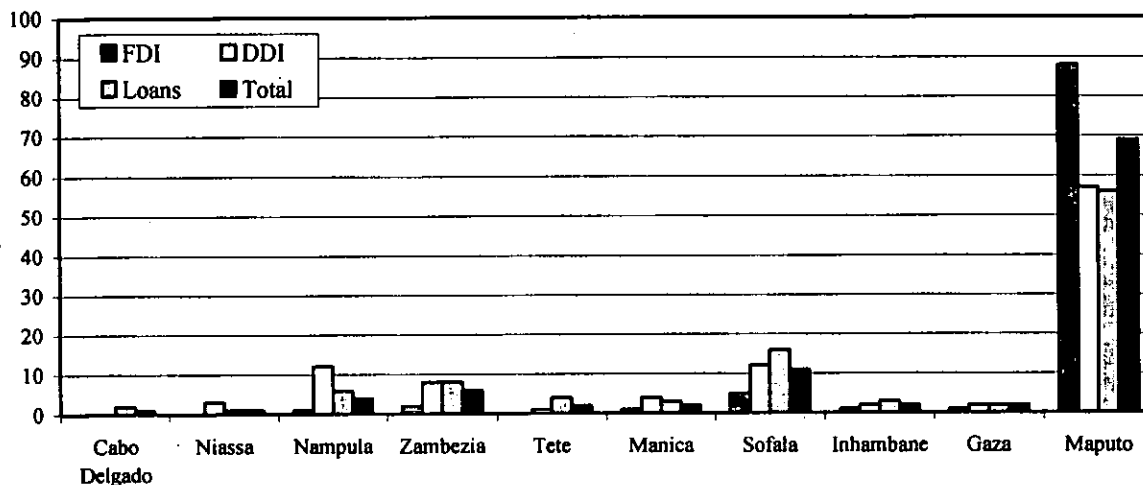


Graphs 3.32 and 3.33 show how provinces share total investment in the economy, by source. Maputo is dominant, irrespective of whether Mozal and Motraco are included or excluded. It absorbs 88% of total FDI and 60% of non-Mozal FDI. Added together, six provinces receive less investment than Sofala and one seventh of total investment flowing to Maputo.

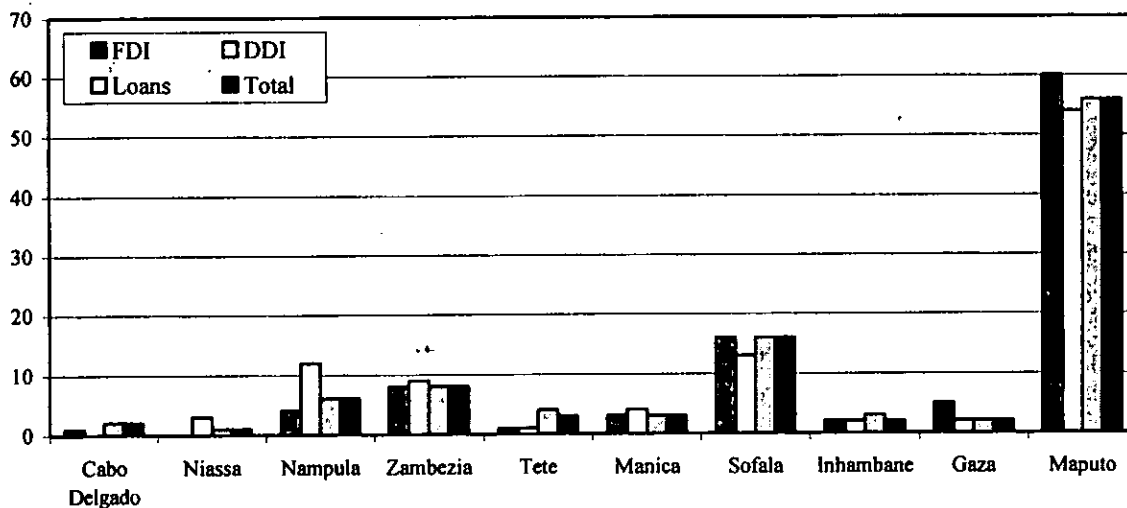
This section has shown that in 1990-1999 investment has been highly concentrated with respect to sectoral and regional allocation. For most of the period, loans, DDI and isolated cases of FDI have been concentrated around the "traditional" areas of narrow specialisation: four branches in the food industry, textiles and cement. Over the last three years of the period FDI boomed mainly due to Mozal/Motraco, but also to large investment programs in sugar. Although its absolute size increased sharply to the point of eclipsing everything else, FDI continued to be focused on a small, narrowly specialised range of areas of interest. FDI driven

industries have also attracted a very significant share of non-FDI finance. Thus, it is not only FDI, but also the general pattern of investment, that is narrowly focused and has consolidated the "traditional" structures and dynamics of industrialisation (discussed in previous sections).

Graph 3.32: Provincial share of national investment approved in 1990-1999, by source (including Mozal and Motraco - percentage)



Graph 3.33: Provincial share of national investment approved in 1990-1999, by source (excluding Mozal and Motraco - percentage)



3.6 Conclusions

The aim of this chapter has been to identify, empirically, the fundamental economic characteristics and relationships that shape industrialisation in Mozambique, in order to provide the information that helps to put the analysis and debates about industrial policy in their socio-economic context. Three empirical sections, in which original time series and

cross section data sets are presented and discussed, following a brief historical background that explains the process of development of the manufacturing sector in Mozambique.

The analysis of current trends and patterns of industrialisation and investment shows that the essential structures and dynamics of accumulation have not changed fundamentally over the last four decades despite radical policy changes that occurred during the period. This can be illustrated by reference to the narrow pattern of production and exports, weak linkages, dependence upon imports and large inflows of foreign capital, and key political and economic role of mega projects in shaping regional integration. Changes in detail (such as the emergence of a new, dominant product, aluminium) and in some aspects of the dynamics (like the growing role of FDI as opposed to the declining importance of migrant labour) have occurred. However, these changes do not represent "departure" from "traditional" trends, but adjustment to new conditions.

The resilience of the patterns of industrialisation shows that the structures and dynamics of accumulation are not very sensitive to formal radical public policy change, or, in other words, formal public policy is by no means the only or most important factor affecting industrial development. In "traditional" debates, this relative "failure" of policy is explained by reference to either the assumption of superiority of markets over public policy (neo-classical approach), or lack of state autonomy and subsequent deficiency in the quality of policy processes ("developmental state" approach).²⁸

From the linkage-agency analytical framework adopted in this thesis (explained in the previous chapter), it is known that public policy, private interests and markets are closely and dynamically related because the state responds to social and economic pressures and operates through the market. Therefore, the apparent failure of public policy change to deliver fundamental economic change over the last four decades cannot be explained within the "state versus markets" framework, be it on the side of neo-liberal or developmental state economics, because both are flawed in the sense that they do not understand the inevitability of the dynamic link between the state, capital and labour, and markets. This analytical framework also argues that agencies are not independent of economic processes and linkages, such that decisions about strategies and policies are not autonomous from deep-rooted economic processes, and the impact of such decisions is not a foregone conclusion. This does not mean that it is not possible to promote change through policy, but that successful policy, rather than

²⁸ For a neo-classical argument, see Krueger 1998 and 1990a, Krugman 1994, and Young 1995, 1994 and 1992. For a "developmental state" argument, see Chang 1996, Chang and Rowthorn (eds.) 1995, Evans 1995, Evans *et al* (eds.) 1985, Stein 1994b.

resulting from blueprints, is more likely to be developed from the understanding of the underlying economic and political relationships upon which the process of industrialisation (including agencies and linkages) depends.

Empirically, the chapter demonstrates that the manufacturing sector in Mozambique is part of an economy dominated by its forms of integration within the South African capitalist system. Up to the mid 1980s, rail transport services and migrant labour were the dominant forms of this integration, which had a huge impact on GDP and the finance of the trade deficit, public investment and investment in the rural economy. Therefore, the access of the manufacturing sector to labour, transport infrastructures and foreign currency were dependent upon these forms of integration. From the 1990s, the process of integration was diversified to include significantly more direct investment in productive capacities in Mozambique in line with privatisation policies, priorities and interests resulting from the restructuring of South African capital and corporate strategies. Thus, while services continues to generate the largest share of Mozambique's GDP and export revenue, FDI, mainly associated with South African capitalism, has become the single most important source of foreign inflows of capital.

There is a historical parallel worth mentioning. From the mid 1960s, during the final crisis and restructuring of the colonial economy, financial austerity and the drive for economic expansion made the Mozambican economy more dependent upon its integration in the Rand area and also led to the policy of open doors to foreign investment. In the 1990s, financial austerity associated with the program of stabilisation, combined with constraints to growth of aid inflows, have also made regional integration and FDI the dominant factors in economic growth in Mozambique. In both periods, the shape of economic expansion was mainly determined by the interests of South African capitalism. Therefore, the success of any industrial policy and strategy in Mozambique depends upon its ability to incorporate regional integration and FDI in a process that broadens the development base of the economy, and this requires accurate knowledge of the capabilities, interests, motivations and strategies of the different firms and forms of capital involved.

However, there are strong reasons why a mega project driven economic strategy would not work in promoting industrialisation in Mozambique. These are discussed in more detail in chapters 5 and 6. However, the empirical evidence discussed shows that these projects tend to be narrow based, not to promote linkages and to capture the dynamics of the entire economy, including other sources of finance, into their own orbits. The close association between such projects and a South African economy dominated by the minerals-energy complex essentially determines these characteristics of mega projects in Mozambique.

The chapter also demonstrates that the manufacturing sector's share of GDP is small and has changed little. Import substitution has not happen in a significant way as the productive and export bases of the sector are narrowly specialised and have become more so over the last decade, intra- and inter-sectoral linkages are weak and production capacity is import dependent with respect to capital equipment, technology and parts, material inputs and finance. Trends and growth rates of manufacturing output and MVA are significantly more unstable than GDP trends, because the performance of the sector is particularly vulnerable to small changes in the ability to import and attract foreign sources of finance.

Manufacturing expansion is particularly vulnerable to, and in conflict with, orthodox economic stabilisation. Financial austerity restricts investment options to inflows of foreign capital, which are unreliable, less sensitive to domestic policy and narrowly focused. This influences the pace and direction of industrial development. Under the current structure, expansion of the manufacturing sector creates severe current account pressures, because of the very strong and positive relationship between investment and imports. Long-term sustainability of rapid industrialisation requires that industrial policies and strategies are capable of addressing this problem by promoting gradual import substitution and with it diversification and expansion of the manufacturing export base. This task cannot be understood in isolation from regional integration and dependence upon inflows of foreign capital; the task is how to channel the energy from dominant forces, such as, for example, South African capitalism, to develop a broader and more integrated productive base.

The empirical analysis of current trends and patterns of investment confirms that they are consistent with the dominant characteristics of the process of industrial development in Mozambique and its relationship with the economy as a whole. In essence, investment has grown but has consolidated the current direction of production and trade that is not conducive to broad and sustainable patterns of development. Thus, although the level of investment is important, its allocation seems to be what industrial policy should be more concerned with.

Fundamentally, this chapter identified empirically the underlying economic conditions of industrialisation and industrial policy in Mozambique. How do formal economic and industrial analysis, policies and programs address them? What are the results of the combination of formal policies with the characteristics and dynamics empirically discussed in this chapter? These issues are discussed in the subsequent two chapters.

Appendix Tables

Table A3.1: GDP and sectoral value added in Mozambique (US\$ million, constant 1996 prices)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
GDP	1,646	1,679	1,729	1,850	1,943	2,001	2,141	2,227	2,294	2,385	2,505	2,805	2,693	2,801
Manufacturing	123	133	137	161	173	178	193	203	197	212	223	252	215	252
Agriculture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	673	673	616
Other Industries	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	281	296	308
Services	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,599	1,535	1,625

Notes: Other industries include construction, fisheries, mineral resources and tourism. n.a. = not available

(Table A3.1: continued)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
GDP	2,913	2,767	2,324	2,092	2,134	2,176	2,242	2,309	2,378	2,212	2,057	1,913	1,779	1,815
Manufacturing	320	304	232	209	235	239	247	254	262	221	206	172	142	145
Agriculture	553	581	511	837	875	914	942	1,039	1,046	951	843	765	694	690
Other Industries	320	249	139	126	128	152	179	115	119	133	123	96	89	200
Services	1,719	1,633	1,441	920	896	870	874	901	951	907	885	880	854	780

(Table A3.1: continued)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
GDP	1,960	2,117	2,265	2,423	2,375	2,161	2,572	2,685	2,712	2,902	3,221	3,607	3,896
Manufacturing	196	233	249	267	214	195	206	188	245	262	323	325	390
Agriculture	752	720	793	969	665	519	720	698	814	871	966	1,082	1,052
Other Industries	294	360	362	267	214	216	257	269	244	319	354	433	506
Services	745	804	861	921	1,283	1,232	1,389	1,530	1,410	1,451	1,578	1,767	1,948

Sources: Own estimates based on data from GOM/Statistics 1961-1972 to 2001; GOM and UNIDO 1993; Banco de Moçambique 1995 to 2001; World Bank 2001, 1995, 1990a and 1990b; UNIDO 1987; UNDP 2000, 1998a, 1998b, 1996a, 1996b and 1995; Brum 1976; Pereira Leite 1999 and 1989; Pereira de Moura and Amaral 1978; Wield 1878; Woyts 1989 and 1984.

Table A3.2: Value of manufacturing output ('000 contos, at constant 1970 prices, unless otherwise stated)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
Food, Beverages and Tobacco	2,001	2,189	1,752	2,348	2,390	2,456	2,940	3,122	3,231	3,658	3,993	n.a.	4,845	4,910
Sugar	684	695	522	699	677	601	701	734	806	921	944	n.a.	1,140	1,064
Flour (wheat and maize)	301	321	270	383	382	420	492	478	436	477	514	n.a.	501	445
Beer	76	94	85	90	98	111	138	179	199	230	274	n.a.	356	404
Soft drinks	49	57	47	41	51	67	78	87	77	81	97	n.a.	67	69
Tea	214	249	212	264	201	239	258	337	299	358	275	n.a.	307	285
Tobacco	188	210	173	205	233	230	236	241	281	285	367	n.a.	340	320
Cashew kernels	39	50	35	74	84	95	120	187	200	355	411	n.a.	620	723
Rice (hulling)	109	115	92	168	163	160	171	201	199	212	201	n.a.	239	242
Other	340	397	316	423	500	534	747	678	734	738	908	n.a.	1,275	1,357
Textiles, clothing and leather	1,176	1,440	1,044	1,492	1,403	1,581	1,412	1,563	1,643	1,674	1,774	n.a.	1,161	1,510
Spinning/ginning	1,068	1,295	890	1,262	1,098	1,261	1,077	1,185	1,210	1,158	1,192	n.a.	725	792
Textiles	63	92	113	168	220	216	217	232	242	254	286	n.a.	134	300
Clothing	20	24	22	35	50	62	80	109	143	206	232	n.a.	252	354
Wood and wood works	324	322	259	333	354	424	488	460	482	542	612	n.a.	565	498
Paper and printing	84	98	93	130	134	146	158	172	192	224	246	n.a.	365	396
Chemicals and oil products	250	232	539	671	841	809	876	985	1,045	1,306	1,298	n.a.	1,153	1,281
Industrial chemical products	14	11	11	14	16	17	19	23	22	73	36	n.a.	89	139
Other chemical products	208	188	170	215	304	326	372	370	384	448	477	n.a.	312	375
Oil products	0	0	327	396	460	395	422	522	561	679	668	n.a.	590	587
Rubber products	28	32	29	43	53	61	54	57	63	74	74	n.a.	95	106
Plastic products	0	1	2	4	7	10	8	14	16	32	43	n.a.	67	74
Non-metallic mineral products	289	291	254	269	253	278	347	328	323	355	433	n.a.	475	519
Cement	183	190	144	157	141	156	187	183	182	206	232	n.a.	260	289
Other building materials	83	72	90	80	72	82	121	104	102	105	137	n.a.	150	163
Basic metal industries	0	0	0	0	20	35	68	60	75	115	108	n.a.	208	217
Metal prod., machines & transp. equip.	257	312	285	405	493	552	651	720	757	897	1,044	n.a.	926	968
Metal products	105	134	116	103	123	128	156	179	198	248	322	n.a.	502	552
Non-electrical machinery	3	3	3	11	7	7	8	12	13	21	28	n.a.	51	57
Electrical machinery	11	20	20	30	41	46	62	72	76	88	107	n.a.	107	134
Transport equipment	139	155	146	260	320	370	424	456	469	541	586	n.a.	265	225
Other manufacturing industries	28	16	6	10	11	12	13	16	12	15	23	n.a.	40	54
Total output	4,409	4,900	4,680	5,658	5,870	6,277	6,919	7,432	7,743	8,743	9,532	10,502	9,737	10,352
Total output (US\$ million, 1996 prices)	190	204	210	248	266	274	297	312	304	327	343	389	332	388

Note: n.a. = not available

(Table A3.2 continued)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Food, Beverages and Tobacco	4,907	n.a.	3,500	3,491	3,122	3,512	3,250	3,153	3,251	2,616	1,873	1,775	1,474	1,552
Sugar	902	n.a.	982	929	679	826	907	728	761	540	316	169	107	72
Flour (wheat and maize)	473	n.a.	290	282	365	346	364	348	376	349	320	459	458	406
Beer	452	n.a.	776	744	627	774	644	626	577	502	476	391	250	252
Soft drinks	122	n.a.	259	248	209	258	215	208	192	167	159	130	85	150
Tea	253	n.a.	79	90	104	110	116	115	135	135	67	84	25	17
Tobacco	316	n.a.	610	576	397	341	261	270	326	270	222	198	177	263
Cashew kernels	747	n.a.	297	400	559	548	551	586	563	452	216	217	166	139
Rice (hulling)	238	n.a.	107	122	81	77	61	39	55	67	30	15	29	63
Other	1,405	n.a.	100	100	100	233	133	233	267	133	67	113	166	190
Textiles, clothing and leather	1,898	n.a.	1,021	1,029	1,015	1,321	1,146	1,012	1,177	1,088	1,190	1,237	1,113	1,049
Spinning/ginning	955	n.a.	500	467	433	721	569	398	589	508	500	520	320	277
Textiles	428	n.a.	224	236	248	238	257	280	240	251	303	347	269	278
Clothing	417	n.a.	183	193	203	195	210	229	196	206	248	284	415	363
Wood and wood works	509	n.a.	440	337	252	231	254	478	428	274	250	308	334	333
Paper and printing	414	n.a.	137	143	157	154	155	161	157	136	144	200	219	198
Chemicals and oil products	1,435	n.a.	1,941	1,790	2,174	2,626	2,389	3,060	2,710	2,555	1,773	748	458	480
Industrial chemical products	168	n.a.	66	117	139	124	79	73	113	117	28	38	41	39
Other chemical products	435	n.a.	514	492	458	537	409	653	768	649	408	235	208	221
Oil products	576	n.a.	1,202	1,024	1,422	1,805	1,761	2,071	1,522	1,551	1,101	327	0	0
Rubber products	152	n.a.	85	91	96	101	101	205	260	204	190	101	165	137
Plastic products	104	n.a.	73	67	60	58	39	58	48	34	45	46	45	83
Non-metallic mineral products	608	n.a.	197	171	249	275	236	221	258	245	185	138	104	121
Cement	331	n.a.	113	93	136	146	116	115	128	133	100	49	37	35
Other building materials	190	n.a.	65	53	78	83	66	75	102	87	64	40	29	36
Basic metal industries	264	n.a.	100	83	62	67	48	63	78	69	47	71	47	33
Metal prod., machines & transp. equip.	1,132	n.a.	514	426	369	391	297	367	428	463	403	506	440	445
Metal products	612	n.a.	192	158	133	125	109	78	83	67	71	104	106	90
Non-electrical machinery	73	n.a.	58	42	33	29	27	17	12	11	17	32	21	27
Electrical machinery	173	n.a.	89	98	107	91	101	219	150	156	147	151	144	149
Transport equipment	273	n.a.	175	128	96	145	59	52	183	230	168	219	170	179
Other manufacturing industries	50	n.a.	368	367	866	703	699	872	904	766	690	6	14	13
Total output	11,215	10,778	8,130	7,744	8,160	9,168	8,381	9,282	9,297	8,129	6,473	4,919	4,201	4,224
Total output (US\$ million, 1996 prices)	493	474	358	341	359	369	380	391	403	341	317	265	219	224

(Table A3.2. continued)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Food, Beverages and Tobacco	2,583	4,100	4,896	4,236	4,261	3,660	3,024	3,037	4,509	5,062	6,867	8,561	10,958
Sugar	45	121	311	217	137	201	246	271	631	528	420	590	655
Flour (wheat and maize)	335	913	922	553	626	480	314	384	719	715	1,646	1,677	1,811
Beer	258	754	708	618	763	519	552	515	702	1,151	1,649	2,066	2,513
Soft drinks	69	57	34	32	33	68	61	228	570	633	774	1,008	1,989
Tea	11	0	3	5	7	8	1	12	6	1	8	12	11
Tobacco	774	491	578	456	71	32	259	166	25	30	193	257	292
Cashew kernels	724	846	573	475	391	453	52	20	4	6	3	1	0
Rice (hulling)	0	0	156	74	34	24	3	0	0	19	25	34	31
Other	366	919	1,611	1,805	2,199	1,875	1,536	1,440	1,854	1,979	2,149	2,96	3,656
Textiles, clothing and leather	1,523	2,169	2,149	1,723	1,787	1,383	942	608	395	368	771	672	622
Spinning/ginning	720	1,418	1,360	223	209	288	183	138	171	247	294	392	345
Textiles	191	146	121	1,082	1,042	723	574	380	162	76	373	206	182
Clothing	459	473	513	325	473	338	156	63	50	33	87	56	81
Wood and wood works	222	198	219	207	178	145	117	92	131	87	132	139	121
Paper and printing	294	458	418	389	351	449	415	346	331	300	358	398	419
Chemical and oil products	430	835	1,432	1,265	1,302	1,225	1,126	896	933	1,015	1,245	1,284	1,097
Industrial chemical products	34	68	60	92	53	118	117	137	136	132	149	164	159
Other chemical products	203	431	684	585	645	688	754	568	547	499	553	633	613
Oil products	58	111	126	96	105	67	46	28	24	21	19	21	16
Rubber products	105	190	415	329	340	257	132	109	161	222	473	432	267
Plastic products	30	36	147	162	158	95	77	54	65	142	50	34	41
Non-metallic mineral products	201	351	367	545	679	718	767	734	1,277	1,153	1,249	1,388	1,533
Cement	50	41	183	299	244	367	328	332	687	758	602	707	712
Other building materials	141	224	139	209	249	249	313	266	510	369	611	681	821
Basic metal industries	152	162	238	393	416	490	372	252	293	107	123	232	163
Metal prod., machines & transp. equipment	762	934	836	912	797	667	521	406	375	393	381	778	420
Metal products	104	147	256	269	224	271	250	176	199	189	183	124	58
Non-electrical machinery	140	157	69	84	50	69	29	26	27	20	28	0	0
Electrical machinery	203	281	336	294	290	200	151	94	60	62	38	62	67
Transport equipment	313	349	170	264	232	127	91	110	88	122	133	591	294
Other manufacturing industries	11	10	6	10	12	10	5	4	5	5	7	9	5
Total output	6,178	9,216	10,561	9,679	9,783	9,747	7,289	6,376	8,250	8,490	11,133	13,461	15,337
Total output (US\$ million, 1996 prices)	302	359	384	411	330	300	318	290	377	403	497	501	600

Sources: Own estimates based on data from GOM/Statistics 1961-1972 to 2001; GOM and UNIDO 1993; World Bank 1995, 1990a and 1990b; UNIDO 1987; UNDP 2000, 1998a, 1998b, 1996a and 1995; Brum 1976; Pereira Leite 1999 and 1989; Pereira de Moura and Amaral 1978; Wield 1878; Wuyts 1989 and 1984.

Table A3.3: Balance of payments of Mozambique (US\$ million, 1996 prices)

	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1978	1979	1980	1981	1982
Current account balance																	
(Before grants)	-13	-4	-2	-13	-10	4	-39	-48	-26	7	7	-4	-278	-263	-479	-533	-639
(After grants)	-13	-4	-2	-13	-10	4	-39	-48	-26	7	7	-4	-223	-195	-423	-476	-560
Trade balance	-39	-33	-42	-62	-68	-67	-109	-138	-139	-112	-110	-165	-370	-322	-522	-524	-606
Exports	88	99	97	105	113	152	138	148	163	153	222	262	166	260	278	277	230
Imports	128	132	139	167	181	219	247	286	302	265	332	427	536	582	800	801	836
Services	26	30	40	49	59	71	70	91	114	119	117	160	91	59	43	-9	-33
Receipts	73	86	97	109	121	134	130	149	167	176	208	264	n.a.	n.a.	118	114	108
Expenditure	47	56	57	60	63	63	60	58	53	57	91	104	n.a.	n.a.	75	123	141
of which interests	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6	36	60
Net private transfers	0	0	0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	53	65	64
Net official transfers															56	57	79
Capital account balance	-1	-4	-6	-1	-2	-15	-6	-7	10	-1	-15	-24	124	167	364	409	395
Foreign borrowing															503	718	725
Debt amortisation															139	309	329
Foreign direct investment															0	0	0
(Net) Errors and omissions															-30	-67	-41
Overall balance																	
(Before grants)	-14	-8	-7	-14	-12	-11	-45	-55	-16	6	-8	-28	-155	-96	-92	-126	-220
(After grants)	-14	-8	-7	-14	-12	-11	-45	-55	-16	6	-8	-28	-99	-28	-36	-69	-141
Financing of the overall balance																	
Net foreign assets	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	36	69	141
Net change in arrears	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	36	69	149
Debt relief	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	0	-8
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0	0	0

(Table A3.3: continued)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Current account balance	-579	-534	-467	-566	-692	-735	-848	-865	-846	-849	-950	-1,008	-736	-707	-672	-836	-1,094
(Before grants)	-489	-366	-328	-353	-388	-358	-460	-417	-344	-350	-447	-443	-397	-402	-359	-523	-678
(After grants)	-504	-445	-347	-385	-545	-633	-703	-752	-737	-716	-823	-870	-553	-557	-530	-620	-903
Trade balance	132	94	77	79	97	103	105	126	162	139	132	150	174	226	230	248	268
Exports	636	540	424	543	642	736	808	878	899	855	955	1,019	727	783	760	868	1,171
Imports	-75	-89	-120	-181	-147	-102	-145	-113	-109	-133	-127	-138	-183	-150	-142	-216	-191
Services	91	61	66	69	137	157	167	173	203	223	240	246	233	253	279	286	353
Receipts	166	150	186	250	284	259	312	286	312	356	367	384	416	403	421	502	544
Expenditure	88	81	103	177	148	117	169	142	136	171	170	144	144	143	146	157	118
of which interest	75	57	41	50	n.a.	78	85	98	108	110	125	138	59	61	64	46	38
Net private transfers	90	168	139	213	304	377	388	448	502	499	503	565	339	305	313	313	416
Net official transfers	43	-73	-40	-88	-77	-125	-55	-84	-187	-155	-107	-22	64	239	185	264	436
Capital account balance	339	265	239	280	301	248	257	251	144	170	186	260	282	347	317	300	160
Foreign borrowing	297	338	279	367	384	378	315	344	354	350	325	317	264	181	197	249	108
Debt amortisation	0	0	0	0	6	5	3	9	23	25	32	35	45	73	64	213	388
Foreign direct investment	44	23	-3	-73	40	34	9	3	-34	-12	-12	7	-6	49	12	12	35
(Net) Errors and omissions																	
Overall balance	-418	-527	-469	-755	-729	-748	-809	-848	-959	-906	-944	-885	-618	-358	-412	-517	-622
(Before grants)	-328	-360	-330	-542	-425	-371	-421	-400	-457	-407	-441	-320	-279	-53	-99	-204	-207
(After grants)	328	360	330	542	425	371	421	400	457	407	441	320	279	53	99	204	207
Financing of the overall balance	47	-54	17	6	-58	-25	3	-4	-12	-40	46	-57	-27	-158	-116	-76	-47
Net foreign assets	281	201	156	536	-608	0	398	51	84	-222	-593	-10	185	65	-3,933	18	0
Net change in arrears	0	213	157	0	1,091	396	20	353	385	669	988	387	121	146	4,148	262	254
Debt relief																	

Sources: Own estimates based on data from GOM/Statistics 1975 to 2001; Banco de Moçambique 1995 to 2001; World Bank 2001, 1995, 1990a and 1990b; UNIDO 1987; UNDP 1998b, 1996a and 1995; Pereira Leite 1989; Wuyts 1989 and 1984.

Table A3.4: Value of exports by sector, 1975-1999 (US\$ million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Goods	185	144	152	166	260	278	277	230	132	94	77	79	97
Agriculture	46	18	16	11	25	28	23	40	16	15	7	6	11
Manufacturing industry	118	105	115	135	199	209	188	146	82	50	35	34	45
Cotton (S/G)	16	17	9	14	24	8	25	17	17	8	5	1	6
Cashew kernels and CNSL	30	35	48	52	54	67	55	44	16	15	12	17	31
Tea	6	6	13	13	21	24	14	26	15	11	2	1	0
Sugar and molasses	24	19	10	8	35	28	29	10	9	6	7	8	4
Copra	9	10	13	14	17	12	7	4	2	2	5	2	3
Sisal	4	3	4	4	6	4	3	3	1	1	0	0	0
Cement	1	1	6	7	4	4	3	3	0	3	0	1	0
Oil derivatives	14	7	10	22	35	63	52	38	22	5	4	4	0
Other	15	6	3	2	3	0	0	0	0	0	0	0	0
Fishing (shrimp, lobster)	10	12	11	17	24	31	52	39	31	27	33	38	41
Other Industries	11	10	10	4	13	9	14	6	2	2	1	1	1
Services	330	255	204	203	207	113	106	103	87	59	107	119	137
Total (Goods and Services)	516	399	357	369	466	391	383	334	219	153	184	198	234

(Table A3.4: continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Goods	103	105	126	162	139	132	150	174	226	230	248	268
Agriculture	7	12	17	21	18	17	7	25	42	62	78	53
Manufacturing industry	45	45	48	58	42	31	59	58	73	71	78	119
Cotton (S/G)	5	7	9	9	11	11	19	19	13	21	11	20
Cashew kernels and CNSL	27	21	15	16	18	8	3	10	17	14	1	0
Tea	0	0	0	1	0	0	0	0	0	0	0	0
Sugar and molasses	5	5	8	10	7	0	11	7	13	13	3	6
Copra	5	2	3	5	4	3	3	0	1	0	0	5
Sisal	0	0	0	0	0	0	0	0	0	0	0	0
Cement	0	0	0	0	0	0	0	2	2	2	1	0
Oil derivatives	0	0	0	0	0	7	15	4	3	1	38	68
Other	4	9	14	18	2	3	8	17	25	20	25	20
Fishing (shrimp, lobster)	47	41	47	64	69	72	66	81	86	82	67	75
Other Industries	4	7	14	19	10	12	17	10	25	15	25	21
Services	157	167	173	203	223	240	246	292	314	342	333	353
Total (Goods and services)	260	272	300	365	362	372	395	466	540	572	581	621

Sources: Own estimates based on data from GOM/Statistics 1975 to 2001; Pereira Leite 1999 and 1989; World Bank 1990a and 1985.

Table A3.5: Value of imports by category, 1974-1999 (US\$ million)

	1974	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Consumer goods	124	153	150	203	178	168	178	182	174	245	262
Food, beverages and tobacco	62	85	81	108	114	116	131	135	121	149	171
Cereals	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	79	68	82
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	42	81	89
Other consumer goods	62	68	69	95	64	53	47	47	53	96	91
Personal passenger vehicles	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5	7	7
Textiles, clothing & leather	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	10	11	11
Hygiene products	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6	12	9
Others	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	32	66	64
Intermediate Inputs	177	220	251	387	367	378	232	193	156	144	176
Chemicals	35	55	61	63	72	78	48	25	19	39	23
Metal products	30	35	16	47	52	30	31	19	19	22	29
Oil and oil products	63	88	140	219	167	213	97	101	69	48	63
Electricity	0	0	0	1	5	8	9	9	6	7	9
Other	48	41	34	57	70	50	47	40	44	29	52
Spare parts	54	62	51	57	104	108	105	71	47	68	92
Equipment	71	102	129	152	151	182	122	94	46	85	112
Total imports	427	536	582	800	801	836	636	540	424	543	642

(Table A3.5: continued)

	1988	1989	1990	1991	1992	1995	1996	1997	1998	1999
Consumer goods	304	365	358	400	363	304	295	331	368	271
Food, beverages and tobacco	176	174	254	252	234	165	176	183	215	139
Cereals	101	83	99	65	87	66	74	84	94	65
Others	75	91	155	187	147	99	102	99	121	74
Other consumer goods	128	191	104	148	129	139	119	148	153	132
Personal passenger vehicles	11	23	16	36	33	27	25	27	17	44
Textiles, clothing & leather	20	32	28	53	31	24	28	51	55	35
Hygiene products	18	20	10	6	8	10	12	10	13	8
Others	79	116	50	53	57	78	54	60	68	45
Intermediate inputs	198	228	245	156	192	203	252	196	220	245
Chemicals	31	32	22	56	51	59	47	42	40	45
Metal products	35	42	30	25	54	47	77	39	81	36
Oil and oil products	61	72	96	55	57	73	92	92	66	71
Electricity	10	8	9	10	10	9	9	9	11	13
Other	61	74	88	10	20	15	27	14	22	80
Spare parts	101	88	84	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Equipment	133	128	191	343	300	220	236	233	280	655
Total imports	736	808	878	899	855	727	783	760	868	1,171

Sources: Own estimates based on data from GOM/Statistics 1975 to 2001; UNIDO 1987; World Bank 1990a and 1985.

Table A3.6: Value of gross and manufacturing investment (US\$ million, 1996 prices)

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Investment in manufacturing	10	16	31	26	20	16	16	21	35	45	39	81
Gross investment												

(Table A3.6 continued)

	1971	1972	1973	1978	1979	1980	1981	1982	1983	1984	1985	1986
Investment in manufacturing	34	27	58	26	26	56	140	138	161	84	52	49
Gross investment				186	187	452	459	447	226	289	234	410

(Table A3.6 continued)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Investment in manufacturing	97	146	161	229	203	221	205	270	190	152	177	294	537
Gross investment	618	685	680	762	677	735	683	899	761	606	631	839	1,535

Sources: Own estimates based on data from GOM/Statistics 1961 to 2001; GOM and UNIDO 1993; Biggs, Nasir and Fisman 1999; Pereira Leite 1989; Pereira de Moura and Amaral 1978; UNDP 1998b, 1996a and 1995; UNIDO 1987; World Bank 1995c, 1993b, 1990a, 1990b and 1985; Wayts 1995, 1989 and 1984.

Table A3.7: Approved investment by sector, type and province, in US\$, (1990-1999)

	FDI	DDI	Loans	Total
Cabo Delgado				
Agriculture	772,396	360,088	6,686,276	7,818,760
Manufacturing	2,610,000	1,155,582	34,014,223	37,779,805
Transports and communications		106,818	3,553,952	3,660,770
Mineral resources			0	
Fishing	690,952	211,891	416,874	1,319,717
Tourism	2,058,737	107,661	9,224,670	11,391,068
Construction			0	
Banking			0	
Others	189,000	18,500	0	207,500
Total	6,321,085	1,960,540	53,895,995	62,177,620
% of investment in the province	10	3	87	100
% of national investment	0	0	2	1
Niassa				
Agriculture	282,000	469,034	988,749	1,739,783
Manufacturing	252,999	5,396,924	7,366,660	13,016,583
Transports and communications		2,310,021	0	2,310,021
Mineral resources	66,000		0	66,000
Fishing			0	
Tourism		3,430,263	6,271,209	9,701,472
Construction			0	
Banking			0	
Others		108,477	0	108,477
Total	600,999	11,714,719	14,626,618	26,942,336
% of investment in the province	2	43	54	100
% of national investment	0	3	1	1
Nampula				
Agriculture	4,611,360	7,643,564	7,966,780	20,221,704
Manufacturing	18,741,767	39,857,083	72,139,778	162,871,962
Transports and communications	350,000	984,068	3,066,924	4,400,992
Mineral resources			0	
Fishing			0	
Tourism		1,000,154	756,517	1,756,671
Construction	301,613	245,745	4,969,888	5,517,246
Banking			0	
Others		79,545	1,601,145	1,680,690
Total	24,004,740	49,810,159	122,634,366	196,449,265
% of investment in the province	12	25	62	100
% of national investment	1	12	6	4

(Table A3.7 continued)

	FDI	DDI	Loans	Total
Zambézia				
Agriculture	10,644,284	5,826,083	39,277,405	55,747,772
Manufacturing	26,803,959	20,526,560	84,727,561	132,058,080
Transports and communications	80,000	179,252	1,655,116	1,914,368
Mineral resources	3,830,000	373,909	0	4,203,909
Fishing	5,650,256	2,904,682	56,461,857	65,016,795
Tourism			0	
Construction	200,000	100,000	2,200,000	2,500,000
Banking		5,120,000	0	5,120,000
Others		9,739	71,503	81,242
Total	47,208,499	35,040,225	184,393,442	266,642,166
% of investment in the province	18	13	69	100
% of national investment	2	8	8	6
Tete				
Agriculture	1,195,721	131,979	22,162,261	23,489,961
Manufacturing	0	1,480,682	1,008,302	2,488,984
Transports and communications	425,000	444,839	3,640,289	4,510,128
Mineral resources	55,000		0	55,000
Fishing	2,502,119	1,951,509	7,943,387	12,397,015
Tourism	820,338	329,798	63,777,565	64,927,701
Construction			0	
Banking			0	
Others	50,000	47,808	306,357	404,165
Total	5,048,178	4,386,615	98,838,161	108,272,954
% of investment in the province	5	4	91	100
% of national investment	0	1	4	2
Manica				
Agriculture	3,026,118	1,122,322	21,451,389	25,599,829
Manufacturing	9,036,704	15,481,031	35,910,039	60,427,774
Transports and communications	50,662	94,939	1,349,106	1,494,707
Mineral resources	7,630,000	606,000	0	8,236,000
Fishing			0	
Tourism		67,183	95,000	162,183
Construction			0	
Banking			0	
Others		40,352	106,102	146,454
Total	19,743,484	17,411,827	58,911,636	96,066,947
% of investment in the province	21	18	61	100
% of national investment	1	4	3	2

(Table A3.7 continued)

	FDI	DDI	Loans	Total
Sofala				
Agriculture	9,504,118	2,717,888	87,273,242	99,495,248
Manufacturing	55,729,274	30,552,238	162,160,478	248,441,990
Transports and communications	9,696,000	5,408,191	25,557,978	40,662,169
Mineral resources			0	
Fishing	19,061,091	11,890,502	54,052,019	85,003,612
Tourism	829,389	638,959	5,024,372	6,492,720
Construction	625,000	0	9,158,096	9,783,096
Banking			0	
Others	550,000	607,876	8,799,903	9,957,779
Total	95,994,872	51,815,654	352,026,088	499,836,614
% of investment in the province	19	10	70	100
% of national investment	5	12	16	11
Inhambane				
Agriculture	950,000	1,122,018	3,107,609	5,179,627
Manufacturing	325,000	1,732,962	13,488,964	15,546,926
Transports and communications	10,875	127,678	327,805	466,358
Mineral resources			0	
Fishing	1,059,255	1,052,606	9,584,551	11,696,412
Tourism	7,393,434	1,269,518	28,803,716	37,466,668
Construction	50,000	258,725	1,196,366	1,505,091
Banking			0	
Others	61,749	1,333,271	121,501	1,516,521
Total	9,850,313	6,896,778	56,630,512	73,377,603
% of investment in the province	13	9	77	100
% of national investment	1	2	3	2
Gaza				
Agriculture	7,023,843	723,136	13,206,623	20,953,602
Manufacturing	6,841,665	398,819	9,455,212	16,695,696
Transports and communications		758,464	630,000	1,388,464
Mineral resources	10,330,000		0	10,330,000
Fishing	77,700	35,622	128,319	241,641
Tourism	1,507,200	4,111,461	10,776,719	16,395,380
Construction		72,700	2,116,531	2,189,231
Banking			0	
Others	1,488,000	1,120,612	1,846,993	4,455,605
Total	27,268,408	7,220,814	38,160,397	72,649,619
% of investment in the province	38	10	53	100
% of national investment	1	2	2	2

(Table A3.7 continued)

	FDI	DDI	Loans	Total
Maputo (province and city)				
Agriculture	8,242,936	8,701,395	139,181,483	156,125,814
Manufacturing	1,521,031,990	118,670,015	578,620,728	2,218,322,733
Transports & communications	18,327,705	19,524,398	99,489,750	137,341,853
Mineral resources	1,259,600	44,650	1,718,074	3,022,324
Fishing	2,201,530	2,854,247	12,547,655	17,603,432
Tourism	42,862,644	27,440,497	131,035,058	201,338,199
Construction	17,107,455	11,988,116	132,351,013	161,446,584
Banking	72,458,452	34,286,498	12,762,496	119,507,446
Others	25,064,830	19,450,763	119,540,344	164,055,937
Total	1,708,557,142	242,960,579	1,227,246,601	3,178,764,322
% of investment in the province	54	8	39	100
% of national investment	88	57	56	69
National Total				
Agriculture	46,252,776	28,817,507	341,301,817	416,372,100
Manufacturing	1,641,373,358	235,251,896	998,891,945	2,907,650,533
Transports and communications	28,940,242	29,938,668	139,270,920	198,149,830
Mineral resources	23,170,600	1,024,559	1,718,074	25,913,233
Fishing	31,242,903	20,901,059	141,134,662	193,278,624
Tourism	55,471,742	38,395,494	255,764,826	349,632,062
Construction	18,284,068	12,665,286	151,991,894	182,941,248
Banking	72,458,452	39,406,498	12,762,496	124,627,446
Others	27,403,579	22,816,943	132,393,848	182,614,370
Total	1,944,597,720	429,217,910	2,207,363,816	4,581,179,446
% of national investment by type	42	9	48	100

Source: Own estimates from CPI's data base of 1,300 investment projects approved in 1990-1999.

Table A3.8: Distribution of approved investment by type and industry, in US\$ (1990-1999)

	FDI	DDI	Loans	Total
Mozal (aluminium smelter)	1,326,600,000	13,400,000	0	1,340,000,000
Motraco (Mozal's power station)	26,100,000	13,050,000	91,350,000	130,500,000
Sugar	40,709,096	28,000,222	160,373,686	229,083,004
Cement	25,031,181	23,809,371	96,400,002	145,240,554
Beer	40,300,000	13,797,500	86,394,500	140,492,000
Soft drinks	5,068,462	25,812,308	2,736,239	33,617,009
Cereal mills	21,960,628	15,936,166	60,576,757	98,473,551
Cashew processing	6,812,834	7,105,584	23,528,395	37,446,813
Vegetable oils	2,500,000	2,000,000	9,250,000	13,750,000
Tea	5,080,000	7,688,616	25,682,160	38,450,776
Tobacco	132,000	1,738,277	25,940,150	27,810,427
Textiles (cotton ginning, spinning, cloth)	24,510,000	12,969,077	88,817,377	126,296,454
Wood products	7,033,017	9,078,095	63,535,536	79,646,648
Glass	3,466,700	2,908,650	13,128,501	19,503,851
Metal engineering	7,068,914	9,091,146	63,385,924	79,545,984
Total	1,542,372,832	186,385,012	811,099,227	2,539,857,071
% of manufacturing investment of the type	94	79	81	87
% of total investment of the type	79	43	37	55

Source: Own estimates from CPI's data base of 1,300 investment projects approved in 1990-1999.

Table A3.9: Public revenue and expenditure, 1975-1999 (US\$ million)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Revenue													
Fiscal	220	191	217	374	344	458	503	556	548	589	509	584	373
Income tax	220	191	217	312	313	366	336	424	398	377	324	360	200
Corporate tax	37	32	31	31	31	31	28	53	50	47	46	45	10
Consumption tax	37	32	31	62	63	92	84	132	124	71	69	67	41
Other indirect taxes	73	64	93	125	125	153	140	159	149	212	162	202	104
Other domestic revenue	73	64	62	93	94	92	84	79	75	47	46	45	45
Grants	0	0	31	62	63	92	168	159	149	141	116	135	35
Grants	0	0	0	0	0	0	0	0	0	71	69	90	138
Expenditure													
Current	n.a.	n.a.	n.a.	n.a.	n.a.	733	867	953	1,070	1,060	926	1,146	549
Investment	n.a.	n.a.	n.a.	n.a.	n.a.	427	476	582	647	660	764	944	314
Investment	n.a.	n.a.	n.a.	n.a.	250	305	392	371	423	401	162	202	235

(Table A3.9 continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Revenue												
Fiscal	248	277	287	242	241	209	233	224	308	395	429	490
Income tax	210	244	256	206	209	190	213	204	283	365	400	452
Corporate tax	11	11	13	14	16	15	21	20	31	42	40	36
Consumption tax	45	44	38	29	21	15	21	17	25	33	37	33
Other indirect taxes	112	129	131	96	103	102	113	107	153	206	232	287
Other domestic revenue	42	60	74	67	69	58	59	60	73	83	91	83
Grants	38	33	31	36	32	19	20	20	25	30	29	37
Expenditure												
Current	174	195	218	215	252	178	283	194	203	279	231	427
Investment	547	590	684	519	546	440	625	469	642	834	854	915
Current	282	293	330	248	279	223	302	203	272	368	417	500
Investment	265	282	328	252	253	209	323	266	327	416	372	374

Sources: Own estimates based on data from GOM/Statistics 1975 to 200; World Bank 1990a and 1985; Wapys 1989 and 1984.

CHAPTER 4

CONTEXT OF INDUSTRIALISATION AND INDUSTRIAL POLICY ANALYSIS IN MOZAMBIQUE

The previous two chapters set the main theoretical and empirical framework for the analysis of industrialisation and industrial policy in Mozambique. This chapter initiates the analysis of how influential research and core economic policies respond to the fundamental political and socio-economic pressures that affect the development of the manufacturing sector. The first section discusses the main pressures that influence and shape the pattern of economic and industrial development in Mozambique. It argues that these pressures are not being adequately addressed by formal and official industrial policy and strategies. The second section summarises the current core economic programs – classical, Washington consensus type of stabilisation and liberalisation programs – and discusses their implications for industrial policy. The third section discusses the main studies on industrial development in Mozambique and how they address the problems of industrialisation and the interaction between industrial development and macroeconomic stabilisation and economic liberalisation. The conclusion summarises the main points to be drawn from this analysis for industrial policy formation in Mozambique.

4.1 Pressures that influence industrialisation in Mozambique

The pattern, pace and direction of development of the manufacturing sector in Mozambique have been influenced and shaped by several socio-economic pressures. First, the existing manufacturing sector is generally uncompetitive, old, worn out and outdated. As a result, productivity and quality standards are generally low, and so are profits, investment and wages. Recent productivity growth in manufacturing, which has been concentrated in large and foreign owned firms, has been driven by the recovery of the rate of capacity utilization and significant downward adjustment in the level of manufacturing employment. With rare exceptions, only FDI driven projects have invested in new technology and improved management and organization. In order to respond to mounting pressures to increase wages, capital accumulation and investment, firms will have to find initial finance to be able to upgrade standards and increase productivity in a cumulative and sustained basis.

Second, most domestic firms have serious management deficiencies with respect to business strategy, planning and financial management, and domestic entrepreneurs are generally inexperienced and unskilled. Additionally, formal training schemes are almost non-existent and skilled workers with the ability to adjust to new technologies and production practices, adapt and innovate are very scarce.

It should be noted, however, that these two characteristics of the manufacturing sector are shared mostly by small and medium, domestically owned firms, but not by new FDI driven projects. Large, foreign owned projects are usually capital and skill intensive (with the exception of sugar) and some of them operate with internationally competitive technology and levels of productivity (such as Mozal, an aluminium smelter). As a result, in most of these projects investment, profits and wages are significantly higher than in the majority of manufacturing firms.

Third, the productive and export capacity of the manufacturing sector is narrowly specialised, and have become narrower over the past decade. Therefore, intra- and inter-industry linkages are weak and the sector is heavily import-dependent so that expansion of manufacturing investment and output, under current conditions, results in very significant balance of payment pressures. Hence, there is an inverse relationship between economic stability and sustainable growth of manufacturing output. In the short run, the relationship between expansion of output and economic stability depends upon the level of aid inflows. In the long run, manufacturing output and exports have to diversify and intra- and inter-industry and sectoral linkages have to be strengthened.

Fourth, the output of the manufacturing sector has been highly volatile. This reflects the fact that production and exports are narrowly based, and therefore susceptible to changes in demand conditions for any one particular industry. This volatility also results from balance of payment pressures that manufacturing expansion, under current conditions, creates, such that each period of expansion is followed by a period of contraction that is due to import dependence and inability to sustain imports.

Fifth, the overall economic activity and direction, at more global or at sectoral, industry and firm levels, are constrained and shaped by the core macroeconomic stabilisation and liberalisation policies, which affect aggregate demand, access to and cost of finance, industrial and other socio-economic relations, business confidence, patterns of investment and opportunities for economic change. The manufacturing sector in Mozambique, which does

not have knowledge and technology advantages, needs access to cheap finance for capital equipment, working capital and trade. However, it also needs a strategy to allocate financial resources and to tie financial incentives with performance targets. Core macroeconomic and liberalisation policies have not helped to provide financial resources or a strategy.

Sixth, FDI has been selectively acquiring and dominating entire existing industries (beverages, sugar, cereal milling, cement, textiles) and introducing new ones (aluminium, steel and iron). This process is driven by corporate strategies, and has had little impact upon the development of vertical and horizontal relationships, linkages and complementarities with other firms and industries in Mozambique. On the whole, FDI has been very narrowly specialised, and most recently has been dominated by the expansion of the minerals-energy complex of South Africa. FDI has become the single most important source of finance of investment in the economy, particularly in the manufacturing sector, and its share of investment is still increasing. Additionally, a very large share of DDI and loans, other sources of finance, have been allocated to FDI driven projects. Quite apart from the power that FDI is acquiring in the Mozambican economy, a FDI driven investment strategy may not be sustainable because Southern African is a very marginal destination of FDI from outside the region. From inside the region, inflows of FDI into Mozambique depend of globalisation strategies of South African corporations, particularly of those associated with the minerals and energy complex, which are also affected by the world's economic environment.¹

Related to this, seventh, economic dynamics in the Southern Africa region, particularly associated with the restructuring of capital in South Africa, affect the pattern of investment, structure and direction of production and trade, employment opportunities, and division of labour. The economy continues to be dominated by services, one of two traditional dynamic links between the Mozambican economy and South African capitalism, but FDI is showing signs of being capable of becoming the dominant channel by which the Mozambican economy is integrated within the SDI and other processes of expansion of South African capitalism through the Southern Africa region.

These pressures are important starting points in the analysis of manufacturing and formulation of policy, but they have not been adequately addressed in the studies of the sector or official policy documents. There is an implicit institutional assumption that not very much can be

¹ See Fine 1997b, Fine and Rustomjee 1996 and Roberts 2000 for a discussion of the globalisation strategies of the South African corporations. Castel-Branco 2001 presents data on the potential impact of increasing globalisation of the minerals-energy complex on the direction of FDI inflows into the Mozambican economy.

done about these pressures in terms of policy making. Therefore, the best strategy is assumed to be having no strategy that interferes with individual decisions and actions.

Current core economic programs have driven industrial policy and other forms of investment policy and strategy to the margin of economic policy. This is because of their assumption that growth and economic change are natural outcomes of market allocation of resources, which is made efficient through economic stabilisation and liberalisation of goods and factor markets. Therefore, sectoral policies that interfere with "free market" allocation are either undesirable, second best or play a marginal role. In reality, this results in a state that responds defensively to domestic lobbies while trying to compensate for its inability to face up to the power of the Bretton Woods institutions, large foreign corporations and powerful and fragmented domestic pressures. The combination of external and domestic pressure and defensive reaction by the state has weakened the capability and willingness of public institutions to develop and implement coherent and relevant industrial policies that go beyond the simplest forms of coordination, facilitation and provision of incentives for capital accumulation.

Additionally, the debate and analysis of industrial policy, whenever it comes about, is almost exclusively focused on incentives and on facilitation of the process of private capital accumulation with little concern for the direction and patterns of accumulation. This direction of the debate is associated with real and fundamental problems: pressing needs for capital investment, interests of the growing national entrepreneurial bourgeoisie, and the influence of owners of capital upon institutions and processes of policy analysis, formulation and implementation. However, the focus of the debate on capital accumulation reinforces the marginalization of industrial policy because whenever capital accumulation is in conflict with the core stabilisation and liberalisation objectives the latter prevail.

As a result, the concept of industrial policy is not at the top of the economic agenda. The dominant policy documents, the Policy Framework Paper (PFP) and the Poverty Reduction Strategy Paper (PRSP), do not mention industrial policy or any specific policies and strategies for the manufacturing sector.² The official industrial policy documents (general or industry

² See GOM 2000a, 2000b and 2000c, and GOM, IMF and WB from 1988 to 1999. The PFP is formulated by the government and approved by the International Monetary Fund (IMF) and the World Bank (WB), which sets the direction of economic policy and priorities for a period typically of 2 years. It is focused on macroeconomic stabilisation and trade liberalisation, but also incorporates sectoral policies associated with the provision of human capital and infrastructures. It sets the conditionality attached to multilateral finance. The PFP provides useful information about the government's commitments with respect to money supply, including credit ceilings, obligatory reserve ratios, public borrowing and interest rates, and also about public expenditure and deficit before grants, taxes, aid and multilateral credit and the expected business environment and constraints. The PRSP replaced the PFP,

specific) are known only by a few public and private institutions, firms, unions and individuals (scholars, consultants or others) and are considered inadequate or irrelevant by most.³ The exception to this rule is the sugar industry, where the three main components of industrial policy and strategies – investment priorities, pricing policy and inter-firm coordination of exports – are core determinants of investors' interest in the industry.⁴

By contrast, almost all agents know about, and many have studied in detail, the official documents concerning investment incentives, free industrial zones, exchange rate and credit mechanisms and policies, tax legislation and policies (including customs import and export duties), labour laws, licensing legislation, etc.⁵ They all have some interest in the official statistics⁶ and strong interest in, although not always access to, the PFP and PRSP.

4.2 Current economic programs and implications for industrial policy

The definition of and role played by industrial policy depend upon interpretations of how the economy functions, linkages happen and agents operate. Pure neo-classical approaches envisage the market being the link between producers and consumers in a world of atomistic, rational agents that seek individual welfare maximisation and face no rigidities. Sectoral policies are not necessary and may even be undesirable if they lead to outcomes that are not market conforming. Public policy is required only to establish the rules for voluntary contracts and exchange, enforce contracts and property rights, control money supply, ensure low taxation and guarantee law and order. Revisionist neo-classical economics, associated with endogenous growth models, information and new institutional economics, acknowledges that there might be systemic market failure associated with externalities in production and trade, differences in human and social capital and in technology and knowledge, information

when the G-7 approved the principle of making debt cancellation for heavily indebted poor countries conditional to resources thus made available being used to finance poverty reduction programs.

³ See GOM 2000e. The documents mentioned are GOM 1999j, 1998a, 1997a, 1996b and 1995.

⁴ GOM 1999e, 1999f, 1996b and 1993. The National Sugar Institute (INA) formulated these policies largely in response to demands from potential foreign investors during the process of privatisation of the sugar estates in order to attract bidders.

⁵ GOM 1999a, 1999k, 1999l, 1998e.

⁶ GOM/Statistics 1995-1999 and 1975-1994. Official statistics provide useful demographic information and economic data. However, quite apart from the quality of data, official statistics take so long to be published that businesses cannot use them for planning. The latest Statistics Yearbook, published in the second semester of 2001, reports on 1999 data. Businesses utilise official statistics for consultancy reports; to increase the weight of lobbying activity; and to convince potential financial partners, mostly foreign investors, to invest in particular firms or projects.

imperfections and inappropriate institutional and legal settings. Public policy is called upon to manage externalities and information failure that may prevent agents from distinguishing right from wrong market signals, and from identifying the magnitude and direction of distortion and required adjustment. These two approaches are combined in the Washington consensus that underlies the nature of current economic programs in Mozambique.

Fundamental components of economic programs

Current economic policy in Mozambique is formulated in series of government memoranda, reports, plans and policy agreements with the Bretton Woods institutions.⁷ In the most recent documents, poverty reduction is defined as the main socio-economic goal of economic policy in the medium and long run.⁸ Poverty reduction, it is argued, is achieved through accelerated economic growth and social justice. None of the documents elaborates further on the meaning of and path to social justice in any significant way, apart from mentioning it, such that it can be argued that according to current policies poverty reduction is directly and positively correlated with economic growth irrespective of the patterns of growth that may develop.⁹

The documents identify eight growth-enhancing areas of policy. First and foremost is macroeconomic stabilisation, which is pursued through tight monetary and fiscal policies,¹⁰ more efficient tax collection and more effective customs control and financial reform.¹¹ It is argued that macroeconomic stability increases productivity and competitiveness by providing a dynamic business environment, reducing uncertainty, and improving the performance of the financial sector. There is no mention of how investment, technology change, acquisition of technical and managerial skills, industrial relations and labour conditions are affected by, and

⁷ See GOM 2000a, 2000b and 2000c, GOM, IMF and WB from 1988 to 1999, IMF 2000.

⁸ GOM 2000a, 2000b and 2000c, GOM, IMF and WB 1998 and 1999, IMF 2000.

⁹ To be more precise, the documents argue that social justice is achieved through development of human and social capital and an improved legal system. These factors are also incorporated into the growth function, so that social justice and poverty alleviation are highly correlated with, and determined by, economic growth. To alleviate poverty, the state plays two functions: provides unfortunate individuals with endowments (human capital) that they can exchange for income in the market place; and ensures that the market operation is smooth in order for all possible trade to take place at the right price so that each individual's state of welfare is optimised.

¹⁰ These include tight targets for increase in money supply that are to be achieved through high real interest rates, tight credit ceilings and high obligatory reserve ratios, as well as negative public borrowing from domestic banks and a gradual reduction of overall state deficit before grants.

¹¹ Financial reform, later discussed as a growth enhancing measure on its own right, is also important for monetary stabilisation because it is assumed to be linked with improved financial supervision, reduction of political loans and increased confidence in the system.

affect, macroeconomic stability, and how the tension between short term stability and economic change and innovation could be addressed. In other words, the documents do not mention how stabilisation policies affect the factors that are directly linked to productivity and competitiveness. The presumption is that an enabling business environment, supposedly provided through macroeconomic stability, is sufficient condition for the economic potential to be materialised as optimising and atomistic agents perceive and take market opportunities.

Trade liberalisation¹² is the second growth enhancing area of policy, and it is expected to provide larger markets for domestic production, incentives to export, capacity to compete, cheaper capital, intermediate and consumer goods and access to the world stock of knowledge and experience. The documents do not discuss the impact of quick and across the board trade liberalisation on the market share, size and business expectations of domestic firms in an infant economy. Equally, there is no discussion of the factors that directly affect export capabilities – production experience, productive capacity at international standards, business networks – and how to acquire them. No policy implications are drawn from the fact that the expected price effects of trade liberalisation are one-off and depend upon trade balance and the exchange rate.¹³

Financial reform, the third growth enhancing policy, consists of privatisation, liberalisation and development of financial markets and its institutions, as well as improving banking supervision. Financial reform is expected to lead the development of the real side of the economy through financial deepening, increase in savings and improvement of the quality of investment.¹⁴ It is acknowledged that information failure may prevent the expected outcomes of financial reform from materialising,¹⁵ but there is no systematic and serious discussion of the structure and dynamics of the financial system, how it interacts with the rest of the economy and is influenced by patterns of economic development.

It is argued that these three areas create the fundamental market conditions that, in the absence of externalities, deliver optimal allocation of resources towards high growth sectors

¹² Pursued through elimination of quantitative barriers, reduction of tariff levels and dispersion, liberalisation of domestic price systems, valuation of factors at prevailing market prices, simplification of administrative barriers to trade and establishment of businesses, and negotiation of regional trade agreements within SADC.

¹³ GOM 2000e and 1999i and interviews with Luís Siteo and Alfredo Siteo (MIC).

¹⁴ See GOM, IMF and WB (various PFP series). For a more general theoretical approach, see McKinnon 1973 and Shaw 1973.

¹⁵ See Biggs, Nasir and Fisman 1999. For a theoretical discussion, see Sing 1982 and Stiglitz and Weiss 1981.

at minimal cost. However, human capital and infrastructures are two areas of social externality that create market failure. This is because of their public good and merit good characteristics, which typically yield higher social than private returns, so that if left to market forces alone would suffer from under-investment. Thus, public investment in human capital and infrastructures, understood to crowd-in private investment, are the fourth and fifth areas of policy for poverty reducing economic growth.

Beyond general statements about the role of education in human capital formation, the policy documents make no attempt to be specific about what kind of skills should be developed more intensively and extensively, how such skills could be developed and universal education achieved, and in what manner are these skills in line with the overall pattern of economic and industrial development. Knowledge is assumed to be a flexible commodity, easily and readily available and transferable, so that people can shop around for packages of knowledge as relative returns on different types of knowledge change. The programs assume that it suffices to guarantee a certain level of investment in the education for people to attend school and training schemes, acquire knowledge and be able to use it, and that industrial experience and capabilities are simply learned through education. The possibility that a boom in education may create an educated unemployed work force and the subsequent brain drain if education is not in line with economic and industrial expansion and modernisation is not addressed.

Labour reproduction, organization, wages, skills and productivity are not understood as forming part of industrial and other socio-economic relations, such that, unlike machines, workers can change the organization of production, their role in the process of production and distribution, and can bargain about wages, profits, use of public funds, etc. Thus, "returns" on "capital" labour are not given by any technically fixed rate of return on human capital, but result from the dynamics of industrial and other socio-economic relations associated with the relative organization and power of labour and capital and their interaction with the state.

The issue of infrastructures raises some interesting questions for industrial policy. On the one hand, there is strong emphasis on private-public partnerships, and even total privatisation of the provision of many infrastructures and associated services, which seems to be at odds with the notion that market forces under-perform in the provision of infrastructures. This tension is not mentioned, let alone addressed.

On the other hand, the bulk of infrastructures being developed consolidates the subordination of the Mozambican economy to stronger economic interests, such as the minerals-energy complex (MEC) of South Africa and plantations. For example the number one objective of

the Maputo corridor is to develop infrastructure: Witbank-Maputo toll road, port of Maputo, railway network of Maputo, the Ressano Garcia/Komatipoort border posts and Mepanda-Uncua hydro-electricity project. These are associated with the MEC, form part of the spatial development initiatives (SDI) that envisage the spatial expansion of South African capitalism, and are financed and managed by large private corporations.¹⁶ The rehabilitation of roads and railways in other areas is associated with special economic zones developed around cotton, copra, sugar and coal, and depends on financing from the private corporations that also own, and/or control, the productive facilities for these commodities.

There is a tension, not discussed or mentioned in the policy documents, between economic infrastructures being developed by and for big business, and official policy documents claiming that the development of competitive markets and local, small enterprises are the central goals of the development and poverty reduction policy. This issue is not about the relative and hypothetical (de)merits of big and small businesses but about inconsistencies between policy rhetoric and practice. The existence of dominant economic agents and interests are not acknowledged, let alone discussed, in any of the policy documents. Yet, large infrastructure projects promoted by big business have far bigger impact on the shape of the economy than any document about the alleged virtues of small labour intensive projects. If this reality is acknowledged, it is, then, possible to take advantage of big business to strengthen economic linkages, tackle unemployment and poverty, and diversify the sources of political and socio-economic influence upon policy-making.

Infrastructures are not neutral with respect to patterns of productive investment and capital accumulation, technologies available and financing. Large trading infrastructures (like ports) are more likely to favour imports and the provision of services to landlocked, hinterland countries if the ability to import and export differs in favour of imports¹⁷ and trade is liberalised. This may affect negatively the balance of trade while improving the balance of services, and it is not obvious that it will favour manufacturing production by domestic firms. A large dam is less likely to be used for local, small irrigation schemes than it is for generating energy; and a sophisticated industrial estate developed around a top-tech mega project is unlikely to be the springboard for small, local and low technology processing firms

¹⁶ See MCC 1998. In ISP 1998: pp. 12, SDIs are described as "(...) *programs of strategic initiatives undertaken by the South African government aimed at generating long-term, internationally competitive growth and development, and at restructuring the apartheid space economy.* The infrastructure projects mentioned are valued at US\$ 900 million, which exceeds the total sum of deposits in the entire banking sector in Mozambique (MCC 1998).

¹⁷ Because the ability to import is financed by international aid and the ability to export is not helped by the absence of specific investment and production policies and strategies.

that the economic program claims to support. Thus, the provision of infrastructures is more likely to enable the achievement of specific socio-economic goals, for example a specific pattern of industrialisation, if the infrastructure is developed with such goals in mind, rather than as a general provision of physical capital that may be wasteful.¹⁸

According to this analysis, the Washington consensus approach to infrastructures may yield one of three possible outcomes: (i) the state develops the infrastructure and, by doing so, partly determines the pattern of productive investment and industrialisation – therefore, the state would do well to have an industrial policy, and does so at least implicitly; (ii) the state waits for private entrepreneurs to decide which patterns of investment should be followed, but because they are atomistic individuals operating in a competitive environment, as neo-classical economics claims, entrepreneurs fail to coordinate without state intervention,¹⁹ infrastructures are not built and new private investment does not materialise; or (iii) the private sector develops the infrastructures that shape the economy, coordination is achieved because of dominance of large corporations and oligopolies, and the state provides investment incentives. Mozambique has experimented with the third of these outcomes.

For example, the development of a large aluminium smelter in Maputo, Mozal, required a secondary road, one bridge, the entire rehabilitation and modernisation of the port of Matola and the building of a power station (Motraco) that generates twice as much energy as the entire consumption of the country without Mozal. It was not the presence of such infrastructures that attracted investment in Mozal, but the other way around. Without Mozal, none of these infrastructures would have been created or become financially viable.²⁰ The presence of Motraco may stabilise the supply of energy for the existing manufacturing sector and for new investment in manufacturing, and this externality justifies public intervention. However, Motraco is not the result of market-friendly state intervention but of the pressures associated with a monopolistic mega-project. These infrastructures consolidate Mozal's economic and political power even if there are positive externalities that accrue to other firms and sectors of the economy. This is not a critique of Mozal or the infrastructures built for it, but of the fundamental inconsistencies between rhetoric and practice of policy. In a way, this

¹⁸ See Hirschman 1958, 1992 (Chapters 1 and 3) and 1995 (Chapter 3).

¹⁹ See Chang 1996 for a transaction cost analysis of why atomistic individuals fail to coordinate.

²⁰ Ian Reid and Peter Cowie (from Mozal) argue that Mozal also enhances the viability of the Witbank-Maputo toll road and the entire Maputo corridor project based upon the SDI philosophy, because it intensifies the road traffic in association with imports of material inputs, spares and equipment and exports of aluminium.

case is an example of "winners picking the state" as opposed to the "state creating and picking winners".²¹

The sixth and seventh areas of policy are public administration and legal system reform, and elimination of red-tape and bureaucracy. These are aimed at establishing transparent and stable rules for voluntary contracts and exchange, enforcing the rules and property rights, and reducing transaction costs. Civil servants benefited from the establishment of careers and training schemes, as well as improved salaries. However, the impact of these incentives upon the effectiveness of the state is questionable because policy-making and implementation is fragmented, and government departments are becoming donor driven because of the combination of financial constraints and donor design and financing of support projects in crucial areas of activity of the departments. Activities that are not donor supported often do not materialise even if they are important.²²

Additionally, the government is losing, or giving away instruments of policy through the process of accelerated and non-selective liberalisation and simplification. There is evidence that part of what is branded "red-tape" and selected for "simplification" results from lack of resources to implement important instruments of policy. This is, for example, the case for industrial licensing: MIC does not have the resources to implement the law, which has already been simplified. Production units have been established without proper inspection, and delays in the issuing of licences have led to calls for even further and deeper simplification of the law to the point where licensing becomes symbolic or disappears altogether.²³

The eighth area of policy is called domestic production policy and comprises what used to be, in earlier programs, sectoral policies (excluding manufacturing) and the business environment

²¹ The notion of "creating and picking winners" was first used in the analysis of East Asia's industrial policy to clearly oppose the neo-liberal assumption of market-created winners, while showing that industrial policy can be an effective way of creating efficiency. See, for example, Amsden 1989, Chang 1996 and Wade 1990.

²² See GOM 2000e, where interviewees specifically make the point that in most government departments and support services, only donor supported activities function. This is because donor support is tied and cannot be diverted to other activities, even if these are complementary. Donor dependence for formal and informal financing of current activities is also associated with a policy of tight current expenditure. GOM 1997c argues that, as much as 35%-40% of public investment expenditure is actually disguised public current expenditure. This happens because tight limits on growth of current expenditure strangle the very basic functionality of many state organizations. Many donor-financed programs (for example, all programs financed by the system of the United Nations, many programs financed by multilateral organizations – such as the private sector development assistance – and some programs financed by bilateral donors – such as the regional planning support program) are not included in the state budget and therefore are not counted as current or investment expenditure.

²³ GOM 2000e and 1998e, and interview with Olga Gomes (MIC).

and development policies. It is an amalgamated set of goals, intentions and activities, including the following: (i) support to the rural peasant economy through land distribution and provision of extension services; (ii) stimulate production by domestic firms; (iii) adoption of labour intensive technologies; (iv) improve decision making processes associated with the approval and implementation of investment projects; (v) attract mega projects; and (vi) introduce standards of quality. In the documents, none of these activities is elaborated with enough detail such that discussion of substance would be a matter of speculation. Nonetheless, the lack of consistency and of detail may be a signal of limited ability to formulate and implement these policies, if not an indication of how marginal they have become within the economic policy framework in Mozambique.

Implications for industrial policy

None of the current, core economic policy documents mentions the manufacturing industry in any form or detail, although other sectors of the real economy are included.²⁴ This signals a slight change from earlier economic policy documents,²⁵ which used to refer to the role of manufacturing in job creation and import substitution. Manufacturing was strategic also in terms of the penetration and development of the private sector because of the very large number of manufacturing firms to be privatised. However, even in these earlier programs it was argued that the development of the manufacturing sector would be the result of the combination of an enabling business environment and private sector initiatives. The business environment would be delivered through macroeconomic stabilisation, trade liberalisation and reduction of red tape, and private sector development would be the result of a massive privatisation program. For almost a decade, since 1987, privatisation was the dominant and almost exclusive form of policy for the manufacturing sector.²⁶

²⁴ Roads, water, sanitation, energy and electricity, transports (mainly ports and railways) and communications are part of the package of infrastructures and facilities covered by the program. These areas have acquired another degree of importance because their markets have been liberalised and assets privatised. Therefore, they are important not only because of market failure but also because they are important targets for the penetration of the private sector. Agriculture and rural development are part of the program because poverty is more pronounced in the rural areas, the land issue is still a very controversial matter and a potential future asset market, domestic entrepreneurship is more dominant in the agriculture sector, agriculture absorbs a the majority of the working people, and food security is a central issue in Mozambique. The fishery sector was introduced in this list because of the dominant role of shellfish in exports of goods and the role of fishing as a source of income in the rural areas.

²⁵ See, for example, GOM, IMF and WB 1988, World Bank 1990a and 1985.

²⁶ Castel-Branco 1996 and 1994b, Castel-Branco and Cramer (forthcoming), Cramer 2001 and 1999.

Moreover, rather than benefiting from an enabling environment, manufacturing development is constrained by the policy commitments to stabilisation and liberalisation adopted by the government. On the one hand, these policies have their own targets – control of aggregate demand and money supply, and liberalisation of the goods and factors markets such that prices reflect prevailing market conditions. These targets are exogenously determined with respect to manufacturing development, which creates policy rigidities and inefficiency in the manufacturing sector. On the other hand, whenever capital accumulation and growth are in conflict with the core stabilisation and liberalisation targets, the latter prevail. Therefore, core stabilisation and liberalisation strategies are growth enhancing insofar as economic growth is consistent with tight monetary and fiscal policies and prevailing market factor prices. In other words, given core economic policies, the only option open to economic growth is the expansion of the existing, underdeveloped economic structure.²⁷ This conclusion is consistent with evidence discussed in chapter 3.

An important implication of the marginalization of the manufacturing industry in the process of policy making is that little is coherently defined about any of the fundamental pressures that influence and shape the pattern, pace and direction of industrialisation in Mozambique. One particularly acute problem is what to do about FDI that is selectively acquiring control over some industries and creating some new ones, but without developing significant linkages and complementarities with domestic firms. There is little evidence that foreign investors are competing across the manufacturing sector against domestic firms, except in the case of demand for skilled workers: they usually operate in different industries, branches or market niches, and foreign investors borrow mainly from foreign banks where they have access to cheaper finance for working capital, equipment, machinery and trade related credit facilities.²⁸ Thus, foreign investors are significantly less constrained by the stabilisation commitments of the government.²⁹ Domestic investors feel that they operate at a disadvantage relative to foreign investors³⁰ because they are less experienced and skilled,³¹ the assets they own are of

²⁷ Castel-Branco 1996 and 1994b, Haarlov 1997 and Weiss 1992. For a more general debate, see Amsden 1997, 1994 and 1993, Fine 1997e, Mkandawire 1999, Tarp 1993 and Weeks 1994.

²⁸ See Banco de Moçambique (various yearly reports), Cramer 2001 and KPMG 1999. See Agosin and Mayer 2000, Aitken and Harrison 1999 and Leahy and Momtagna 2000 for a more general discussion of this point, in particular with respect to linkages (positive and negative) between foreign and domestic firms in various markets, including capital markets, and implications for policy.

²⁹ See UNCTAD 1999a, 1999d, and 1997a for a more general analysis of this point.

³⁰ See GOM 2000e.

³¹ See Biggs, Nasir and Fisman 1999.

inferior quality,³² they rarely benefit from corporate networks that provide finance, technology and marketing connections, and they do not have access to the same financial facilities abroad.³³ Foreign firms tend to pay higher wages and salaries to skilled workers, so that domestic firms are at a disadvantage to compete for scarce local, skilled labour.³⁴

Even if foreign firms do not compete against domestic firms in the financial and goods markets, domestic investors claim that the state is more receptive to pressure from large foreign firms because of their economic power.³⁵ Common examples of this are the contrasting fates of the sugar and cashew industries; the magnitude of incentives received by large corporations with FIZ status; and the government's commitment to use public money to re-capitalise two large, foreign owned commercial banks while it refuses to commit public resources to support domestic manufacturing firms.³⁶

The inability of the state to face up to different pressures and define strategies that change the composition and direction of pressure groups towards more progressive industrial development results in the emergence of a defensive, reactive state and fragmented policies and competition for rents. The defensive, reactive state has become fragmented because different parts of its executive and legislative bodies have become more sensitive to particular interest groups and economic pressures in the absence of an overall strategy.³⁷

³² See Cramer 2001 and Castel-Branco and Cramer (forthcoming) for an analysis of the privatisation process in Mozambique, which also discusses differential access to assets between foreign and domestic investors.

³³ See Kumar 1998, 1996a and 1996b, and UNCTAD 1997a for a more general analysis of the corporate structure under which subsidiaries of international corporations operate and the advantages (for the subsidiary) that such structure can provide.

³⁴ See Leahy and Momtagna 2000 for a theoretical discussion of wage bargaining and policies under different foreign direct investment conditions.

³⁵ See, for example, Blomström, Kokko and Zejan 2000, Ganesan 1998 and Weiss 1998, for an analysis of the relationship between host states and international corporations, the power of the latter and the alternative strategies available to the former.

³⁶ See GOM 2000e.

³⁷ Examples of this fragmentation are abundant and some are discussed in detail elsewhere in this thesis. Amongst others, a good recent example is the conflict between fractions of the government over labour law. The new law reflects the demand of businesses for more flexible labour management rules, including the simplification of the process of retrenching unskilled labour and the reduction of the power of trade unions. However, the law also reflects the demand of the small, elitist pool of educated nationals, so that it is stringent with respect to recruitment of skilled labour abroad, allegedly to protect the jobs for national skilled labour. In practice, this is depriving firms of access to skilled workers or making it so difficult to recruit skilled workers that the law is becoming a major target for private sector criticism of incoherent government policies.

The fragmentation of state policy and interests is exacerbated by the tutelage system whereby government departments formulate policy and supervise investment and other decisions by businesses in a particular sector. For example, the Ministry of Agriculture and Rural Development supervises the sugar industry and formulates its policy, whereas the cement industry works under the Ministry of Public Works and Housing. Therefore, there is no centre for industrial policy formulation, and policies and strategies for specific industries are fragmented and are defensive responses to lobbies by dominant firms in the industry. As a result, there are ongoing conflicts between the fragments of industrial policy, such as, for example, the one that exists between sugar and soft-drink producers about the protected domestic price of sugar. These conflicts are not more generalised only because of weak inter-industry linkages. Where linkages are stronger, such as between Mozal and Motraco, monopolistic power and vertical integration by one of the firms ensures coordination, while the state is a passive observer of corporate strategy.

The absence of coherent strategies creates competition for rents that results in rent seeking.³⁸ However, larger and more influential firms and investors are in position to appropriate most of the rents, such that the competition for rents may become gradually limited to a smaller group of large firms and economic groups, at least in some of the most dynamic industries. This would certainly weaken even more the state's ability to pursue policies that are not simply a defensive response to powerful economic groups.³⁹

The economic policy documents include a lot more detail about macroeconomic policy and trade and financial reform than they do for all of the remaining areas. This reflects the priority that has been given to these core policies at the expense of the other areas, such that policy capabilities have been asymmetrically developed across different sectors of the government. Over 14 years of implementation of stabilisation and structural adjustment programs, the

³⁸ See the case of the cashew industry, and the comparison between cashew and the sugar industry, in chapter 5.

³⁹ Castel-Branco 2001 and Castel-Branco and Cramer (forthcoming) provide evidence of increasing concentration of economic power in Mozambique, mainly through foreign direct investment associated with the South African minerals-energy complex. The costs of 6 mega projects (all associated with the MEC) already approved (two implemented, four in the pipeline) is more than twice as large as Mozambique's current GDP, and forty times bigger than current manufacturing value added (MVA). When, and if, all of these projects are implemented, they will produce three quarters of Mozambique's MVA and exports of goods, and two fifths of Mozambique's GDP. Together, Mozal and Motraco, the two implemented mega projects, account for 90% of foreign direct investment and 57% of total investment in the manufacturing sector between 1990-1999. Prior to Mozal, 68% of all FDI inflows to Mozambique between 1990 and 1998 were invested in two beer factories by South African Breweries, one cereal milling company by Namib Management Services, spent by CIMPOR to buy the Mozambique cement company whose control of Mozambique's market subsequently increased from one third to four fifths (World Bank 1996b), and used to acquire and rehabilitate four sugar estates.

Ministry of Planning and Finance (MPF) and the central bank (Banco de Moçambique, BM) have acquired the capacity to formulate macroeconomic policies within the parameters of the Washington consensus, whereas MIC have very little experience, capacity and resources to formulate industrial policies of any significant consequence.

MIC is one of the smallest Ministries of the Mozambican government. The directorate in charge of manufacturing (DNI) has been particularly neglected. By the time this research was undertaken, DNI had two recently trained economists and one lawyer, almost no computers, had been stripped of its rights and resources to produce meaningful industrial and trade statistics and a record of industrial firms,⁴⁰ and was only implementing routine, administrative tasks.⁴¹ The Minister for Industry and Trade had one special advisor to help him negotiate with mega investment projects, the most active and complex area of the manufacturing industry. This advisor had no qualified supporting staff or access to a database and information system. Since 1987, of all government departments MIC has received the smallest share of the current and investment state budget.⁴² By contrast, the Investment Promotion Centre (CPI) has several engineers and economists in all its divisions and each of them has access to modern information technology; in the MPF and BM almost all senior staff and several in lower ranks have received university training; and the National Statistics Institute (INE) has more university-trained staff than all the manufacturing support institutes and agencies put together.

The government's attempt, over the years, to provide services for the manufacturing sector has led to the creation of support institutes, such as IDIL (small and local industry), IPEX (export promotion), INNOQ (standards and quality control), FFPI (fund for financing of local industry) but without the ability to make them operational. The weakness of the domestic manufacturing sector does not allow these institutions to become financially viable in the short and medium term without strong financial backing from the state. However, the rules of macroeconomic stabilization prevent public finance from supporting such institutions in a significant manner, such that these support institutions will only eventually operate properly

⁴⁰ This problem arises from the interpretation and application of the law of national system of statistics that centralises all production of statistics in INE. BM is in charge of producing monetary data, but no other department can produce sectoral data. Thus, the quality of sectoral statistics has declined, MIC and other sectoral government departments find it very difficult to mobilise donor support to develop their statistics capacity, and lack of reliable and timely data affects MIC's ability to develop and monitor the implementation and effects of policies and to negotiate investment projects and incentives. INE, on the other hand, is a target for several donor-supported programs including UNDP, the European Union and various bilateral and multilateral agencies.

⁴¹ See GOM 2000d and 2000e.

⁴² GOM 1997c.

when a donor decides that the time has come to invest in them.⁴³ FFPI has made an attempt to become financially viable by lending 60% of its funds to small commercial activities rather than local industry.⁴⁴ Although the fund has so far survived thanks to expedients like this, it has failed to achieve its main goals. Therefore, creating organizations is not sufficient to develop institutional capabilities for manufacturing development, nor it is a substitute for strategy, policy and allocation of resources.

4.3 Studies about industrialisation and industrial policy in Mozambique

The previous section argues that industrial policy has been marginalized from core economic policies because the reference to manufacturing in any of the core economic analysis and policy documents does not go beyond the notion of a dynamic business environment that is expected to result from stabilisation and liberalisation. Nonetheless, several studies about the manufacturing sector have been done, and they reflect the orthodox analysis of spontaneous adjustment through market forces, or heterodox views that are concerned with patterns of accumulation, linkages, agents and institutions of industrialisation.

World Bank studies – quest for an enabling business environment

The World Bank produced or commissioned three major studies of the manufacturing sector, namely the industrial sector study (World Bank 1990b), impediments to industrial sector recovery (World Bank 1995b) and a manufacturing survey (Biggs, Nasir and Fisman 1999).

The first two studies attempted to develop long-term and short-term strategies to accelerate growth of manufacturing production and exports. The third was defined as a survey to identify the characteristics and sources of growth of manufacturing in order to support the development of adequate policies.

The three studies shared a central aim: to demonstrate that manufacturing development is compatible with, and dependent upon, economic stabilisation, liberalisation and privatisation policies. In addition to this, each study pursued specific objectives. World Bank (1990b) was a study for the period of transition from “central planning” to a “market economy”. It

⁴³ See GOM 2000e.

⁴⁴ Interview with Luís Siteo.

acknowledged that markets were underdeveloped and distorted, and therefore efficient allocation of resources required state intervention that, in order to be efficient, had to be guided by methodologies that simulate "free markets", namely domestic resource costs (DRC). World Bank (1995b) was concerned with the identification of the causes of low supply response to economic reforms. It made short-term recommendations for further trade liberalisation, customs control, export promotion and liberalisation of the business environment. Biggs, Nasir and Fisman (1999) provided useful information about the characteristics of the manufacturing sector, sources of growth and problems faced by businesses, and tried, unsuccessfully, to base the case for further liberalisation upon this data.

The industrial study – first market-friendly "strategy" for manufacturing

World Bank (1990b) was the first attempt by the Bank to produce a coherent strategy for rehabilitation and development of the manufacturing sector within the framework provided by macroeconomic stabilisation and liberalisation. This study was produced at the end of the initial three years of the program of economic rehabilitation (PRE), a Washington consensus based program of economic stabilisation and rehabilitation.⁴⁵

Between 1987 and 1989, the manufacturing sector had benefited from the best of two worlds: multilateral and bilateral import support programs had provided the foreign currency to import raw materials, fuel and spare parts; and an administrative system of allocation of foreign currency inherited from central planning mechanisms had ensured that manufacturing firms had access to foreign currency at affordable costs. During this period, manufacturing value added (which had fallen dramatically between 1982 and 1986) increased significantly. However, the adjustment program was still limited to tax, interest rate, exchange rate and price reforms, and the partial reform of the central planning based system of finance.⁴⁶ Additionally, there was no clear strategy for rehabilitation of manufacturing. Rehabilitation was defined as a process aimed at stopping economic decline and recovering the productive capacity of existing assets within existing structural constraints. Rehabilitation was separated from restructuring, upgrading and modernisation.

⁴⁵ See GOM 1988, GOM, IMF and WB 1988 and World Bank 1985.

⁴⁶ During the period of centralised planning and financing, the economy was financed through the public budget (around 45% of public investment was enterprise financing) and the central bank. Enterprises and projects included in the central plan had open accounts in the central bank and their investment requirements and deficits were automatically covered either through public finances or the central bank. The larger the size of the firm and its losses the more finance it received through these mechanisms. See Castel-Branco 1996 and 1994b, GOM 1997c and Wuyts 1989.

The industrial study claimed that the manufacturing sector in Mozambique was import dependent, inward oriented, did not contribute to exports, suffered from lack of incentives for the private sector and had an ageing and outdated capital stock, although it was larger and more diversified than in other Sub-Saharan African (SSA) countries. In this context, the strategy recommended by the study was to create an enabling environment for the private sector to blossom. The study – also known as the “business environment study” due to its subtitle and focus – linked manufacturing development and change with incentives to the private sector; and these incentives with the degree of liberalisation. Therefore, manufacturing development became a matter of deepening and expanding the process of liberalisation of the economy. The study defined four areas of policy to enhance manufacturing development: (i) *reform of the trade regime and pricing system*; (ii) *reform of the tax system*, in order to reduce the weight of direct (corporate and income) taxes and increase the weight of indirect (consumption and other trade related) taxes; (iii) *reform of the financial system* through gradual liberalisation, in order to capture excess liquidity and increase domestic savings, increase the availability of financial resources and improve the quality of investment projects; and (iv) *privatisation* of the state-owned and state-managed enterprises.

The report acknowledged that during the period of transition, resources could not be allocated purely through market forces due to existing market distortions. However, it recommended that decisions concerning policies and strategies that influence resource allocation should be based upon domestic resource costs analysis (DRC).⁴⁷ The report argues that the state had a role to play in three areas, namely: macroeconomic stabilization, management of transition from central planning to market economy and provision of public goods – infrastructures, training and basic services.

There are some important errors and inconsistencies in this report. First, it failed to acknowledge the main characteristics of manufacturing exports. During the period of analysis, the 1980s, the manufacturing sector was responsible for about half of the exports of goods.

⁴⁷ DRC is a static methodology to measure the benefit-cost of producing a good domestically instead of importing it. It is a ratio of social domestic costs to the foreign currency earnings or savings in producing a particular good. This method is criticised because of: (i) its lack of accuracy due to measurement problems, exchange rate conversions, estimation of shadow prices, etc; (ii) its static analysis and inability to explain DRC inefficiency and to identify opportunities where static comparative advantages have not yet been established; and, most importantly (iii) the fact that the entire DRC analysis is based upon assumptions of perfect competition (shadow prices, marginal returns of factors equalling their marginal costs, etc.) which are exactly non-existent under protection and non-market allocation of resources. In other words, DRC is an attempt to compare real projects with fake market conditions. See Edwards 1993, 1993, 1990 and 1985, Fine 1997d, Greenway 1988 and Weiss 1991 for detailed presentations and critiques of the DRC and other associated methodologies.

These exports were mainly based on semi-processing of primary goods, but nonetheless involved some degree of processing. Most importantly, export oriented manufacturing production represented more than 30% of total manufacturing value added. Therefore, the problem of manufacturing exports cannot be solved mainly through openness and liberalisation of the economy, as recommended in the report. It is necessary to create industrial capabilities that increase output, diversify and increase the standards of production and accelerate and diversify export growth.

Second, the report criticised lack of incentives for the private sector and argue that this was a major are of policy to promote manufacturing growth. However, nowhere in the report was any serious analysis of the private sector in Mozambique carried out. There was no analysis of the dynamics of private accumulation, structure of ownership and control and conditions of competition. No distinction was made about small, local firms and large, foreign owned corporations, and there was no serious discussion about fundamental factors that affect the performance of firms and industries, such as access to finance, the process of acquisition of industrial capabilities and modernisation of the productive assets. The report simply assumed that once the state had withdrawn from managing the economy and incentives were introduced, the private sector would, spontaneously, emerge. And this new private sector would be, from the start, efficient.

The report presented no serious study of the state-owned enterprises, apart from assessing their efficiency by output and profit results, and therefore concluded that these enterprises were inefficient because of being state-owned. Yet, quite apart from the fact that the domestic private sector inherited from colonialism was very weak, private and state-owned firms alike were affected by the same problems listed in the report: an ageing and outdated capital stock, import dependency with respect to inputs and equipment, inward orientation of almost 70% of the manufacturing production, lack of managerial and technical skills. It was this ability to assume that the private sector is the natural way of doing things, is inherently efficient and that it lies dormant waiting to be unleashed by the removal of the state from managing enterprises, that allows the Bank to recommend accelerated privatisation and trade liberalisation as panaceas.

Fourth, apart from assumptions regarding efficiency gains due to liberalisation of the financial sector, the report did not address the issue of finance for the industry, which is a particularly important aspect if the capital stock is old, worn out and outdated. Nor does the study relate financing of the industry with the basic and central goal of economic stabilisation, and how macroeconomic policies constrain the options for industrial finance. Fifth, the report provided

no way forward in terms of restructuring the existing industrial fabric and building new industrial capacities. All it says is that DRC analysis should be used to select the priority sectors while markets are still too distorted to be fully trusted. The study produced a preliminary DRC analysis of the manufacturing sector and concluded that all but two branches were inefficient. Therefore, according to the report Mozambique had no comparative advantages in manufacturing production.⁴⁸

The industrial study was received with mixed feelings by the government and the private sector.⁴⁹ On the one hand, it addressed some of the demands of the emerging and established private sector – by emphasising the need to remove bureaucratic command of the economy, to privatise state owned and managed productive assets, to reform corporate taxes, to liberalise imports of equipment and material inputs and the labour market, and to facilitate trade in general. On the other hand, it did not address more fundamental issues – access to finance and technology, formation of business networks and learning and support institutions, coordination of competing and complementary investment, and other forms of nurturing the development of the domestic private sector during the infancy of the economy. Thus, the report did not provide a vision of industrial strategy.

Impediments – a study of the causes of low supply response to reforms

World Bank (1995b) was another major study that tried to answer the following question: why has industrial output fallen significantly between 1990 and 1994, despite the fact that fundamental macroeconomic and trade reforms had been successfully implemented? In other words, why was the manufacturing sector not responding to a better business environment? The focus of the report was on short term problems associated with ownership, management, technology and policy. The macroeconomic and trade environment were assumed as given, and long-term problems of the manufacturing sector were not discussed.⁵⁰

The report concluded that low supply response of manufacturing to fundamental economic policy reforms was due to three factors. First, all manufacturing firms suffered from unfair

⁴⁸ See Haarlov 1997, who confirms that this was the opinion of the Bank's field staff.

⁴⁹ See, for example, GOM 1992 and GOM and UNIDO 1993.

⁵⁰ The report does not explain why ownership, management, technology and policy are short-term problems. It does not define which are the long-term problems not discussed and why not. It makes, however, a clear reference to an exogenously determined, relative to the analysis of manufacturing, macroeconomic and trade environment.

competition, illegal imports, limited access to finance and foreign exchange and excessive regulation and red-tape associated with government bureaucracy. In addition, state-owned and state-managed firms were also affected by poor management and low credit worthiness, the latter being associated with high indebtedness and unclear and unstable allocation of property rights. According to the report, the continuous deterioration of state firms reflected the slow pace of privatisation.

Second, the expansion of inward oriented industries was constrained by the high import content (50% to 80% of material inputs) of their activities and the cascade effect of the turnover tax on increasing the prices of domestically produced goods. Third, exporting firms did not have access to short-term finance nor benefited from import tariff exemptions on imported equipment and material inputs utilised to produce for export.

The study recommended the following three sets of policies: (i) lowering import tariffs to discourage tariff evasion and reform of the customs administration, including the possibility of privatisation of customs management, to eliminate illegal imports; (ii) promotion of manufacturing exports by guaranteeing tax free imports of inputs to established exports, fixed import tariff drawbacks to occasional exporters, and short-term trade related finance, and by reforming the investment code and approving legislation concerning FIZ to attract FDI; and (iii) improving the business environment through reform of the investment code with respect to simplification and clarification about capital repatriation, restructuring the labour market by introducing flexible wages and contracts, and speeding up the process of privatisation.

This report also made strong assumptions about the quality and efficiency of the private sector without an investigation being done in order to understand it. In the report, there is no reference to the heterogeneity of the domestic private sector, not only in terms of size, scale, capacity, experience and skills, but also in terms of dynamics of accumulation. For example, by the time privatisation of manufacturing assets was well underway, long term established traders were the only domestic capitalist with business experience and capital to buy productive assets, and yet many of them found manufacturing too complex and risky to bother investing in it.⁵¹ This lack of research about the private sector might be the reason why the report claims that state-owned or managed firms were the only badly managed firms.

⁵¹ See, for example, Castel-Branco and Cramer (forthcoming), Cramer 2001 and 1999 and Haarlov 1997. Mackintosh 1987 and 1986 presents an interesting analysis and evidence for processes of capital accumulation that favoured rural traders over other potential domestic capitalists.

Additionally, the study does not discuss how import dependency, which is a fundamental constraint for the expansion of the manufacturing sector, could be realistically addressed without the implementation of an infant industry strategy.⁵² Furthermore, the report did not discuss how the trade reform could help to reduce import dependency, nor how trade-related finance and tax reforms would square with stringent economic stabilisation and liberalisation.

Survey of industrial firms – understanding the manufacturing sector?

Since 1995, the manufacturing sector's output, capacity utilisation and labour productivity have been increasing again. Biggs, Nasir and Fisman (1999) survey of manufacturing firms in Mozambique, for the World Bank's regional program on enterprise development (RPED), attempted to produce information on the manufacturing sector as a whole, particularly at firm level, because:

"In order to design policies to sustain (...) growth (...) it is first necessary to understand the nature of the manufacturing sector and its problems. While there is a great deal of information available on the economy, almost all of it is aggregate data from government statistics. There is very little information available on the manufacturing sector as a whole and almost no firm level data." (pp. 1).

The study provided information about characteristics of the manufacturing sector, sources of growth, business problems identified by entrepreneurs, finance and privatisation. The last two themes will be discussed in chapter 5. The study also provided important evidence of significant levels of differentiation of the private sector in manufacturing, which adds to the critique of previous World Bank reports.

Before continuing with the analysis of this study, two points should be made. First, it is remarkable that it took 12 years of stabilisation and structural adjustment policies, and two World Bank reports about, and programs for the development of manufacturing in Mozambique, before a survey of the sector and its constituent firms was undertaken.

⁵² Hirschman 1992: Chapter 1 argues that a fundamental development linkage emerges when an economy acquires comparative advantages in what it imports. The fatter the imports of a particular good the greater is the likelihood that they would be swallowed by a newly established domestic industry. Amsden 2001 and 1992, and Leahy and Neary 1999 argue that late industrialising economies, which do not benefit from technological advantages, require infant industry type strategies for firms to acquire first mover advantages and benefit from market and linkages opportunities.

Second, the study was not only a survey, but also an attempt to provide a descriptive analysis of the aspects of the manufacturing sector that were investigated. What is remarkable is that a significant part of the study consisted of interpretations of the basic data without these interpretations being based on sound data or knowledge of the processes involved. For example, the report argued that market friendly reforms had already been successful in concentrating the manufacturing sector around more efficient industries (pp. 20 and 26). Data were presented about concentration of manufacturing in food and beverages (table 2.1, pp. 9), but there were no data showing that beer, soft drinks, sugar and cereal milling (the fastest growing branches in the food industry) are more efficient than other industries. The report did not present information about the reasons why investors were operating in these industries. The interpretation of the phenomenon "concentration" seemed to be an ex-post rationalisation based upon the belief that market-led allocation of resources is inherently optimal.

A. General characteristics of the manufacturing sector

The study was initiated with an account of the history of the manufacturing sector in Mozambique, arguing that manufacturing activity started in the 1930s with small firms producing for the domestic colonial market, and that along the way the sector somehow diversified (pp. 8-9). The existing evidence contradicts this account.⁵³ First, manufacturing activity in Mozambique started before the first world war with semi-processing of agricultural products for export, namely sugar, cotton, copra, sisal and vegetable oils, and most of these activities were carried out by large, non-Portuguese foreign owned firms. Second, the sector did not "somehow" diversify, as the survey suggests. It diversified into activities that produced for the domestic, colonial market to satisfy the most pressing demand; that could be developed with capital, technology and skill available; and that would not compete with Portuguese industries. Along the way, Portuguese industrial policies changed due to different political and socio-economic pressures, and this had an obvious and observable impact on the structure of manufacturing. It has been widely recognised that the integration of the Mozambican economy into the Southern African capitalist system led by large capital in South Africa was, and continuous to be, a powerful driving force shaping the Mozambican economy, including the manufacturing sector.⁵⁴ Therefore, the neo-classical account of the history of manufacturing in Mozambique is factually inaccurate.

⁵³ See chapter 3.

⁵⁴ See Brum 1976, Castel-Branco 1994b, First 1983, O'Laughlin 1981, Pereira Leite 1989, Wield 1977a and 1977b and Wuyts 1989, 1984, 1980a and 1981. For a brief periodization, see chapter 3.

On page 10, the report argued that the manufacturing sector was small, highly concentrated in a few sectors, exhibited a low degree of intra-sectoral linkages, most producers sourced their material inputs from abroad, and few firms exported a significant share of their output. According to this report, these characteristics showed that the manufacturing sector in Mozambique was underdeveloped, which, it is argued, was due to Mozambique's recent history of central planning, civil war, natural disasters and international shocks. This argument was made in spite of the report's own data showing that the manufacturing sector was less concentrated before the liberal economic reforms were initiated than it was at the end of the colonial period, and significantly more concentrated and unbalanced 10 years after the economic reform program started. Additionally, the manufacturing output share of industries more likely to contribute to intra and inter sectoral linkages (metal engineering and industrial chemicals) declined sharply since the reforms started (Table 2.1, pp. 9). Therefore, if anything, the manufacturing sector has become more underdeveloped after the reforms.

However, on pages 20 and 26, the report argued that current concentration of manufacturing reflected improvements in resource allocation driven by market-friendly reforms that have revealed the most efficient sectors. Quite apart from the fact that no information was presented to support the argument that current concentration reflected efficiency gains, it was remarkable how characteristics that had initially been used to define and describe an underdeveloped manufacturing sector suddenly were turned into evidence of successful market-friendly reform.

The report's data confirmed the dominant role of the food, beverages and tobacco industry, which employed almost half of the work force in manufacturing and produced about 70% of manufacturing output. It also confirmed that the manufacturing sector was dominantly concentrated in Maputo: 60% of the firms, 50% of the work force and 70% of the sales.

B. Sources of growth and specialisation

The report showed that output and employment growth in manufacturing was due mainly to large firms and new entrants, and that on the whole output increased significantly and employment declined sharply. While output grew in all industries, wood and wood products is the only industry where employment also increased. Small firms and privatised firms

performed worse than all other firms (public, foreign owned, large, always private and new firms) with respect to growth in output, employment, investment and technical efficiency.⁵⁵

The study identified three sources of manufacturing growth: increase in capacity utilisation, investment, and improvements in productivity and technical efficiency (pp. 15). Capacity utilisation in manufacturing firms doubled to an average of 48% because of three factors: availability of foreign exchange through import support schemes, increase in domestic demand and the deflationary effect of trade liberalisation on the prices of imported material inputs (pp. 15-6). No quantitative or qualitative information was given in the report about the three factors that are assumed to explain increase in capacity utilisation, or to support the existence of the links between these three factors and capacity utilisation.

Investment in new equipment and technology was made mostly by large, foreign owned firms: three quarters of such firms made significant investment, compared with less than 50% of the other firms; and two thirds of total investment was made by foreign firms. Because the report's data covered a period prior to the implementation of Mozal's mega investment, it showed that more than 50% of total investment was made in the food, beverages and tobacco industry, particularly in four sugar estates, two beer factories, a few subsidiaries of coca-cola and one cereal milling plant.

The report argued that the increase in labour productivity was due to increase in capacity utilisation and retrenchment of labour. Very few firms had increased productivity by improving technology, skills, organization, labour relations and management, and those few who did so were, usually, large and foreign owned. Technical efficiency of Mozambican firms was one of the lowest in Sub-Saharan Africa: one third of the best practice in Africa and half of the average technical efficiency in Zimbabwe, Zambia and Kenya. Additionally, the inter-firm variation with respect to technical efficiency was twice as high in Mozambique as in Zimbabwe. For labour, the implication of these low levels of technical efficiency was that on average Mozambican real wages had to be half of real wages in equivalent industries in Zimbabwe, Zambia or Kenya for Mozambican firms to achieve equivalent rates of profits.

⁵⁵ The report defines technical efficiency as the ability to obtain the largest value of output from a given bundle of capital, labour and material inputs (page 22). This measure is rooted in the traditional neo-classical production function, and therefore is subject to the same criticisms: static, exogenous treatment of technology, skills, processes of production, labour organization and management methods, and insensitive to the social relationships amongst workers and between labour and capital. Additionally, the method is flawed because of being based upon assumptions of perfect competition, needing assumptions about effective protection and being closely influenced by the "capital controversy". See Fine 1997d, Sraffa 1972 and Edwards 1985.

The determinants of low productivity and technical efficiency, argues the report, were low levels of education and skills, lack of managerial training, experience and capabilities, and the utilisation of old, worn out and outdated equipment. In a footnote in page 27, the report also mentioned other causes of low labour productivity, namely: dissimilar, small orders that reduce workers efficiency; decline in output due to competing imports associated with trade liberalisation; decline in demand due to lowering of incomes and retrenchment of labour; and labour market rigidities in face of the above problems. There were significant inconsistencies in this analysis. In pages 15-6 the report claimed that trade liberalisation and expanded domestic demand contributed to increase capacity utilisation, and labour retrenchment helped to increase productivity. However, in page 27 it said that domestic demand was contracted because of trade liberalisation and retrenchment of labour!

The study also argued that firms from the textile, clothing and leather industries, foreign owned firms, very large firms and exporting firms had the highest level of technical efficiency with less inter-firm variation. This conclusion is not surprising since the most important exporting firms were foreign owned and large, and to succeed as exporters firms had to attain a minimum threshold of standards of quality and productivity that varied by industry, but did not vary much by firm. When compared to African best practices, textile firms were the least competitive in Mozambique (meaning that the best practice was very high), whereas firms from the wood and wood products industry were the closest to the best practice levels of technical efficiency (because the best practice in this industry was low). Therefore, the report concluded, a technical efficiency analysis of Mozambican manufacturing recommended that resources should be re-allocated, through privatisation and trade liberalisation, towards saw milling and wood furniture, as well as exporting textile firms (pp. 25-8). It is interesting to notice that the report recommended concentration of resources in industries other than food, beverages and tobacco, which was the industry around which manufacturing activity had been concentrated. Thus, if anything, technical efficiency analysis rejected the report's earlier argument that existing allocation of resources, allegedly market conforming, was efficient.

Apart from recommending further concentration of the manufacturing sector and of the export base of the economy, the report suggested two other sets of policies to increase technical efficiency and labour productivity: (i) abolition of barriers to true market competition, through the provision of infrastructures and access to finance; and (ii) abolition of bureaucratic and trade barriers so that domestic firms can have access to larger markets and to an information and learning rich environment (pp. 25-8). These policies do not address the problems that were identified in the report as the causes of low productivity and technical efficiency (low education and skills, old and outdated equipment, dissimilar orders, decline in

domestic demand, low investment levels, etc.). Additionally, trade liberalisation, which was recommended as a productivity improving policy, was also identified by the report as a contributor to low productivity by reducing demand levels faced by domestic firms. It is, therefore, unlikely that trade liberalisation would expand the market for domestic firms. Given the low level of education, skill and experience of the working force and management alike, it is unlikely that the simple exposure of Mozambican firms to international competition would be a significantly positive learning experience, even assuming that somehow the firms survive the experience. Finally, the report mentioned the pressing need for firms to have access to finance but it did not discuss how to do it within the tight boundaries defined by macroeconomic stabilisation.

C. Problems faced by businesses

The study discussed and ranked the most important problems identified by businesses that affected the performance of the manufacturing sector. The analysis was based on a list of eight major categories of potential problems: finance, government, competition, demand, skilled labour, business support, infrastructures and shortage of inputs. "Government" comprised three sub-categories (enforcement, policy and bureaucratic burden), and 20 items. All of the other categories included only between one and five items (table 4.2a; pp. 34).

The study indicated that 33% of the surveyed firms refer to "government" as their first problem, whereas 27% elected "finance". Finance becomes clearly the number one problem when the category "government" is broken down into its constituent sub-categories. Small, medium and domestic firms rank finance as their first problem twice as frequently they rank "government". Only in the case of large and foreign owned firms are government policy and bureaucratic burden ranked first problems almost as frequently as finance. This is understandable because foreign firms borrow finance abroad and large, established firms receive preferential treatment by banks.

There is considerable overlap between "government policy" and "bureaucratic burden". Two of many examples are "customs delays" and "unfair competition", which are sometimes classified as policy and other times as bureaucracy. The distinction between the two classifications is so muddled that it is quite possible that "double counting" and "arbitrary classification" occur as frequently as the problems are mentioned.

Less than 2% of the firms mentioned business support services as their first problem, and this category is ranked as the least important of the business problems. The report argued that this

is because firms did not know what they did not know and the help they needed, and many firms had no information about the business support services available in Mozambique. This analysis raises further scepticism about domestic firms being able to learn significantly from simple exposure to international competition. It also confirms how weak the manufacturing support services in Mozambique are.

On the whole, the major problems identified by firms were: finance (27% of the cases); government policy – with most important items being unfair competition, smuggling, customs delays and labour market rigidities (16%); demand faced by domestic firms (14%); bureaucratic burden – with most important items being unfair competition, smuggling, and customs delays (11%); and infrastructures (8%).

UNIDO studies – institutions and infant industry

Since the beginning of the economic reforms in 1987, UNIDO was involved in two major studies of the manufacturing sector in Mozambique, namely UNIDO (1987) and GOM and UNIDO (1993). These studies were intended to provide the foundations of industrial policy and strategy in Mozambique from a point of view significantly different than the World Bank studies. Both studies were focused on the institutions and networks necessary to promote industrialisation, as well as on the national dimension of industrial policy. They recommended policies to develop domestic linkages, utilise more natural resources, and develop small and medium domestic firms.

GOM and UNIDO (1993) became the base for the current legislation on industrial policy. Official industrial policy is discussed in chapter 5, such that in this chapter only UNIDO (1987) will be analysed.

The first large investigation into the manufacturing sector in Mozambique, undertaken at the time when economic reforms were initiated, was the two-volume⁵⁶ study by UNIDO (1987), which was requested by the Mozambican government. The main goals of the study were to analyse the development of the manufacturing sector and to recommend policies and a

⁵⁶ Volume one includes the analysis of the manufacturing sector and policy recommendations. Volume two includes descriptive economic data and studies of 20 industries within the manufacturing sector.

program for rehabilitation of the manufacturing sector within the context of the approved program of economic rehabilitation (PRE) supported by the Bretton Woods institutions.⁵⁷

The study adopted an *institutional* approach to industrial policy, by focusing on the institutional framework within which manufacturing in Mozambique operated at the time. This included: (i) the macroeconomic institutional framework of the manufacturing sector (how finance is mobilised and deployed, how prices and wages are defined, how exchange rate is allocated, the institutional form taken by the labour market); (ii) support services; (iii) legislation concerning the manufacturing sector; (iv) organization of state's supervision of the manufacturing sector and management of state owned assets and shares; (v) production, management and use of information (statistics, accounting).

The report recommended a three-stage rehabilitation, diversification and development program for the manufacturing sector. In the short-run, priorities would include basic needs, consumer industries, and industries that are important from the point of view of foreign exchange earnings and savings, tax revenue, provision of basic tools, packaging and building materials. In the medium-run, these industries should be further diversified and modernised, and specialisation should occur in line with developments in Southern Africa. In the long run, capital-intensive industries could be developed (steel and iron, equipment, gas, fertiliser).

In order to achieve these goals, the study recommended several institutional reforms: the consolidation of all manufacturing and industrial policy under the same Ministry and an end to the cumbersome system of tutelage; establishment of holdings to manage state owned shares in private companies; introduction of greater flexibility in the labour market and price formation; establishment of systems and organizations for quality and standards, information and documentation, statistics, training, support to small and medium enterprises and export promotion. The study also recommended the reform of the financial system, namely: the end to automatic financing of unprofitable and unviable projects; the introduction of cost-benefit analysis to determine allocation of financial resources in the manufacturing sector; and the establishment of an industrial development bank.

This study was interesting mainly because it provided a significant amount of data, tried to address essential institutional issues and its recommendations were consistent with its analysis. However, the study also had important weaknesses. For example, it failed to

⁵⁷ This study would later become the springboard for the UNIDO project on industrial policy in Mozambique, which took place between 1989 and 1993 (GOM and UNIDO 1993). This project provided the background analysis for the current, official industrial policy documents (GOM 1997a).

understand the dynamics of accumulation of capital in Mozambique and in the Southern Africa region, how they influence each other and affect the structure and patterns of development of the manufacturing sector. Four examples will illustrate this point. First, in the study, the link between manufacturing and the economy, industries and firms, and the domestic and regional economy sector were essentially technical. No account was taken of the agents of this process, how they related to socio-economic pressures and opportunities and what their interests and actions might be. Therefore, industrial planning became an exercise in building linkages that could be materialised through institutional reforms. Second, the study suggested a strategy for industrial development but failed to analyse the consistency between this strategy and core stabilisation and liberalisation programs. By failing to address the issue of finance, acquisition of industrial capabilities and trade policy in the context of ongoing neo-liberal reforms, the study condemned its recommended strategies to not being implemented. Third, the complexity of transition from a predominantly state-owned and managed manufacturing sector to another developed around the private sector was restricted to rules, transfer of property rights and the definition of how the state could manage its shares. Very little information was gathered about the process of developing and industrial domestic private sector. Fourth, the SADC context was also restricted to vertical and horizontal integration, economies of scale, market size, and access to capital. No account was taken of the nature of economic processes and relations in the region, and how corporations and corporate strategy are influenced by, but also influence, government policy and economic pressures and linkages.

Academic studies – two alternative views

Amongst various academic studies of different aspects of the manufacturing sector in Mozambique, Weiss (1992) and Haarlov (1997) were chosen for discussion because of the following reasons. First, they were focused on industrial policy after economic reforms started, and their studies, in a way or another, discussed implications of economic reforms for industrial policy. Second, they analysed the manufacturing sector as a whole. Third, each one introduced new and interesting issues into the debate about manufacturing in Mozambique. Weiss (1992), based on a clear appreciation of patterns of industrialisation and the cycles of boom and bust that characterise industrial accumulation in Mozambique, made three points about the economic and industrial process in Mozambique.

First, Weiss rejected the myth that the crisis of the Mozambican economy in the 1980s was largely due to central planning, because, he argued, in reality the Mozambican economy was

not centrally planned. This argument was supported by four observations: (i) peasant production, which was still dominant, was not possible to plan, although it was responsive to indirect planned actions (such as those that affected demand and prices for wage labour and wage goods, infrastructures, marketing, provision of finance, investment and consumer goods, technical extension, etc);⁵⁸ (ii) external economic shocks could not be planned for by a small economy, and the Mozambican economy was particularly sensitive and vulnerable to them; (iii) the impact of the war could not be planned for either, and the war was a major determinant of the political and economic developments in Mozambique in the 1980s; and (iv) resources available for central planning were very scarce, and investment in large, centrally planned projects was short lived.⁵⁹

This critique of the central planning-based analysis called attention to the fact that institutions (whether the state or the market) were not enough to determine the outcome of socio-economic processes. Reforms of mechanisms and institutions (for example, towards liberalisation and de-regulation) had to pay attention to agents, economic linkages and their dynamic relationship because these were the central components that shaped the socio-economic process of accumulation. Thus, a simple move from planning to a liberalised economy may not unleash the expected economic potential and competition, nor dynamic and enterprising private agents.

For example, despite the rhetoric of central planning, the 1980s was a period of fast capital accumulation mostly by rural traders and urban speculators that benefited from scarcities and fragmentation created by economic crisis and the war.⁶⁰ The extent of this process was one significant pressure to justify the process of economic reform initiated in 1987.⁶¹ So, the planning process may have affected the pattern of private accumulation, but did not ensure state-centred, nor prevent private-based accumulation. On the other hand, by 1987 rural traders and urban speculators were the only domestic private agents with enough capital to acquire state-owned productive assets, but many of them had no interest in consolidating a

⁵⁸ See Mackintosh 1987 and 1986, O'Laughlin 1981, Wuyts 1989 for a similar argument. Bowen 2000 develops this argument in a broader study of the relationships between the state and the peasantry in Mozambique. Wuyts 1997 develops this point in a more theoretical way.

⁵⁹ See Chapter 3, and also Castel-Branco 1996 and 1994b, and Wuyts 1989 for a similar argument. According to these studies, public investment in large, centrally planned projects more than doubled between 1979 and 1980, and again between 1980 and 1981. In 1982, public investment increased marginally, by 4%, and in 1983 declined by 21%. The declining trend was only reversed from 1986-87. Therefore, the large project-based, centrally planned public investment boom lasted for two years.

⁶⁰ See Castel-Branco 1996 and 1994a, and, most importantly, Mackintosh 1987 and 1986 for a discussion of this process of accumulation.

⁶¹ Castel-Branco 1996, Castel-Branco and Cramer (forthcoming), Mackintosh 1986 and Wuyts 1989.

business in manufacturing because of the complexity, risks and costs associated with the sector.⁶² Thus, a simple move from planning to privatisation and liberalisation may not have, spontaneously, unleashed private entrepreneurial capabilities in manufacturing.

Second, Weiss referred that bureaucratic procedures and inept mechanisms of control of imports, exports and investment, unlimited financing of unviable projects and un-necessary rigidities in price formation had a much stronger impact in the economy than central planning itself. The basic point was that central planning was not very operational, but bureaucratic and inept management, partly inherited from colonial administration, was a serious problem. Therefore, inefficient public management, associated with limited capacities, motivation, experience and type of organization, may not be solved through liberalisation and may constitute a serious constraint for the liberalisation and privatisation of the economy. Besides, as argued by Cramer (2001), the World Bank and the Mozambican government seriously underestimated the difficulties to administer the complex system of reforms, in particular massive privatisation of public owned assets.

Third, because the Mozambican economy does not produce a large surplus, investment resources are scarce; this is not a creation of central planning, but part of the pattern of development of the Mozambican economy and its structure. Hence, when economic reforms started, the level of investment resources increased sharply because of direct action by donors and multilateral financial institutions combined with a very low level of capacity utilisation in Mozambique. However, as the economy recovered and the demand for investment resources increased, scarcities were again revealed and reinforced. This partly explains the cycles of boom and bust of the manufacturing sector prior to, and after economic reforms took place.

Weiss argued that industrial policy and protection, justified on the grounds of an infant economy, were necessary to allocate scarce surplus efficiently and mobilise more resources. He also emphasised the need to base strategic investment decisions upon cost-benefit analysis of the projects and rigorous performance targets for the supported firms and industries. In other words, the generation of more economic surplus needed to be an endogenous component of the development strategy.⁶³ The paper also argued that industrial policy should be based upon three pillars: (i) gradual modernisation of, and introduction of quality standards upon, a largely non-tradable sector that generates employment and produces for a low income segment of the market; (ii) increase in the manufacturing share of production of material

⁶² Castel-Branco and Cramer (forthcoming), Haarlov 1997.

⁶³ See Doriye and Wuyts 1993 for a similar argument with respect to Tanzania.

inputs and capital goods that could be produced with the skill and capital available; and (iii) the development of an export oriented and import substitution industrial base that is competitive with international technology and standards.

In spite of its strengths, this paper faces three major problems: First, it avoided the discussion of agents beyond some general points, and therefore its suggestions for policy are not rooted in anything beyond linkages and institutions. This led to an oversimplification of the processes by which "one thing leads to another", as the three-pillar industrial policy exemplifies. Second, it did not discuss the regional determinant of linkages and policy in Mozambique, as the region is seen more like an externality or shock, rather than a symbiotic part of the dynamics of capital accumulation in Mozambique. Third, the study recommended strategies for the manufacturing sector that were largely incompatible with core stabilisation and liberalisation policies, and yet it did not discuss how to address this incompatibility. By avoiding this issue, it eliminated the chances of being taken more seriously.

Haarlov (1997) wrote from the perspective of Southern African regional dynamics and integration. In addition to a general discussion of approaches to regional integration and cooperation, he focused on the relationships between trade and industry in Southern Africa, World Bank policies towards regional cooperation and the impact of national structural adjustment policies on industry, trade and prospect for the region. Mozambique provided the national case study of structural adjustment, with emphasis on the manufacturing sector.

He argued that World Bank policies affect the regional prospects of the Mozambican manufacturing sector in two ways. First, Bank officials in the field were not supportive of regional cooperation and integration and the related ongoing discussions of policy because they feared that trade would be diverted rather than created, and they supported nothing less than market and trade liberalisation.⁶⁴ Second, the Bank did not believe in promoted trade and industrialisation, nor in the Mozambican capability to do more than some semi-processing in low value end agro-industries (pp. 178). Under these policies, it was unlikely that

⁶⁴ This is so in spite of, and maybe because of, the ambiguous official position of the Bank with respect to regional integration and cooperation. World Bank 1989 is supportive of regional cooperation as a stage towards the world market; but World Bank 1991 is critical of regional cooperation and integration and argues for little less than integration of world, as opposed to regional, markets as a fundamental feature of trade liberalisation (Haarlov 1997). The Bank's ambiguity and lack of support for the regional project, and pressures for further trade liberalisation are reflected in SADC 1999 and 1996 and ISP 1998 studies, which take trade liberalisation as granted and try to work around it with different suggestions of how industrial strategy can resolve the problems created by trade liberalisation.

Mozambique's manufacturing sector would benefit from regional integration, without which the prospects of profound change in the structure and dynamics of the sector were limited.⁶⁵

The study argued that this was particularly problematic for Mozambique because South Africa is Mozambique's largest single trading partner and source of foreign direct investment, and Mozambique's annual trade deficit vis-à-vis South Africa exceeds, by twofold, its total exports to South Africa.⁶⁶ Therefore, if regional integration did not become a process of creating new productive capacities to improve the position of the poorer economies, it would likely be confronted by lack of cooperation and even strong resistance from the state and other organised interest groups of each country.⁶⁷ Thus the prospects for regional integration and cooperation were dependent on the ability to develop and implement industrial policies and strategies that could bring everybody on board and correct regional economic imbalances. The Mozambican economy on its own could not support a complex process of industrialisation because the market is small, finances are donor dependent, firms face strong liquidity constraints and do not have the expertise and skill to upgrade quickly. The region, on the other hand, offered the possibility of regional vertical integration, cross investment, joint ventures and sub-contracting.

This relationship between manufacturing development in Mozambique and the region was simultaneously the strength and weakness of this study. The strength came from the significantly greater realism that the relationship between the national and regional processes

⁶⁵ In more general terms, ISP 1998 argues that regional industrial strategy is a tool that could help to avoid entrapping specialisation of national economies in Southern Africa, which could result from trade liberalisation. The argument is that given differences in comparative advantages, trade liberalisation without industrial strategy could lead to South Africa specialising in high productivity industries and losing unskilled jobs as a result, and the remaining members states specialising in low value end industries and missing opportunities to upgrade their productive capacities.

⁶⁶ South African FDI to Mozambique is very concentrated in a few large industries for the domestic market (beer, soft-drinks, cereals and sugar), and a few mega projects associated with the minerals-energy complex for export generating little domestic linkages in the Mozambican economy. Thus, South African FDI in Mozambique may not necessarily contribute to narrow the trade gap between the two economies (Castel-Branco 2001).

⁶⁷ This point has been critical in three other studies, namely ISP 1998 and SADC 1999 and 1996. They consider industrialisation as a way to bring everybody on board because it resolves the intra-regional imbalances in industrial development, productivity, employment and wages; as a result, it coordinated industrialisation minimises the negative distributional impact of trade liberalisation. This is an interesting approach to regional industrial strategy and policy, because what it says is that given market imperfections associated with South African economic power and other intra-regional imbalances, an industrial policy is necessary to redistribute wealth and capital. In SADC 1999: pp 2, this point is clearly emphasised: "*SADC Trade Protocol (...) provides for the need to complement trade liberalisation programs in SADC countries with regional industrialisation policy in order to forestall potential polarisation effects as a result of trade imbalances amongst member states. In order to achieve this, there is need to encourage cross border corporate investments, such as sub-contracting and joint venture, linking enterprise sector partners from different member states.*"

of accumulation brought into policy analysis and definition of policy goals in Mozambique. The weakness resulted from three factors. The regional context was analysed mostly in terms of countries, with not enough attention being given to the analysis of corporate and labour interests and how they interact with each other, with policy formation and with socio-economic pressures they face. Thus, capital and labour strategies and interests were not part of the analysis of policy, apart from superficial reference in the context of nation-states.⁶⁸

The relationships between Mozambique and the region were fundamentally treated as a matter of economic linkages – markets, technology, capital, expertise, trade, patterns of specialisation, vertical integration – with little analysis of how existing patterns of accumulation and interest groups influenced decisions taken about the linkages that actually have been materialised. In this connection, the Southern Africa region was perceived as a threat⁶⁹ and an opportunity,⁷⁰ rather than as a dynamic process of accumulation whereby linkages and agents interact to form specific patterns of development and division of labour. Thus, industrial policy became a tool to protect national interest and acquire national advantages with little consideration being given to the fact that industrial policy resulted from the interaction between governments, corporations and labour, none of which can be described as a country or nation. Roberts (2000) emphasised the importance of understanding policy formulation as part of a two-way interaction between government policy and corporate strategy in the restructuring of capitalism in South Africa, such that the power of largely international and globalizing corporations also forced the globalisation of policy in the sense that government and corporate policy and strategy were set in a global scenario.⁷¹

Finally, the integration of the region into policy analysis was restricted, in Haarlov (1997), to its institutional and formal context: SADC, regional cooperation and integration. However, irrespective of SADC and the existence of a formal regional integration project, the economies of the region form a system of capitalist accumulation that was historically constructed around the minerals and energy complex of South Africa and of the process by which capital organised access to migrant labour across the region. Mozambique's service

⁶⁸ In SADC 1999 and 1996, ISP 1998, countries and the region are treated as individuals. Therefore, their argument about policy is very much about transferring wealth from one individual, South Africa, to the others such that a plain market field is created for successful trade liberalisation.

⁶⁹ That would result from entrapping specialisation and negative distributional impact of trade liberalisation, given very large intra-regional differences in income, productivity, wages, infrastructures and economic power.

⁷⁰ That results from potential linkages – access to capital, entrepreneurial capabilities, technology, skilled labour and markets.

⁷¹ See, also, Fine 2001d and 1997b, and First 1989 for similar arguments.

economy is closely associated with this process.⁷² The political organization, capacities and resources of the state have been used to organise this process of formal and informal integration, which has not been driven by "nations" but by forces of capital and labour operating with and through the state.⁷³ This critique does not mean that SADC is irrelevant, but that its dynamics are more adequately understood if the analysis is focused on the interaction between real agents and linkages rather than on countries and organizations alone.

4.4 Conclusions

This chapter argued that economic development and industrialisation in Mozambique are influenced and shaped by several major pressures, which are not adequately addressed by the studies about and policies for the manufacturing sector. This is because core economic programs prioritise stabilisation and liberalisation over growth and economic change. Also, most debates and lobbies concerning the manufacturing sector are focused on simplest forms of coordination, facilitation and incentives for aggregate capital accumulation with no concern for patterns and directions of industrial transformation. Finally, the state reacts defensively to different pressures and lobbies, thus preventing coherence in policy making. In other words, the manufacturing sector struggles to survive at any cost, rather than to change.

Orthodox studies of the manufacturing sector take macroeconomic stabilisation targets and economic liberalisation as given, and emphasise, in their policy recommendations, the need for further withdrawal of the state from economic strategy and management. Heterodox studies are far more complex in their analysis of the manufacturing sector, focusing on institutions, patterns of capital accumulation, development linkages and the influence of the Southern African region in the direction of development in Mozambique. However, most studies tend to discuss manufacturing in isolation of the rest of the economic patterns, avoid the discussion of how to integrate macroeconomic and sectoral strategies, and fail to analyse the dynamic relationships between agents and linkages and how they affect the opportunities, patterns and direction of development. The next chapter will discuss how these pressures and studies affect policy making in Mozambique, and whether official policies respond, in a coherent way, to such pressures.

⁷² See CEA 1979a, First 1983, O'Laughlin 1981 and Wuyts 1989, 1981 and 1980a.

⁷³ See, for example, CEA 1979a, Fine 1997b, Fine and Rustomjee 1996, and First 1983. An example of these points is the spatial development initiatives adopted by the South African government to expand South African type of capitalism in the region (MCC 1999 and ISP 1998).

CHAPTER 5

INDUSTRIAL POLICY IN MOZAMBIQUE

The previous chapter identified the main pressures that influence and shape the process of industrial development in Mozambique, and concluded that these pressures are referred to, but not adequately addressed by the main studies and debates about the manufacturing sector. This is because most studies are influenced by neo-liberal core stabilisation and liberalisation policies, fragmented lobbies focused on private capital accumulation with little concern for the direction and pattern of development, and the reactive and defensive characteristics of state activity. This chapter extends this discussion to the analysis of industrial policies and strategies in place, focusing both on formal and informal industrial policies and how these, combined with more general economic policies, affect the opportunities and direction of manufacturing development. The chapter is organised into three sections. The first discusses general industrial policies and strategies. The second discusses selected, core issues in manufacturing development and how they are affected by more general economic policies and specific industrial strategies alike. The third draws conclusions for industrial policy formation in Mozambique.

5.1 Official industrial policy in Mozambique – content and analysis

Since the early stages of the process of neo-liberal economic reform in Mozambique, which started in 1987, the government has been concerned with the formulation of an industrial policy. This concern results from three practical factors: the role of industry in import substitution, exports and job creation; the need to address the fundamental weaknesses and pressures faced by the sector; and the need to replace central planning with indirect and “softer” forms of influencing industrial development. Industrial policy would provide a direction and incentives without interfering with business decisions. Therefore, although formal industrial policy is not part of the core mainstream policies, it plays its role in market-conforming economic reform. To do so, official industrial policy announces government intentions to the business community and avoids action and intervention by the state in any specific issue.

The marginalization of active industrial policy reflects three major problems. First, macroeconomic and trade policies are determined exogenously with respect to the needs of development of industry, as they mainly respond to stabilisation and liberalisation concerns. Therefore, industrial policy has no impact on these variables. Second, the dominant ideology in economic management in Mozambique, since the neo-liberal reforms started, is that the government should not interfere with business decisions. Therefore, industrial policy also has no influence on micro economic decisions. The government is concerned that the appropriate level of investment is made because of its impact on growth and income, employment, wages and balance of payments. However, it pays little attention to the allocation of investment and direction of industrial development, as these should reflect businesses decisions. Third, apart from organized foreign capital (e.g., in aluminium, sugar, beverages and finance), there are no other strong and organized political and economic interests that would seek the formulation and implementation of a clear strategy and put the necessary pressure upon the state. Hence, public policy is open to capture and/or influence by a great variety of interests that are fragmented and do not necessarily result in coherent strategies, as indicated by the examples, discussed later, of cashew, sugar and mega projects.

Current official industrial policy documents, general or industry specific, have a common and complex, if not bureaucratic, ethos.¹ More than half of each document consists of definitions, generalities, principles, and aims, before presenting lists of sectoral priorities. No realistic programme and practical system of implementation, monitoring or evaluation are included. The law defines the role of industrial policy as providing guidelines and transparency with respect to government intentions, whereas decisions concerning the implementation such intentions are a matter for the private sector.²

The documents define six principles upon which industrial development should be based: (i) industrial policy conforms with general economic policy; (ii) manufacturing development is a matter for the private sector and should be based upon private sector initiatives; (iii) industrial firms need to modernise, not only rehabilitate; (iv) domestic regional inequalities and imbalances in development should be solved; (v) development should be environmentally sustainable; and (vi) regional integration within SADC is an opportunity for accelerating development through access to investment, technological and institutional externalities, and trade. This list suggest the tension between laissez-faire ideology and the demand of equitable

¹ The documents analysed in this section are GOM 1997a, 1998a, 1999i, 1998e and 1999k, which cover general and sectoral industrial policy, licensing and free trade zones. Finance and privatisation, as well as cashew and sugar will be discussed separately.

² GOM 1997a.

and sustainable development. It also confirms that industrial policy is constrained by core stabilisation and liberalisation policies and is mainly an informational and rhetorical device.

The following sectoral priorities are defined: food (sugar, beverages, cereals, copra and cashew, for domestic consumption and exports), textiles (satisfaction of basic needs and exports), metal engineering (provision and maintenance of capital goods) and building materials (diversified building materials for post-war reconstruction). Opportunities for development are identified in basic metals (intra-sectoral linkages and linkages with mining), chemicals (consumer goods and material inputs) and packaging and paper industries.

The strategy defined to implement these goals and priorities includes: (i) the adoption of three stages of manufacturing development, namely: rehabilitation, modernisation and diversification, and exporting; (ii) small and medium enterprises (SMEs), together with the private domestic sector, are considered to be the base for industrialisation; (iii) FDI is important from the point of view of promoting linkages with domestic firms and investors. At a general level, this strategy is expected to be enforced through an enabling business environment that results from stabilisation, trade and financial reform, de-bureaucratisation, and public provision of infrastructures and training. At a more specific level, SMEs will be supported by general investment incentive schemes,³ especial funds,⁴ export credits, access to the stock market and other support services. FDI will be supported through the introduction of free industrial zones (FIZ)⁵ and other specific incentives that may be negotiated in each case.

However, these policies and strategies are not in line with the real dynamics of the manufacturing sector. This inconsistency is the result of several related problems. First, the dynamics of industrial accumulation are overlooked partly because of the dominance of orthodox economic policies based upon simplistic and inadequate assumptions about markets, agents and the working of the economy. Second, the role played by industrial policy in

³ The general package of incentives is restricted to different combinations of tax exemptions: corporate tax may be reduced by 50% to 80% for up to 10 years, depending on location of the project; firms that train their workers qualify for a further 5% rebate on corporate tax; imports of equipment are exempt from import duties; foreign firms also qualify for full repatriation of capital invested and profits.

⁴ Such as FFPI (small industry promotion fund) and FARE (enterprise rehabilitation support fund, created out of state revenue from privatisation).

⁵ Industrial free zone (IFZ) status is given to all manufacturing firms that export at least 85% of their output, with exception of processing of cashew nuts and sea products of national origin, as well other sectors that may be reserved to the state. Firms with IFZ status enjoy exemption from import duties in all imports of material inputs, equipment, machinery, parts and other required materials; no output taxes (VAT or turnover tax) because their output is for export; no corporate tax, but only a fixed levy of 1% of gross revenue from the 7th year of operation, and free import and repatriation of capital. See GOM 1999k and 1999l.

Mozambique is marginal, constrained by targets determined exogenously with respect to manufacturing, and aimed at making sure that the government does no more than announcing intentions. There are very few tools the government can use to implement industrial policy objectives successfully. Third, given macroeconomic constraints, the government is more interested in aggregate capital formation than in the pattern of investment and direction of development. Fourth, the government does not have the political and technical will and ability to pursue active industrial strategies, nor has acknowledged the need to acquire such capabilities. The better educated and more experienced civil servants are overburdened with current management. This is aggravated by the fact that the government has made many of them members of the board of various large privatised companies, in order to keep them working in the civil service despite low public wages. Fifth, the political and economic interests that are better organized and stronger are associated with FDI and large companies, not with domestic SMEs. In this connection, it is believed that active industrial policies deter investment, although the evidence rejects this view.⁶ Hence, the priorities defined in the policy documents are not respected by the state or the private sector, and the targets established have not materialised.

In three of the seven priority industries output has been declining. In the remaining four, output has become specialised around a narrower range of branches, such that about 80% of manufacturing production is now generated by large foreign firms in aluminium, beer, soft drinks, sugar, cereal milling and cement. These firms have also made three quarters of investment in manufacturing between 1990 and 1999, which has become more dependent upon FDI and concentrated in Maputo (see chapter 3).

Existing strategies concerning the establishment of special funds for SMEs and manufacturing support services have not been implemented or have been too modest to make a difference. Policy documents do not address and, given the core economic policies, may not be able to address the issue of how to finance such services and institutions. Thus, under the current circumstances strategies concerning special funds and support services cannot materialise unless a donor or multilateral agency decides to implement projects in this area. In this case, donor agendas may become more important than specific needs of the manufacturing sector and industrial policy. More importantly, the state may cease to be, or never grow to become, a

⁶ Refer to the different fates of the sugar and cashew industries. In GOM 2000e, businesses discuss the role of industrial policy and strategy as an information, quality and credibility device to improve credit conditions and performance in the economy. Commercial bank officials argue that industrial strategies that enhance the viability of industrial projects would help to mobilise cheaper finance for manufacturing investment. See Harris 1997 for a similar discussion with respect to South Africa.

crucial part of the dialogue within the manufacturing sector, being substituted for by a donor or group of donors and multilateral agencies.⁷

The dynamics and structure of manufacturing production reflect the dependence of the sector upon FDI for financing of investment projects, as well as the narrow focus of FDI projects that correspond to business interest and strategies of international corporations. Unless alternatives to FDI are found, foreign investment has to become a central component of the analysis and formulation of industrial policy and strategy. To do this, the state has to acquire information and become more knowledgeable about international corporations mainly, in the Southern African region. Basic information required about these corporations are their productive and financial capacities, competitive conditions in the market they face and their relative position in it, and their corporate strategies with respect to internationalisation of production, trade and finance. This information would allow state officials to define more realistically the priorities for manufacturing development and how they link with each other; to negotiate better deals with international corporations; to anticipate important issues of policy and implementation of projects; to prepare domestic firms to link with large FDI financed projects; to provide information to domestic firms so that they can organise and associate themselves to negotiate their participation in mega and other large projects through sub-contracting and joint ventures; and to produce credible and operational industrial and investment policies and strategies that would both attract foreign investment but also develop necessary domestic capabilities that complement and go beyond FDI.⁸

5.2 Selected issues in industrial policy in Mozambique

It would be a mistake to restrict the analysis of industrial policy in Mozambique to the study of official industrial policy legislation. There are many other areas of policy that directly influence the performance of the manufacturing sector – such as investment incentives, private sector support programmes, finance, licensing, labour market policy, trade agreements – and which do not form part of the legislation on industrial policy. These areas of policy are often un-coordinated and fragmented because they respond to pressures that act upon different government departments rather than to a coherent strategy. This section analyses

⁷ See, for example, comments by businesses related to this point in GOM 2000e.

⁸ See GOM 2000e. Hirschman 1992: Chapter 1, who mentions external pressure mechanisms to bring forth the development potential of LDCs. For the role of linkages in determining the worth of FDI in economic development, see Agosin and Mayer 2000, Aitken and Harrison 1999, Blomström, Kokko and Zejan 2000, Borensztein, Gregório and Lee 1995, Chang 1999 and 1998b, and Weiss 1998. For the need to address the power of FDI in development strategy, see Fine 1997b.

five issues that are crucial in the context of manufacturing development in Mozambique: linkages, private sector development, market structures and dynamics, corporate strategies and finance. Linkages, market structure and corporate strategies are discussed with respect to selected case studies. The remaining issues are discussed with more aggregate data. These issues have been selected because together they form a chain of fundamental analytical problems in industrial policy in Mozambique.

Linkages and industrial policy

The ability to generate and take advantage of development linkages, or to make one thing lead to another,⁹ is a fundamental issue in studies of the manufacturing sector and industrial policy in Mozambique.¹⁰ Linkages can be forward and backward, restricted to input-output or applied to more complex economic processes, and can also have a pecuniary component in the form of fiscal revenue, foreign exchange gains and wages. The opportunity for linkages emerges when: (i) specialisation, complexity and economies of scale and scope prevent internalisation of complementary or related activities and encourage the emergence of a network of suppliers; (ii) firms are willing to outsource from domestic markets; (iii) subcontracting is possible and viable; (iv) externalities can be appropriated and transformed into additional and upgraded capacities; and (v) pecuniary linkages have an effect on national economic development.¹¹

The studies and policy documents about industrialisation and industrial policy refer to four types of linkages, namely: (i) input-output linkages associated with diversification of the manufacturing structure, viable and efficient import substitution and increase in value added; (ii) technological linkages resulting from knowledge spillovers, sharing of information, learning from best practices, as well as technological diffusion through production and provision of capital goods and material inputs; (iii) complementary investment and pecuniary linkages; and (iv) structural linkages that occur between economic processes, along product and business cycles, and during different stages of development of the manufacturing fabric (for example, gradual backward import substitution). The documents identify SMEs and FDI

⁹ See Hirschman 1981 and 1958, and Sender and Smith 1986.

¹⁰ As a result, a linkages division was created in CPI. This unit was created in the context of implementation of Mozal's project.

¹¹ See, for example, GOM 1999c, 1998c and 1997a, Hirschman 1981 and 1958, Kaldor 1967 and 1957, Stewart and Ghani 1991, and Weiss 1985.

as the two vectors through which opportunities for linkages are created and materialise.¹² Mega projects are the main source of pressure that may result in development linkages because of the scale, sophistication, product and management quality, finance, networks and experience that FDI could bring. Additionally, FDI projects are the most dynamic and fast growing in the manufacturing sector, and the single major source of investment finance.

Input-output linkages have been developing in a limited number of cases, mainly between foreign owned firms. For example, energy from Motraco is mostly consumed by Mozal, which exports its entire production of aluminium. It is expected that Motraco will, in the future, also help to stabilise the supply of electricity to the manufacturing industry in the South. However, given that Motraco's electricity comes from the South African grid, this project actually links the manufacturing sector in Mozambique with the energy sector in South Africa. The sugar industry can also supply local firms with material inputs, particularly in the beverage industry of which the larger consumers of sugar – beer and soft drinks – are foreign owned.

Inter and intra sectoral linkages may not develop in the absence of coordinated strategies. For example, Kanes, a domestic metal-engineering firm originally specialised in mechanical and other simple agricultural equipment, but was forced to re-direct its activities because agricultural producers have no access to finance. Farmers want the equipment but cannot afford to buy it without bank or trade credit, and Kanes cannot afford to extend trade credit. Therefore, the firm is constrained to producing to order a wide variety of metal structures and products, and also depends on the buyer being able to extend trade credit. The firm runs the risk of losing skills and experience related to production of agricultural equipment, and the economy misses the opportunity to develop inter-sectoral linkages. Additionally, simpler but less specialised production to order is not conducive to an intensive innovation and learning experience, and therefore does not help the development of technological linkages.¹³

Some investment linkages have developed between domestic and foreign capital, as is illustrated by the fact that 72% of total DDI in manufacturing is concentrated in the same

¹² For a general discussion of the growth impact of positive linkages between FDI and domestic enterprises see, for example, Agosin and Maayer 2000, Aitken and Harrison 1999, Borensztein, Gregório and Lee 1995, Kuamar 1998, Mello Jr. 1999 and UNCTAD 2000a and 1999d.

¹³ Interview with Justino Francisco (Kanes). According to Hirschman, the existence of a "bottleneck" creates development pressures, or linkages, so that in this case finance would be provided. This is, however, a conclusion based on the assumption that there is a tendency of demand and supply of complementary activities to balance at no extra cost. The analysis of the financial sector (later in this section) explains why the sector would not respond to such "developmental pressures".

industries and firms as FDI. However, this is mostly associated with investment by the state and state-owned corporations and by one large private company, Coca-Cola. Additionally, this investment does not tend to be complementary in the sense of creating linkages and externalities throughout the economy, but is simply a share in given investment projects.

Technological linkages have also developed between firms involved in joint ventures and consortia created to attend specific and specialised industrial demands, such as the supply of metal structures and aluminium smelter pots to Mozal. Even in these cases there are serious difficulties in sustaining linkages because of backwardness of most Mozambican firms and irregular demand pressures. For example, one joint venture that supplies equipment to Mozal was forced to recruit 80 qualified and certified welders from South East Asia. In another case, demand existed for one specific good at one particular time period – the supply of metal structures for Mozal's smelting furnaces – that occupied a medium, local metal engineering firm for half a year, after which the firm returned to routine, small and irregular orders for a variety of customers. A joint venture with a more experienced foreign firm was created for the production of the metal structures, but this was a short-lived, occasional experience, therefore not conducive to cumulative creation of new capacities, skills, organization and management routines, or to effective technology transfer.

Given the magnitude of fiscal incentives, most large and foreign owned projects do not generate significant fiscal linkages. Projects with FIZ status, like Mozal, pay virtually no taxes. At the moment, Mozal is the only large project generating very significant export and foreign currency linkages. Wages tend to be higher in large projects, but most of these projects are capital intensive so that wage linkages through demand for basic consumer goods are limited.

Mozal is currently the main potential creator of demand linkages.¹⁴ Investment of about \$US 1.34 billion was made in the construction phase. Mozal, which outsources everything that is not direct production of aluminium, creates at least US\$ 100 million worth of contracts for other firms every year. If domestic firms can compete successfully for contracts with Mozal, domestic demand for these firms may increase, and they would have the incentive and means to upgrade and achieve internationally competitive standards because selling to Mozal is similar to exporting to top markets. Thus, getting long-term contracts with Mozal may work as a springboard for entry in the world market directly.

¹⁴ Mozambican officials argued that the main reason why the Mozambican government approved Mozal was the project's huge potential to generate linkages (see detailed discussion later).

However, firms based in Mozambique were awarded only 3% of construction phase contracts. Of these contracts, 50% were awarded to domestic firms in joint ventures with foreign firms and 30% were awarded to subsidiaries of international corporations. Two thirds of these contracts are for provision of services, namely: software installation and maintenance, training of software operators, transports, rental of installations, and environmental impact assessment. Very few of these contracts involve Mozambican based manufacturing firms, and when they do it usually is a one-off, short-term programmes.¹⁵

According to CPI reports,¹⁶ the main reason why Mozambican firms cannot get access to more and better sub-contracts is that they are not capable of producing with the rigorous standards that Mozal demands.¹⁷ CPI carried out an evaluation of about 370 Mozambican firms to identify those that could be easily upgraded to Mozal's standards.¹⁸ Of this universe of firms, 99% have serious problems with product quality; 95% do not have the required professional profile, portfolio and experience; 92% operate with old, worn out and outdated equipment, and inadequate technology; 90% suffer from serious management deficiencies and inadequate financial structure and capabilities; and 85% have serious deficiencies with respect to marketing capabilities and business attitudes. Only one firm, not in manufacturing, was certified under ISO 9000 standards. Thus, only a very small proportion of the firms can be easily upgraded, and the vast majority requires a process of complete restructuring, which would involve business strategy reviewing, training and access to finance.

The scope for demand driven linkages with Mozal is limited. First, the most important material inputs that Mozal needs are alumina (which comes from Billiton's own mines) and electricity (from Escom and the South African grid).¹⁹ Second, Mozal produces one basic, primary product of manufacturing origin, aluminium, which generates few dynamic product linkages. Mozal's linkages are almost exclusively process related. Third, the aluminium market, as most primary products, is unstable and sometimes volatile; booms and slumps

¹⁵ GOM 1999c.

¹⁶ GOM 1999c and 1998c.

¹⁷ MIC officials also argue that because Mozal was not an initiative of the Mozambican government, but was developed by insistence of the foreign investors, the Mozambican government was not prepared to help domestic firms to upgrade and had not thought through the problems associated with linkages (interviews with Luis Siteo and Manuel Mbeve).

¹⁸ Mozal's officials claim that the project creates a market for industrial goods and services, but its suppliers have to be of highest quality and reliability (interviews with Ian Reid and Peter Cowie).

¹⁹ Alumina and electricity constitute about 60% of Mozal's costs. With other material inputs that have to be imported, the import share of costs, excluding equipment, rises to 80% of the costs structure.

affect aluminium exporters and buyers, as well as their network of suppliers. It is, thus, dangerous to use any single FDI project as the only or main source of linkage opportunities.

If linkage pressures come from a single, narrowly specialised industrial project, no matter how large it is, it is not capable of maintaining a continuous demand for equipment, parts and materials that is large enough to sustain the development of the domestic manufacturing fabric. One way around this is if many other, eventually smaller industries and services relocate and develop in the proximity of an anchor project, such that the combined demand of these industries and services may help to develop long-term, structural linkages. This is the philosophy behind the creation of industrial estates around anchor projects.²⁰

The Beluluane industrial estate is being created around Mozal, the anchor project. The development of the estate involves investment of around US\$ 500 million.²¹ Because the estate has free industrial zone status, all firms benefit from duty free imports of equipment, parts and material inputs. Anchored firms are required to give priority to supplying the anchor project rather than exporting directly. Therefore, the cycle, pattern and scope of activity in the industrial estate is dictated by the anchor project, and the anchored firms may not have an incentive to outsource from domestic markets. Even if many more firms join the Beluluane industrial estate, domestic firms may not benefit from a larger pool of linkage opportunities in the absence of other significant and continuous pressures from diversified sources. The development of domestic firms cannot be tied to a few mega projects of narrow specialisation and industrial estates anchored to them.

Demand pressure may create new business opportunities, but actual linkages may only develop if domestic capabilities are created, existing assets restructured, intra and inter sectoral investment strategies coordinated and financial resources mobilised. More complex linkages, such as technological and structural processes, require that demand and supply pressures are continuous and wide ranging. Long-term, sustained and broad ranging linkages depend upon strategic coordination and domestic capabilities of the economy and the manufacturing sector.²²

²⁰ Interview with Víctor Tivane from CPI.

²¹ Interview with Víctor Tivane. Notice that the investment cost of this industrial estate is equivalent to 2.5 times total DDI in manufacturing in the period 1990-1999, and 20% of total manufacturing investment during the same period.

²² Strategic coordination does not necessarily mean an attempt to implement a big push strategy, by which everything is supposed to happen at the same time. However, being critical of the big push approach is different from rejecting the role of strategy. Hirschman's (1981 and 1958) assessment that linkages, and thus development, occur as a result of imbalances, does not exclude the need for strategy to address the imbalances. He emphasises the role played by economic pressures, or imbalances, in

Private sector development and industrial policy

The private sector, domestic and foreign, is the cornerstone of the industrial policies and strategies in Mozambique. GOM (1997a) defines manufacturing as a private sector activity, and industrial policy a response to private sector initiatives. Thus, the success of industrialisation strategies depends on how capable the private sector is.

Orthodox studies of the manufacturing sector in Mozambique²³ and policy documents emphasise that the development of the private sector depends upon three factors: (i) the business environment created through stabilisation and liberalisation; (ii) privatisation; and (iii) specific support programmes and institutions. This section briefly discusses the last two factors, as well as some characteristics of the domestic private sector.

World Bank (1996b), Castel-Branco and Cramer (forthcoming), Cramer (2001) and Biggs, Nasir and Fisman (1999) analyse the experience of privatisation in Mozambique. The World Bank study emphasises the role of privatisation in improving the efficiency of resource allocation through transfer of property rights from the state to the profit maximising private sector.²⁴ It analyses the success of the privatisation process with respect to two criteria: (i) how many firms were privatised and how fast; and (ii) how privatised firms perform from the point of view of the economic goals of privatisation. The study argues that with respect to the first criterion, the Mozambique experience is one of the most successful in Africa. More than 1,200 firms were privatised, four fifths of which over the last six years of the privatisation programme. Included in that number are not only SMEs but also large utilities and the largest firms in manufacturing, finance and transport sectors.

With respect to the second criterion, the study analyses the performance of the privatised firms relative to efficiency, competitiveness, investment and the fiscal impact of revenue from sales. Biggs, Nasir and Fisman's survey performs a similar analysis (table 5.1).

creating opportunities, and by the entrepreneurship to take advantage of them. Public strategy is part of entrepreneurial capability.

²³ See, for example, World Bank 1999, 1996b, 1995b and 1990b, Biggs, Nasir and Fisman 1999.

²⁴ In the view of the study, this transfer of property rights also increases competition by reducing state intervention in the goods and factor markets.

The two studies show that, with the exception of large and foreign owned firms, the economic performance of privatised firms was worse than that of any other group of firms (firms that had always been private, new firms and public enterprises). More worryingly, most privatised firms have failed to invest in new equipment and technology, which, given the poor state of the capital stock and technological backwardness at the time of privatisation, raises serious doubts about their ability to survive. This is partly due to the fact that, with exception of traders, domestic entrepreneurs do not have capital to invest.²⁵ It is also an indicator of failed linkages with foreign investors and the inability of the financial system to channel resources for manufacturing development. This also explains the reasons why domestic investors try to diversify their activities away from the manufacturing sector and into trade and services, as they need to minimise risk improve access to finance.²⁶ This type of diversification is not conducive to creating linkages and generating positive spillovers from manufacturing into the rest of the economy, and therefore does not contribute to developing the productive fabric of the economy.

Castel-Branco and Cramer (forthcoming) and Cramer (2001) argue that privatisation in Mozambique has been affected by three fundamental errors. First, it was made a panacea for almost all economic and management problems, without adequate analysis of the economic and institutional implications of the massive transfer of resources to the private sector. Second, the notion that privatisation would unleash the domestic private sector and bring forth its potential was based upon unrealistic assumptions about the private sector in Mozambique. Third, privatisation did not form part of a clear industrial strategy that could have helped with: (i) the selection and restructuring of the firms; (ii) the identification of simple and concrete targets for the privatisation of each firm, in accordance with the type of firm and industry and the goals of industrial policy; (iii) the identification of, and negotiation with, most adequate potential buyers; (iv) the establishment of adequate incentive, support and linkage mechanisms; and (v) the definition of the methods of state divestiture adequate for each case and objective. Neither of these two studies, however, discusses the interest groups more likely to influence industrial policy (for example, in a finance scarce economy, FDI projects may acquire disproportionate influence), and how such influence would have shaped the final result of privatisation.

²⁵ See Biggs, Nasir and Fisman 1999, Castel-Branco 1994b, Castel-Branco and Cramer (forthcoming), Haarlov 1997 and Weiss 1992.

²⁶ See, for example, Biggs, Nasir and Fisman 1999, who claim that 70% of owners of Mozambican manufacturing firms also own other unrelated business, mainly in trade and services. See also Haarlov 1997 and Weiss 1992.

Table 5.1: Performance of privatised firms in Mozambique

Indicators	Study/Assessment	
	World Bank 1996b	Biggs, Nasir and Fisman 1999
Efficiency gains		
- output	Sales doubled, but mostly because of large, foreign owned firms. Overall growth was short-lived	Privatised firms grew slower than all other groups of firms, and growth was short-lived.
- employment	Declined.	Declined very significantly more than in any other group of firms.
- capacity utilisation	Increased, mostly because of large, foreign owned firms; and growth is concentrated in a few industries.	Grew slower in privatised firms than in any other group of firms; concentrated in a few industries and large, foreign owned firms.
- labour productivity	Increased.	Increased but only because capacity utilisation increased & employment declined sharply.
- modern management	Almost only in large, foreign firms.	Almost only in large, foreign firms.
Competitiveness		
- at firm level	--	Technical efficiency of privatised firms is lower than in any other group of firms.
- competition in the economy	Evidence of concentration: beer, soft drinks and cement.	Evidence of concentration: beer, soft drinks, cement and cereals.
New investment	Increased, but mostly in foreign owned firms.	With exception of foreign owned firms, privatised firms invested less in new equipment and technology than any other group of firms.
Fiscal impact (privatisation proceeds)	Mozambican buyers paid 16% of agreed value of firms sold to nationals (US\$ 8 million); foreign buyers paid 85% (US\$ 43 million) of agreed value of firms sold to foreigners.	--

The process of privatisation in Mozambique is better understood from the point of view of the real pressures that forced it to happen, namely: (i) the limited capacity of the state to manage all the firms that it owned or administered; (ii) the interests of an emerging potential domestic entrepreneurial class keen to inherit state property at low costs; (iii) the need to capture excess liquidity controlled by traders and speculators in order to make it available to finance productive investment; and (iv) donors' ideology and its impact on policy direction.

To help the domestic private sector blossom, three private sector development programmes (tables 5.2 and 5.3) were formulated by multilateral agencies and started to be implemented in

2000.²⁷ It is remarkable that private sector support programs were introduced only thirteen years after market-led economic reforms were initiated.

These projects were developed without any coordination between the proponents. Not even the government encouraged the proponents to coordinate, which may be explained by two factors: (i) the government wishes to maximise resources invested in private sector development; and (ii) having more than one donor, and particularly when they have different approaches, improves the bargaining power of the government. Institutional conflicts emerged, partly because UNIDO and the World Bank have to compete with each other for finance from the same bilateral donors.²⁸

These conflicts and the need to compete with PoDE encouraged UNIDO to finance a study about possible complementarities and overlap between the two projects.²⁹ The study concluded that there is more complementarity than overlap, and that the few cases of overlap could easily be resolved.

Table 5.2: Private sector development projects – proponent, financing and life span

Program	Proponent/Agency	Cost (US\$ million)	Financing	Life span
PoDE Enterprise development program	World Bank	47.6	55% IDA 10% NORAD 10% EU 5% DfID 20% GOM & firms	6 years
IP Integrated Industrial Programme	UNIDO	10.4	10% UNIDO 35% bilateral 55% still to be raised	3 years
EM Enterprise Mozambique	UNDP	2.0	No money raised yet	3 years

Source: Project documents (World Bank 1999, UNIDO 1999 and UNDP 1999).

²⁷ UNDP 1999, UNIDO 1999 and World Bank 1999. See Coughlin 2000 for an assessment of the complementarities and overlapping between these projects.

²⁸ Interviews with Jan Thomas Odegard (UNIDO programme officer) and Luís Siteo (MIC).

²⁹ See Coughlin 2000. EM is too small and at the time unlikely to even begin implementation. Therefore, it is dropped from the analysis.

There are, however, other more significant problems with these programs than the simple issue of overlap.³⁰ First, they have different approaches to the problems of the private sector: UNIDO is focused on non-market, institutional failure, and the World Bank is focused on market conditions. Simplistically, it can be said that the projects do not overlap and are complementary in the sense that each addresses one side of the same coin. The problem, however, is that MIC is going to have to deal with two different projects, reflecting different philosophies, having different focuses, emphasising different priorities, and the two ideas are different, not complementary. Who is going to make them complementary? Does MIC have the bargaining power to force changes in both projects? Should and could MIC, instead, design the government's policy with respect to the development of the private sector? Or is MIC going to become absorbed with the management of conflict and reporting to each donor rather than working on industrial policy?³¹

Second, none of the projects discusses the private sector within a specific socio-economic context and strategic framework. It is as if the private sector is homogeneous and can be efficient or inefficient in general, independently of what it does and within which context it operates. UNIDO's project is slightly more specific by focusing on the food industry, but this is still too vague to make a real difference.

Third, the financing of the private sector is still an unresolved problem. UNIDO does not discuss finance at any significant length, whereas the Bank intends to introduce special funds. These funds absorb just over 20% of the money available for the project. It is highly unlikely that US\$ 10 million spread over six years will have a significant impact on domestic manufacturing investment.

Fourth, both projects define their own priorities and institutional organization independently of each other. Given fiscal constraints, it is likely that the department in charge of coordinating these projects becomes absorbed by administrative matters, having little to say about policy and no resources to do anything different or complementary. The existence of two distinct coordinating units, one for each project, may aggravate this problem.³²

³⁰ Coughlin 2000 makes the same point in the very last paragraph of his study, in which he argues that it is necessary to create public and private institutions properly staffed and equipped to ponder and choose industrial strategies and policies. (pp. 8)

³¹ See, for example, Doriye and Wuyts 1993, Tarp 1993 and Wuyts 1995, for debates about the role of aid and conflicting donor priorities in confusing state capacity and activity.

³² Coughlin 2000 argues that the experience of these projects may lead to a consolidation and amplification of the two coordinating units so that MIC would be positioned to think about strategy and policy, instead of merely sketching out main lines of action and avoiding overlapping and the grossest inefficiencies (pp. 8). This, however, would require that the government, not donors, set the agenda.

Table 5.3: Comparative description of enterprise development project (PoDE) and integrated industrial programme (IP)

Program	Analysis of the problems of the private sector	Objectives of the program	Activities
PoDE (World Bank)	<p>Private sector is small, fragmented and inward-oriented.</p> <p>Business and learning support services are underdeveloped.</p> <p>Second generation reform policies are necessary (liberalisation, de-regulation and simplification).</p> <p>Finance, though improved and diversified through liberalisation, is not easy to access and is not cheap.</p>	<p>Improve competitiveness of the private sector through strengthening their access to services external to the firm.</p> <p>Promotion of efficient markets for training and capacity building services, and linkages to domestic and foreign investors and buyers.</p> <p>Improve access to term finance.</p> <p>Capacity building in MIC, CPI and business organizations.</p>	<p>Institutions: regulatory reform and simplification of business legislation; promotion of support services; facilitation of regular round tables between the private and public sectors.</p> <p>Finance: (i) finance CPI and FIZ; (ii) finance quality firms to compete in the consultancy, training and technology markets by providing 50% of financial needs at commercial rates; (iii) term finance for SMEs, by providing 50% of financial needs at commercial rates.</p> <p>Operation of a linkages office that seeks to identify foreign partners for domestic firms.</p>
IP (UNIDO)	<p>Inadequate capacity for policy formulation (public and private sector).</p> <p>Regional deficiencies for private sector development, particularly in the Centre and North of the country.</p> <p>Inadequate capabilities and mechanism to attract investors and technology suppliers.</p> <p>Inadequate institutional arrangements and mechanisms to ensure competitiveness and sustainability.</p>	<p>Improve policy formulation as an interactive process between the state, enterprises and population.</p> <p>Improve the quality of the firms and access to services, namely through provision of technology and training, as well as quality management and standardization.</p> <p>Focus on food industries and SMEs.</p>	<p>Policy formulation: (i) information networks and statistical capabilities; (ii) industrial surveys: opportunities human resources, firms; (iii) strengthening capacities of the public sector and business associations; (iv) establish a permanent forum public/private sectors; (v) develop specific policies: environmental, quality and standards and industrial policies.</p> <p>Training: train trainers and national consultants who will train business people.</p> <p>Technology: examples through pilot projects in the food industry.</p> <p>Linkages: food industry and information networks.</p>

Source: Project documents (World Bank 1999 and UNIDO 1999).

Fifth, the Bank's project plans to create and manage a linkage office, despite the fact that a linkage division exists in CPI. It is likely that more institutional linkages may occur if the national institutions are strengthened rather than duplicated or replaced.

Donors and the government are repeating, with the support programs, the same errors committed during privatisation: adopting a simplified and inadequate analysis of the agents involved, and separating agents performance from strategy and policy and the overall socio-economic conditions under which they operate. This is more notorious in PoDE, but also evident in IP. The policy implication of defining private sector support strategies outside the more general context under which the manufacturing sector develops is that the support programs may become irrelevant for manufacturing development and for the development of domestic entrepreneurial and government capabilities.

Market structure and dynamics and implications for policy

Current economic policy in Mozambique takes for granted that the degree of incentive to the private sector is determined by the degree of liberalisation of goods and factor markets. This vision is based on neo-classical assumptions about how firms seek profits through the market and how goods and factor markets behave. The resulting policy documents do not take into consideration two fundamental aspects. Firms can influence the state, the direction of policy and market conditions. Thus, competitor firms' capabilities, strategies and actions have to be taken into consideration because they influence market outcomes. Hence, the option of liberalisation may not be available or may be irrational. This also creates a dynamically cumulative problem for industrial policy that cannot be avoided, namely the need to understand how one's strategies and actions change the very conditions in which the strategy is based, and changes the influences that act upon the state and strategy in the next round of policy negotiation.

A comparative analysis of recent developments in the sugar and cashew industries may illustrate these points. Table 5.4 presents the main similarities and differences between these two industries, apart from technical differences associated with their production processes.³³

³³ For information on sugar and cashew, see GOM 1999d, 1999e, 1999f, 1999g, 1999h, 1998b, 1996b, 1995 and 1993, Cramer 2001, Deloitte and Touche Ltd. 1997, Hanlon 2000, Africa America Institute 2001, Pereira Leite 1999 and 1995, and Sellschopp, Dorsey and Cuamba 1999.

Under the coordinated pressure of investors, three large international sugar corporations, the government approved a sugar industrial policy developed around three main points: (i) definition of the priorities for privatisation and rehabilitation to avoid excess capacity; (ii) pricing policy based on a flexible levy on the price of imports, when this price falls below a certain historical, average price. The domestic rent is shared between producers and the state, not by domestic traders or dumping industries; and (iii) development of mechanisms of coordination of marketing strategies between the firms to take advantage of preferential quotas and avoid having to dump sugar into world markets.³⁴

The World Bank and IMF opposed the pricing policy because it was inconsistent with trade liberalisation. Recently, and based on a technicality, the IMF tried to force the government to abandon the policy and, having failed to do so because of pressure from the industry, demanded a study on the impact of the pricing policy on poverty reduction using static, welfare economics. However, the World Bank and the IMF have not questioned the other two core elements of the sugar strategy, coordination of investment and of exports, which are not more "market conforming" than the pricing policy. The demands for price liberalisation in the sugar industry were abandoned after a study commissioned by the industry indicated that this policy was central for the survival of the industry. The IMF still insists that liberalisation is the first best option and that the pricing policy should be reviewed annually, as if the world market conditions faced by the industry, which are highly "imperfect", do not matter.³⁵

Three factors forced the IMF to withdraw pressure for liberalisation: (i) the backing of the policy by international sugar and financial corporations and other multilateral agencies; (ii) the scale of investment already made³⁶ and the threat, by investors, to withdraw in case the pricing policy was reversed; and (iii) the oligopolistic character of the industry that encourages and facilitates coordination, which is reinforced by the existence of a sugar producers' association, which is capable of financing and organising its own lobbies.

³⁴ To facilitate this coordination, one of the estates exports the entire Mozambican preferential quota, and the four estates share the proceeds.

³⁵ Or it is as if IMF officials are incapable of understanding real, rather than textbook type, markets.

³⁶ Sugar is second only to Mozal with respect to the share of total investment and total FDI in the manufacturing sector.

Table 5.4: Differences and similarities between the sugar and cashew industries

SUGAR	CASHEW
Differences	
<p><u>The structure of the industry:</u> Mostly unified, as agriculture and processing activities are integrated. Tongaat-Hüllet owns the majority of assets in two sugar states, and Illovo and Sena Holdings (a consortium of sugar companies from Mauritius) are majority shareholders in one sugar estate each. They are all international sugar corporations that control production of sugar in Southern Africa.</p>	<p>Mostly fragmented: small peasants collect the raw, unshelled nut; retail traders buy the nut from peasants and sell it to larger traders, who in turn may export the raw nut or sell it to 16 processing factories of different sizes and technology. Mocita is the only factory owned by a large international corporation, Anglo-American. However, 11 of the 16 factories are owned by seven large and diversified, domestic economic groups, of which 5, owning 8 factories, are also involved in commercialisation and export of raw cashew nut.³⁷</p>
<p><u>The size of the firms:</u> The four sugar estates are by all criteria very large companies, employing thousands of factory and plantation workers.</p>	<p>The average factory used to employ 600 workers, and a couple employed more than 1,400. This, however, does not say much about the economic groups that own most of the factories.</p>
<p><u>Business specialisation:</u> All corporations are specialised in sugar and control sugar production and marketing in other countries.</p>	<p>Only workers of the processing factories are entirely depend on the industry. Peasants also work as wage labour produce other crops. All traders are involved in wide-ranging rural commercialisation, money lending, and provision of trade credit and other services. Owners of processing factories own many other businesses, including rural commercialisation.</p>
<p><u>Investment:</u> Of the US\$ 230 million invested, 70% is foreign borrowing from international financial corporations and multilateral agencies.</p>	<p>Of the US\$ 37 million invested, 60% comes from borrowing mostly from the domestic banking system.</p>
Similarities	
<p><u>State of the firms at privatisation:</u> Firms were devastated during the war; were privatised after the economic reform program started.</p>	
<p><u>Market conditions:</u> Both industries face highly complex and "imperfect" international markets. Less than 10% of the sugar production is traded in the world market, and the remaining is either traded domestically or through systems of preferential quotas. All sugar producer countries adopt protective measures of different degrees and forms (quotas, tariffs, etc) against imports of raw and refined sugar, as well as sugar containing products. The availability of sugar in the world market is unstable because it depends on uncertain climate conditions; the surplus over domestic consumption and preferential quotas is dumped into the world market. The world sugar price is, therefore, volatile. In the cashew sector, most producers protect domestic processing. India uses fiscal and other industrial policy measures, including financing of imports of raw cashew nuts, to ensure supply of raw materials to the factories. Brazil introduced a total ban, and Vietnam and Indonesia apply high tariffs, on exports of unshelled nuts. Therefore, large imports of raw cashew nuts are likely to be transitory, during periods where domestic supply of raw cashew is adjusting to demand of raw materials by the processing industry.</p>	
<p><u>Policy support requirements:</u> Both industries need restructuring, protection, access to capital for rehabilitation and modernisation, market coordination, amongst other industrial policy measures, to build efficient productive capabilities and respond to market conditions.</p>	

³⁷ Traders that are also industrialists have the option to export unprocessed cashew nuts or process it, according to changes in international relative prices and the quality of the nut [interviews with Raimundo Matule (INCAJU), Rogério Nunes (Entreposto) and Kekobad Patel (Enacomo)].

Unlike sugar, the cashew industry is fragmented, peasants, traders and industrialists have conflicting interests and the more powerful agents are large traders. Before privatisation, exports of raw cashew were discouraged by an export tariff. After privatisation, the government was put under pressure by the World Bank to liberalise these exports. The Bank's argument was based on two points. First, value added of domestic processing firms, at world prices, was negative, so that the economy could earn more foreign currency by exporting raw nuts. This was due to three factors: (i) the poor conditions of the firms at the time of privatisation; (ii) the low and volatile world price for processed cashew nuts; and (iii) the unusually high, but equally volatile price for unprocessed cashew nuts due to massive imports from India to supply its processing industry, while cashew orchards were being expanded to achieve self-sufficiency. Second, peasants would benefit from liberalisation because the exporting price of cashew would go up and the peasant share of that price would also increase due to increased competition between traders. As a result, peasants would invest in the rehabilitation and expansion of cashew orchards.³⁸

This analysis failed to understand the oligopolistic nature of rural commercialisation in Mozambique,³⁹ particularly with respect to commodities for export, and its impact on the distribution of gains from liberalisation in favour of large traders. It also failed to understand that given the dynamics of the peasant economy in Mozambique,⁴⁰ it was unlikely that price incentives alone would enhance the viability of cashew production.

Because of the fragmentation of the industry and the reactive action of the state, no coherent policy emerged. Large traders sought liberalisation because they would be able to earn significantly more by exporting unprocessed nuts than by selling them to domestic cashew processing factories.⁴¹ Manufacturers sought protection to have access to raw materials at low price. Trade unions supported manufacturers because of the threat to wages and jobs arising from liberalisation. Traders and manufacturers created their own associations to coordinate strategy and lobbying, but because of the structure and dynamics of the industry collective action by each part reinforced industrial fragmentation and rent seeking.⁴² The World Bank

³⁸ Hilmarsson 1995, World Bank 1996b, 1995b.

³⁹ See, for example, Mackintosh 1987 and 1986.

⁴⁰ See, for example, Bowen 2000, Castel-Branco 1994a, O'Laughlin 1981, Wuyts 1989 and 1981.

⁴¹ Pereira Leite 1999.

⁴² This does not suggest that more competition has been introduced, but rather that, in the absence of an active and coherent industrial strategy, competition for rents and resources spent on trying to capture the rents have increased, because nobody can decide where the rents go and enforce this decision. See, for example, Castel-Branco and Cramer (forthcoming) and Khan 2001.

made the continuation of its support to small and medium industries in Mozambique conditional on liberalisation of the cashew industry.⁴³ The debate about the cashew industry blossomed, but was narrowly focused on the discussion of the export tax and factor prices.⁴⁴ Generally, there was no systematic analysis of all the other, more important, conditions that could help the industry to develop. These included access to finance for working capital and equipment, new technology and research and innovation, infrastructure rehabilitation, a regulatory framework for quality standards and control, rehabilitation and expansion of the cashew orchards, and the integration of the different, fragmented parts of the industry.⁴⁵

With no alternative strategy, defensively reacting to pressures, and under threat by the World Bank, the government opted for liberalisation. This decision, which two years later was partially reversed by the Parliament and put under review by the MPF, resulted in the closure of all cashew processing factories and more than 10,000 jobs were lost. By 1999, the export price of unprocessed cashew nuts had fallen by almost 50% due to different factors, the most important of which was the reduction in Indian imports.⁴⁶ Additionally, as would be expected, the main winners have been the large traders/exporters of raw cashew. By exporting unprocessed cashew nuts, their margins increased by 50% to 10 times relative to what they would get by selling to local industries, depending on the fluctuation of relative prices of unprocessed and processed cashew nuts in the world market. Had traders continued to sell the raw material to local processing firms rather than exporting, their margins would have averaged 38%.⁴⁷

It has been argued that if manufacturers intervene directly in the commercialisation of the raw nut they could obtain the raw material at a lower cost, thus rendering processing viable at a lower level of protection.⁴⁸ However, this argument misses two important points. First, traders own more than two thirds of the factories, including the largest ones. Some of them have become traders and exporters of unprocessed cashew nuts because of the unfavourable conditions faced by the processing industry.⁴⁹ Diversification into trade is a means to wider

⁴³ World Bank 1995c.

⁴⁴ See, for example, Deloitte and Touche Ltd (1997). For a critique, see Cramer 1999.

⁴⁵ Castel-Branco and Cramer (forthcoming) and Cramer 1999.

⁴⁶ See, for example, Africa America Institute 2001 and Hanlon 2000.

⁴⁷ For data on trading margins, see Pereira Leite 1999: pp. 45.

⁴⁸ See, for example, Cramer 1999, GOM 2000e, 1999g and 1999h.

⁴⁹ Interviews with Rogério Nunes (Entrepoto) and Raimundo Matule (INCAJU). See also GOM 2000e and 1999g and 1999h. Not all factories were bought by traders of unprocessed cashew, but larger domestic economic groups diversified into cashew processing and then into trade in unprocessed cashew nuts as part of the group strategy to minimise risk and ensure viability.

business options and to maintain a foot in the industry. By getting involved in trade, manufacturers have the option to export processed or unprocessed cashew nuts, depending on relative advantages at any point in time. However, firms would under invest in the factories if they have no commitment to processing the nut.⁵⁰ Firms cannot base medium and long-term investment decisions upon volatile and unstable international prices, which are also affected by the capabilities, strategy and actions of competitors. As manufacturers became more involved in trade, the prospects for the processing of cashew nuts become bleaker. Thus, state policy – driven by the combined influence of large traders/exporters, the World Bank and the IMF – has driven the industry and its agents away from manufacturing. As the quantity of raw cashew nuts available is not yet increasing,⁵¹ the next step in the restructuring of the cashew nut industry in Mozambique might well be the rationalisation of marketing, which may require, amongst other policies, further concentration of power and establishment of market barriers to entry by the incumbent traders.

The second point is that firms need extensive and loyal networks to succeed in large-scale rural commercialisation in Mozambique. Large traders/exporters trade in a wide variety of goods and services with retail traders and farmers: purchasing of a variety of surpluses from farms, and supplying of manufactured consumer and investment goods, trade related credit, transports and the services of small cereal milling and peeling units that are crucial for the peasant economy. Large traders have the social and economic base upon which to build loyal networks with retail traders and farmers.⁵² Some of these large traders also own cashew nut processing factories that have closed or scaled down because of shortage of raw materials. Thus, they make conscious decisions to export unprocessed rather than processed cashew nuts. In a way, their gradual move into the manufacturing component of the industry has undermined processing of cashew nuts. New entrants into cashew nut trading may not have the advantage of these networks and may not be able to compete with incumbent traders.⁵³

⁵⁰ See GOM 2000e, where strategic commitment is also associated with lowering of risk and more efficient links between manufacturing investors and the banking system. For a more general and theoretical discussion, see Bigsten *at all* 1999, Chandler 1977, various articles in Chandler, Hagström and Sölvell (eds.) 1998, Leahy and Neary 1999 and 1994, Rasmussen 1994.

⁵¹ See Pereira Leite 1999 and 1995.

⁵² It is unlikely that peasants and retail traders in rural areas will shop around to see who can offer the best conditions for each of the crops, each of the services, for money, etc. They do not have many options, and there is a considerable cost in shopping around, including that of losing the contact with the established network.

⁵³ Pereira Leite (1999: pp 45) shows that the number of large traders/exporters of unprocessed cashew nuts increased from 3 in 1991 to 11 in 1997 after liberalisation of the industry. The data show no clear relationship between the number of exporters/large traders and the size of trading margin. The margin is determined by the volatility and instability of the world market and the strategies and actions of foreign competitors. The lack of a clear relationship between the number of traders and the size of the margin is not surprising because most trade of cashew is done through large trading groups. The

The comparative study of the sugar and cashew industries reveals two common problems in policy-making in Mozambique. First, the World Bank, the IMF and the government take for granted that liberalisation is almost always possible and beneficial. In the case of these industries, they failed to understand that in a market where the strategy and actions of each agent affect market outcomes and pay-offs, each agent's strategy has to include the knowledge it has about the capabilities, strategy and action of the other agents.⁵⁴ In other words, it would be irrational for the sugar and cashew industries to give away protection if they have to operate in a market where the other agents are protected in one way or another (see table 5.4). Second, in the two cases the government was a reactive agent following the lead and pressure of the more dominant forces. Therefore, the exercises on policy and strategy were narrow and limited in scope and vision. They resulted in very different policy decisions and processes of industrial restructuring because of differences in the capabilities, structures and dynamics of industries and firms, which affects firms' capacity to influence policy.

The study reveals two other important aspects for policy making. First, the organisation of producers associations tends to reinforce industry structures and dynamics in absence of a solid strategy for change, and also tends to influence the direction of policy towards the dominant interest groups. In the sugar industry, the producer association consolidated the oligopolistic nature of the industry and investors' ability to cooperate, coordinate and influence policy, even against the wishes of the IMF and the World Bank. In the cashew industry, the associations reinforced each of the groups and, by doing so, the fragmentation of the industry and the power of the dominant trading group.

Another side of this problem is that, in the sugar case, rent seeking was limited because rents were clearly allocated from the outset and the producers' association facilitated cooperation in the share of rents. Even in the presence of a reactive state, sugar producers imposed a policy and enforced its implementation. In the cashew industry, associations of producers and traders emerged to organise rent seeking, because the allocation of rents was an open matter. As large traders/exporters became the dominant side in the debate and policy process, the level of rent seeking reduced because traders, within an oligopolistic market structure, appropriate most of the rents. Ultimately, this would be immaterial if the development of the sector were to be valued enhancing. Unfortunately, this is not the case in the cashew industry.

increase in the number of exporters/large traders is associated with established, large groups starting to trade in cashew nuts. This undermines the World Bank and IMF arguments according to which liberalisation brings about more competition, and efficient resource allocation and income distribution.

⁵⁴ Rasmussen 1994.

Second, exit was always an easier and more realistic option for cashew than for sugar manufacturers, and corporate strategy played a more important role in investment decisions in sugar than in cashew. Cashew nut processing is done in small and medium labour-intensive factories, which are part of horizontally diversified economic groups, where cashew is only one of many, unrelated activities. Thus, cashew manufacturers have more options and less commitment to manufacturing. To develop their commitment to manufacturing, which may make sense in terms of industrialisation and long-term export gains, policies and strategies have to discriminate in favour of manufacturing. This would require a strategy to restructure the whole industry, including vertical integration of the industry.

Sugar producers are large, international corporations concentrated in international sugar business. Exit was prohibitive for sugar producers because of the large amounts of investment and sunk costs involved in establishing the industry, as well as the implications of exit in terms of market power relative to competitor corporations. Although incentives, in particular the establishment and allocation of rents, are important to enhance the chances that investment occurs, the investment decision function of sugar producers include other factors as well: market strategy, the strategy and actions of competitor sugar corporations, and production conditions. The government has the opportunity to use corporate strategy and production conditions as tools to impose performance targets tied to investment incentives. This could be done by encouraging profits to be re-invested in the diversification of the industry into sugar based or sugar containing products, development of independent cane grower schemes, or more investment in rural infrastructures, which could develop domestic linkages and increase the social benefit from the industry's rents.

Corporate strategy and implications for policy

The policies and strategies resulting from the current economic and industrial policy context rely on FDI to guarantee adequate levels of investment and growth in manufacturing.⁵⁵ This dependence on FDI results from the inadequacy of available forms of finance to sustain high rates of investment and growth; the deficiencies of the entrepreneurial class; and also from the

⁵⁵ In the late 1990s, FDI and balance of payment support grants became the most important sources of finance of the trade deficit. FDI is also the single most important source of finance for the manufacturing sector. The combined value of FDI projects implemented, approved and moving into implementation, or in later stages of design and appraisal is about twice as large as Mozambique's current GDP (see, for example, Castel-Branco 2001, GOM 1999b).

aggressive strategies played by interested corporations.⁵⁶ In spite of this implicit dependency, FDI is not discussed in depth, nor any form of FDI strategy or implications of a FDI based strategy are analysed.⁵⁷ The policy documents take for granted that macroeconomic stability, combined with economic liberalisation and investment incentives, is sufficient to ensure dynamic FDI inflows.⁵⁸

Heterodox literature suggests very different approaches. In particular, it argues that the positive contribution of FDI to the economy depends on the degree of domestic linkages and investment complementarity enabled through FDI, not only on the gross value of investment. Thus, public policies that develop domestic capabilities and promote specific uses and allocation of FDI do matter.⁵⁹ This is even more important because LDCs are usually more affected by the slowdown of inflows of FDI during the downward period of international business cycles. Between 1999 and 2000, FDI inflows into Southern Africa fell by 26%, which has partly been explained by declining opportunities for mergers and acquisitions in the region as massive privatisation programs in Mozambique and other countries are completed.⁶⁰

Furthermore, it is argued that FDI is not very sensitive to "sound" macroeconomic policies. Economies may be penalised for getting macroeconomic balances hugely wrong, but they are not rewarded for getting macroeconomic balances right above a certain minimum threshold. The asymmetric response of FDI to varying degrees of "bad" and "good" macroeconomics

⁵⁶ Multilateral and bilateral aid and grants are unlikely to increase, macroeconomic stabilisation targets limit foreign borrowing under commercial terms and domestic credit to the economy, and export revenue is still too low to sustain any meaningful level of trade and investment. For a discussion of the context and conditions of the domestic private sector, see Castel-Branco and Cramer (forthcoming), Cramer 2001 and GOM 2000e. Elsewhere in this thesis, projects intended to support the development of the private sector are discussed. World Bank 1999 and 1996b, which emphasise the success of the program of privatisation, also acknowledge the deficiencies of the domestic private sector. GOM 1999c and 1998c argue that the development of the domestic manufacturing fabric and economic linkages require "intelligent partnerships" to be developed between domestic and foreign firms, because the domestic private sector does not have the finance, networks and expertise required. Biggs, Nasir and Fisman 1999 argue that large and foreign owned firms have been the main sources of manufacturing growth, whereas the domestic private sector that emerged with privatisation is the worse performing.

⁵⁷ MIC officials claim that FDI is not properly addressed by industrial policy documents because massive inflows of FDI were unexpected and depend totally on the investors' initiative (interviews with Luis Siteo and Manuel Mbeve). Businesses argue that it is the role of the government to study what corporations in the region intend to do in order to implement strategies to develop domestic capabilities, including domestic firms, to be prepared for and take advantage of FDI (GOM 2000e).

⁵⁸ Mozambique has become an FDI-friendly economy, where investment opportunities for foreign firms are identified in practically all sectors, and it is believed that economic stability and high incentives, including the possibility of award of FIZ status, will attract the necessary amounts of FDI. See, for example, GOM 2000a, 2000b and 2000c, UNCTAD 1999a and 1999d.

⁵⁹ See, for example, Aitken and Harrison 1999, and Borensztein, Gregório and Lee 1995, and Lall 1997, 1992a and 1992b.

⁶⁰ UNCTAD 2001.

arises mainly from four factors. First, there is significant controversy regarding the definition of what "sound" and "unsound" macroeconomic policies are. Second, there is considerable uncertainty regarding the forecast of what the impact of particular macroeconomic policy is likely to be on variables that affect investment decisions directly. This uncertainty results from the controversies about what makes sound macroeconomic policy, and also from the fact that the impact of a policy, no matter how sound it seems to be, depends not only on the policy itself but also on the socio-economic and political environment, nature of the problem that has to be addressed, combined effect with other policies and how the policy is implemented. Third, there is significant uncertainty regarding the accuracy and stability of macroeconomic indicators in LDCs because of data deficiencies and the vulnerability of these economies to shocks that they cannot control. Fourth, corporations put more weight on market and production conditions that affect their businesses directly – demand, technology, labour, competitive conditions, exchange rate, access to finance, institutions – than to aggregate, controversial macroeconomic data and assumptions.⁶¹

Finally, it has also been argued that countries spend excessive amounts of resources through incentive packages to attract foreign investment, which increases the social cost, and reduces the social net benefit, of FDI. Incentives are often redundant because they give away social resources to attract FDI that foreign firms may not need because they would have invested (or not invested) even in the absence (or presence) of such incentives for other reasons associated with their own strategies.⁶²

This analysis applies especially well to Mozambique. One example illustrates it.

Mozal is a large aluminium smelter built in the late 1990s in the outskirts of Maputo city. It has the capacity to produce 256,000 tons per year, which is expected to increase, in the second stage, to 512,000 tons by 2003. The initial cost of the project was US\$ 1.34 billion, which is projected to reach US\$ 2.4 billion when the second stage is completed. Current shareholders are Billiton (47%), IDC (24%), Mitsubishi (25%) and the Mozambican government (4%). The shareholders in the second stage will be Billiton (85%) and IDC

⁶¹ See Bird 1990, Fitzgerald 1997 and 1996, and Khan 2001 and 1995. For a contrary view, see Corden 1980.

⁶² Incentive packages tend to be more costly socially the scarcer FDI is and the more dependent an economy is on FDI as an alternative source of foreign currency and credit. See Helleiner 1989, UNCTAD 1999a, 1999d and 1999e and Weiss 1980. Mike Müller, managing director of 2M, one the largest beer factories bought by SAB in Mozambique, argued that SAB's strategy of expanding direct investment in breweries all over the Southern African region is mainly associated with existing trade barriers. Protection of national breweries make exports to protected markets less profitable and domestic production very profitable.

(15%).⁶³ The finance for the project has the following structure: 43% comes from South Africa (IDC and South African financing system); 23% from the UK; 14% from other European countries (including the shares of the Mozambican government which were paid for by a loan from the European Investment Bank); 10% comes from Japan, 9% from IFC and 1% from Mozambique.⁶⁴ Production started in 2000, and its main market is the automobile industry in Asia. During construction, Mozal employed up to 9,000 occasional workers, and now employs 900 permanent workers for operation. Of these workers, 85% are Mozambicans.

Mozal has been attributed FIZ status. This means that it is exempted from paying duties on imports of material inputs, equipment, parts and any other imports that are required for the activity of the company. It is also exempted from paying value added tax and turnover taxes because its production is for export, and from paying corporate tax. The project can import and export capital freely after registering with the central bank.⁶⁵

Mozal's impact on investment and trade balance is very large, on GDP is considerably less so and on employment is very small (table 5.5). This was to be expected because of the scale of the project relative to the small size of the Mozambican economy; the import dependence of production that minimises the contribution to GDP; and the capital intensity of a project designed to be successful against the toughest competitors in the world market.

With initial capital cost per direct job equivalent to 20 direct jobs elsewhere in the manufacturing sector, each worker in Mozal produces as much as 18 workers and exports as much as 159 workers from other manufacturing firms (table 5.6).⁶⁶ In absolute terms, Mozal is far more productive than any other firm in Mozambique, but relative to its initial capital costs its huge advantage is its export capability.

⁶³ Billiton, included in the FTSE 100 index, has recently become the largest aluminium producer in the world, controlling mining of alumina and smelters. Its business is focused on minerals and non-precious metals. Billiton acquired the South African minerals and metals corporation, Gencor, and is, thus, strongly associated with the minerals complex in South Africa. IDC (South African Industrial Development Corporation) is a para-statal investment agency. Mitsubishi is one of top world competitors in the automobile industry.

⁶⁴ Given the close relationships between the South African financial system and the minerals-energy complex of South Africa, the predominant role of South African financing in Mozal is another indicator of the link between Mozal and the minerals-energy complex (see Fine and Rustonjee 1996).

⁶⁵ See GOM 1999k for the Mozambican legislation on FIZ.

⁶⁶ It is argued that Mozal can generate as many as 2,500-3,000 indirect jobs through linkages. This estimate is not taken into consideration in the above analysis because it depends on linkages that have not yet materialised and also because each one of the predicted, indirect jobs requires more investment.

Table 5.5: Mozal's economic impact

	Investment	GDP	Trade Balance			Direct Employment	
			Exports	Imports	Net contribution	Number of workers	Investment per worker
Value (US\$ million)	1,340	157	430	260	170	900	1.49
Mozal's share of total... (%)	82 (a) 46 (b) 30 (c)	4 (e)	61 (e)	19 (e)	19 (d)	2.25	--

Sources: Own estimates based on GOM 1999b, GOM/Statistics 2001 and 1995-1999, and Mozal 1999.

Notes: (a) share of total FDI in manufacturing; (b) share of total investment in manufacturing; (c) share of total investment in the economy (data based on investment projects approved between 1990-1999). (d) Measures by how much trade deficit before grants falls as a result of Mozal's net contribution (exports – imports) to the trade balance. (e) Mozal's share of total GDP, exports of goods and imports after Mozal's contribution has been added.

Table 5.6: Comparison between Mozal and the average manufacturing firm

	Initial capital cost per direct job	MVA per worker	Exports per worker
Mozal (US\$ 1,000) (1)	1,490	175	478
Average firm (US\$1,000) (2)	73	10	3
Ratio [(1)/(2)]	20	18	159

Sources: Own estimates based on GOM 1999b, GOM/Statistics 2001 and 1995-1999, and Mozal 1999.

According to state officials, the Mozambican government became closely involved with the project after investors demonstrated the potential benefits benefit from the expected demand related linkages that Mozal could generate, as well as from employment creation, and the opportunity to change the structure of the economy and improve the balance of trade.⁶⁷ The success of Mozal is expected to improve business confidence in the Mozambican economy and attract more FDI. The government also sees mega projects like Mozal as desirable because they accelerate the pace of industrialisation and the development of the domestic private sector.

From previous discussions and data, it is obvious that expected linkages are not happening at a significant rate, and that high tech mega projects are not the way to address unemployment.

⁶⁷ Interviews with Luís Siteo, Manuel Mbeve and Sérgio Macamo (MIC), and António Macamo (CPI).

The slow development of domestic entrepreneurship is one of the reasons why linkages are difficult to come through. This suggests that mega projects are not perfect substitutes for strategies and policies that promote the development of domestic capabilities. Instead, these projects may be significantly more efficient if they are part of such strategies and policies.⁶⁸ Fiscal linkages have been prevented from happening because of the package of incentives that Mozal enjoys.⁶⁹ Mozambican officials claim that for public finances to benefit from Mozal the government needs to own shares in the project. However, the government has to pay back the foreign loan that was used to buy the shares, which attaches risks to public financial returns on a project like Mozal.

Amongst Mozambican officials, it is believed that survival pressures will force Mozambican firms to become efficient, and that these pressures are what Mozambican firms need to become efficient. "Intelligent partnerships", meaning joint ventures with foreign firms with expertise in the area, are seen as the only available way to promote domestic firms because no other forms of investment are available on a systematic basis and joint ventures are seen as the most adequate ways for transfer of technology, skills and experience. The experience, discussed elsewhere, shows that "intelligent partnerships" were used for less than 2% of Mozal's sub-contracts, and that little real technology transfer took place because the projects were almost always short-lived.

Mozal does not seem to be changing the structure of the economy. On the contrary, it is reinforcing the economy's dependence upon a smaller bundle of primary products, only this time it is the transformation of alumina and electricity into aluminium that dominates manufacturing output and exports of goods, rather than sugar, tea, cotton or cashew nuts. Similarly, whereas the project's net contribution to the balance of trade is significant, the export structure of the economy is becoming more concentrated and narrow, and therefore more vulnerable to volatile booms and slumps of primary commodity markets.⁷⁰

Mozambican officials also argue that Mozal was established in Maputo because of Mozambique's comparative advantage in power supply (associated with the large Cahora Bassa dam on the Zambezi River, in Tete), cheap labour and the package of incentives. However, a closer examination shows that cheap labour (meaning low wage labour) was

⁶⁸ See, for example, Borensztein, Gregório and Lee 1995, Eayon and Kortum 1995, Hirschman 1981 and 1958, Lall 1997, 1992a and 1992b, Mello 1999 and Nelson and Pack 1999.

⁶⁹ See Helleiner 1989, Hirschman 1981 and Weiss 1980, for a more general discussion of this problem.

⁷⁰ See, for example, Edström and Singer 1992 for an analysis of the booms and slumps of primary commodity markets and their de-stabilising impact on the economy and business confidence.

relevant for Mozal only during the construction phase. The vast majority of Mozambican workers in the plant are either skilled or semi-skilled, and company is reported to be recruiting skilled workers from many other firms because they can pay higher wages.⁷¹ Mozal is capital-intensive and the wage bill is a small proportion in company's cost structure.

Motraco, a joint venture of three electricity corporations, namely EDM (Mozambique), ESCOM (South Africa) and SEB (Swaziland), which supplies Mozal's energy requirements, is linked with the South African power grid. Therefore, while it is obvious that Mozal has strong links with the energy sector,⁷² such links are with the South African energy sector, not the Mozambican. Thus, whether or not Mozambique has comparative advantages with respect to power supply, it is irrelevant for Mozal.⁷³

Mozal's officials argue that the project was located in Mozambique for three main reasons: energy, incentives and Mozambique's fast economic growth in recent years.⁷⁴ Their analysis of energy and incentive issues differs from that of Mozambican officials.

The link with energy is through Escom's expansion strategy in the region. This corporation controls most of the energy generated in South Africa and also by Cahora Bassa, and is involved in new projects to expand energy production (Mepanda Uncua in Mozambique, and potential projects elsewhere in the Continent), as part of SDI promoted by the South African government and large corporations. Mozal was conceived as part of the energy strategy because of its energy intensity making it a determinant factor of the viability of investment in the energy sector, and also integrates Mozambique and its manufacturing sector into the

⁷¹ Interview with Manuel Mbeve (MIC), and Ian Reid and Peter Cowie (Mozal). See also "Metical", various issues in January and February 2001. Ian Reid and Peter Cowie also argued that one of the major constraints faced by Mozal and any other future mega project in Mozambique is the acute shortage of skilled and experienced workers. Reid and Cowie also emphasised that the current labour law does not help industrialisation because the domestic supply of skilled workers is very limited and the new law makes recruitment of foreign workers very difficult. They suggest that the government should concentrate on training large numbers of professionals of required quality and improving the quality of the education system. They argue that Mozal is not only recruiting skilled workers but also providing training and scholarships to increase the supply of skills.

⁷² Motraco, build primarily to supply energy to Mozal, is proof of this link. The fact that Mozal consumes twice as much energy as the remaining of Mozambique, and that Motraco can, in addition to Mozal, supply the entire manufacturing sector in the South, including two new potential mega projects in Gaza, heavy sands, and Maputo, iron and steel, is proof of the strong role of the South African energy sector in the Mozambican economy.

⁷³ Costs and unreliability of supply of electricity are the main infrastructure related problems faced by the manufacturing sector in Mozambique, as identified by Biggs, Nasir and Fisman 1999. Thus, even if Cahora Bassa is capable of producing large quantities of energy, the Mozambican economy is not capable of using it. Therefore, arguing that Mozambique has comparative advantages in power supply requires a strong qualification: in relation to whom? Definitely, is not against South Africa.

⁷⁴ Interviews with Ian Reid and Peter Cowie (Mozal).

South African energy grid. Thus, the motivation to establish Mozal in Mozambique, particularly in the South, can only be properly understood within this more general, strategic framework that combines the capabilities, interests and strategies of Escom, Billiton, the South African financial system and minerals-energy complex.

In addition to the package of incentives received from the government of Mozambique, Mozal enjoys incentives provided by the South African government, namely export related finance and lower energy fares for a number of years as part of export incentive policy.

There are other factors that should be taken into consideration in this analysis. First, Mozambican officials said that Mozal was developed not from government initiatives but fundamentally because of the insistence of the investors, even before the revised and more generous version of the FIZ legislation had been approved. Therefore, incentives at the level of FIZ status were not the fundamental issue in the decision to invest.⁷⁵ Second, when Mozal was still developing as an idea, Kaiser, a USA based multinational, was trying to convince the Mozambican government to build a large aluminium smelter in the outskirts of Maputo. Kaiser failed in large part because Mozal came along. According to Mozal's officials, Kaiser did not have the financial structure or the influence upon the world market to be able to succeed.⁷⁶ Mozal's aggressive business strategy seems to have been motivated also by the need to eliminate Kaiser as a competitor. Third, Mozal's officials also claim that no mega project can succeed in Southern Africa without going through the South African financial system and operating together with some large South African corporation.⁷⁷ The argument is that South Africa has the capability and the experience of the region, and also the integration strategy that links the economies of the region. For example, in Mozal (1999) it is argued:

Since the project will import a substantial proportion of its inputs from South Africa, it will stimulate regional trade between the two countries. This trade will also enhance the viability of the road and rail system that is being implemented as part of the Maputo corridor. (...) The new transmission line will contribute to regional integration and enhance the Southern Africa power pool. (...) (pp. 61-2).

⁷⁵ Interviews with António Macamo, Luís Siteo and Manuel Mbeve. This information is confirmed by Ian Reid and Peter Cowie (Mozal), who said that it was only after several visits by members and officials of the Mozambican government to Mozal's twin project in Richard's Bay, where they could see the linkage potential of a large aluminium smelter, that the Mozambican government finally decided to go ahead with Mozal.

⁷⁶ Interviews with Ian Reid and Peter Cowie.

⁷⁷ Ian Reid.

Fourth, Mozal creates important dynamic linkages with other South African firms that are the main suppliers of parts, equipment, services and assistance. Fifth, Mozal's location in Mozambique also opens the access to the Indian Ocean directly through the Port of Maputo, where investors initially wanted Mozal to be built.⁷⁸

Sixth, large South African corporations, associated or not with the MEC, are globalizing instead of vertically and horizontally integrating within the South African economy. Apart from the market power they acquire by expanding worldwide, globalisation helps these corporations to become less sensitive to government policy and to increase the influence of their strategies upon public policy.⁷⁹

Therefore, although the FIZ status helped Mozal to be established in Mozambique, it may have done so only in conjunction with the other factors. In other words, Mozal may have happened in Mozambique even if the incentive package made available by the Mozambican government was far less generous.

This analysis points to four fundamental issues. First, massive investment incentive packages increase the social costs of FDI, reduce its social benefit, and are often superfluous. Second, incentives should not be used without thorough consideration of the corporate strategies and motivations behind investment decisions because it may almost always be possible to minimise the social costs of incentives and increase the social benefits of the project. For example, Mozambique could have used the competition between Mozal and Kaiser to reduce the magnitude of tax exemptions awarded to Mozal.⁸⁰ Third, the analysis of investment projects should only incorporate externalities (indirect employment, linkages, etc.) if the costs and possibilities of making such externalities happen are thoroughly estimated and evaluated; otherwise, projects may be approved on the basis of benefits that will not occur. Fourth, no matter how much FDI flows into the Mozambican economy,⁸¹ there is no substitute for

⁷⁸ Manuel Mbeve.

⁷⁹ See Fine 1997b, Fine and Rustomjee 1996 and Roberts 2000.

⁸⁰ See, for example, Chang 1998b for a more general discussion of the bargaining process between LDCs and multinational firms, and Blomström, Gregório and Lee 2000, and Weiss 1998 for a more general analysis of the relationships between the state and multinational firms.

⁸¹ Large inflows of FDI, such as the case of Mozal, are likely to be highly concentrated in a few areas because of corporate strategies and Mozambique's limited capabilities. This does not offer very good prospects for vertical integration and diversification of the Mozambican economy. Furthermore, FDI inflows into the economy are unstable and the current boom seems to be running out of steam (UNCTAD 2000a and 20001). The current capabilities of the Mozambican economy – infrastructures, skills, entrepreneurial, institutional and financial – would easily be exhausted by a couple of projects of the scale of Mozal. Therefore, it should not be taken for granted that Mozambique will continue to receive massive inflows of FDI and that it has the capacity to absorb more mega projects.

strategies and policies that effectively create domestic, including entrepreneurial, capabilities. These strategies cannot be general and abstract, and should take into account the various forces that influence the development of the Mozambican economy, including the processes of restructuring and expansion of South African capitalism.

Finance

In the current economic context in Mozambique, financial reform is identified as a major contributor to a dynamic business environment. Financial liberalisation is expected to increase competition in the financial sector and therefore improve the efficiency, diversity and quality of services. Real interest rates that reflect the prevailing relative factor intensity and market conditions are expected to increase domestic savings and improve allocation of investment resources towards labour intensive projects with high rates of return. The launching of the Mozambican stock exchange (BVM), is expected to mobilise more investment resources by creating new opportunities for savers and by offering cheap access to finance, risk sharing and equity capital particularly to large firms.⁸² In Biggs, Nasir and Fisman (1999) and GOM (1999i and 1997a), it is mentioned that the small and medium firms may benefit from the BVM by having access to cheap finance.

The discussion that follows is focused on three issues, namely a brief description of the process of financial reform, the general structure of the financial system after liberalisation and privatisation, as well as an assessment of how the financial system performs with respect to its role of raising resources and financing the economy.

After independence, the banking system in Mozambique was nationalised, with exception of BSTM, a private commercial bank that continued to operate. Two new banks were formed. The central bank, Banco de Moçambique, was created to perform three distinct activities – currency management, financing of centrally planned projects and of the foreign currency component of investment, and commercial operations. For most of the period until 1987, exchange and interest rates were fixed according to the objectives of the material plan, because the implementation of the large development projects then approved required imports and massive borrowing for investment. Interest and exchange rates played a marginal role in

⁸² See GOM 2000a and 1999i, GOM, IMF and WB 1999, and KPMG 1999, on Mozambique. See Itoh and Lapavitsas 1999, and Aybar and Lapavitsas 2001 for a theoretical discussion. Harris 1988 discusses similar topics with respect to the interpretation of South Korea, and Fine 1997b analyses the case of South Africa financial system in the context of industrial dynamics and policies.

economic decisions because the scarce investment and foreign currency resources were directly allocated to planned projects and firms that qualified under the central investment plan. The bank was an instrument of the plan and almost an extension of public finance in that firms that qualified under the central plan were allocated financial resources in proportion to their needs and losses.⁸³

The other bank, BPD, was created to finance the domestic currency component of planned projects, and to support small and medium projects, cooperatives and rural areas. BPD developed branches and counters in each district of the country partly to encourage local savings and attract them to the official banking system, and also to provide credit and management assistance to local economic projects.

Neo-liberal financial reform started in 1986-87, and followed five fundamental stages: (i) gradual liberalisation of interest rates following the introduction of PRE in 1987; (ii) the separation of the commercial activities from the central bank, formation of a new, state-owned commercial bank (BCM), and concentration of BM's activities on monetary management and banking supervision; (iii) the opening of the financial system to private banking, so that new mostly foreign owned banks were allowed to operate in Mozambique; (iv) privatisation of the state-owned commercial banks, BPD and BCM; and (v) the creation of the stock exchange. BPD and BCM were privatised by five years later had run into severe financial losses, partly associated with corruption linked with top official nomenclatura, to the point of becoming a source of economic instability. The main private shareholders of BPD, a Malaysian bank, returned its shares to the government, which has had to start a new process of privatisation of the bank. BCM was acquired by BIM. It is interesting to mention that both banks were privatised very quickly under World Bank⁸⁴ pressures because of fears that by remaining under public ownership they would be used to finance the emergence of a corrupt business class based on the official nomenclatura.

Currently, there are 11 banks and credit institutions in operation in Mozambique, the majority of which are totally or partially owned by Portuguese banks. As a result of the financial collapse of the two privatised commercial banks, BPD and BCM,⁸⁵ BIM (the second largest commercial bank in terms of share of operations) and BCM (the first) were allowed to merge.

⁸³ For an analysis of the financial system in this period, see Wuyts 1989. Castel-Branco 1994b and Weiss 1992 discuss briefly the financing of firms and projects under the central plan.

⁸⁴ World Bank 1995c.

⁸⁵ See GOM, IMF and World Bank 1999, IMF 2000 and 1998, World Bank 1999, and "Metical" various issues in the first semester of 2001.

The majority shareholder of the new bank is BCP, a large Portuguese bank. After the merger, the structure of the banking system became as shown in table 5.7:

Table 5.7: Main banks' share of banking operations in Mozambique (%)

	Deposit Operations	Credit Operations
BIM+BCM	55	62
Austral (ex-BPD)	17	15
BSTM	17	11
Sub-Total	89	88
Others	11	12
Total	100	100

Sources: *BM (various yearly reports) and KPMG 1999.*

The total number of bank counters fell by almost 20% between 1997 and 1999, mainly because of the reduction of the number of counters of Banco Austral (ex-BPD) by 33%.⁸⁶ Banco Austral argues that this reduction is caused by the need to rationalise the operation of the bank because of competitive pressures to cut costs and of low savings and credit operations in most rural areas. Therefore, closure of counters occurred mostly in the rural areas. The distribution of counters is concentrated by bank (BIM+BCM, Austral and BSTM owning 93% of all counters)⁸⁷ and by region (table 5.8).

The financial system is concentrated in two ways: it is dominated by one bank and the regional distribution of financial activity is skewed towards Maputo. This evidence suggests that privatisation and liberalisation did not result in more competition and in financial deepening in the whole country, although financial services have diversified and improved in Maputo. The closure of more than 70 counters in rural districts does not give much hope either to agricultural activities or to local micro and small manufacturing projects.

Biggs, Nasir and Fisman (1999) show that access to finance is the number one problem identified by manufacturing firms. Two thirds of the surveyed firms do not have a bank loan. Although the share of larger firms with bank credits is higher (50%) than the sample average

⁸⁶ KPMG 1999.

⁸⁷ KPMG 1999.

(35%), this is still very low (table 5.9).⁸⁸ Of the firms that have no bank loans, 88% (57% of the total sample) never applied for a bank loan. Of the firms that never applied for loans, 75% (43% of the total sample) consider that interest rates are excessively high (tables 5.10 and 5.11) and 11% (6% of the total sample) blame lack of collateral. Of the entire sample, only 8% of the firms claim that they do not need credit, and only 6% have an alternative to bank loans in the form of parent firm financing (table 5.10).

Table 5.8: Regional distribution of bank counters and exchange shops in Mozambique (1999)

	Bank Counters		Exchange Shops	
	Number	Percentage	Number	Percentage
Maputo	103	41	29	81
Gaza	21	8	1	3
Inhambane	12	5	--	--
Manica	14	6	1	3
Sofala	26	10	3	8
Tete	13	5	--	--
Zambézia	14	6	--	--
Nampula	24	10	1	3
Cabo Delgado	14	6	1	3
Niassa	9	4	--	--
Total	250	100 (a)	36	100 (a)

Source: BM (various annual reports) and KPMG 1999.

Note: (a) Actual sum is 101 due to rounding.

Table 5.9: Firms with bank loans (% of total firms in the group)

Full sample	Firms with...		
	5-50 workers	51-100 workers	> 100 workers
35	21	38	50

Source: Biggs, Nasir and Fisman 1999

⁸⁸ Larger, foreign owned firms receive most of their finance from abroad through borrowing, parent firm support or multilateral involvement with large projects.

Table 5.10: Firms without bank loans (% of total firms in the sample)

Without bank loans	Reason for no loan		Why did not apply for bank loans?		
	Applied but rejected	Never applied	Do not need	Expect rejection for lack of collateral	High interest rates
65	8	57	8 (a)	6	43

Source: Biggs, Nasir and Fisman 1999.

Note: (a) 75% of the firms that do not need credit receive finance from parent firm; the remaining 25% claim that they operate at extremely low levels of capacity utilisation, which does not justify applying for credit.

Table 5.11: Average interest rates and spreads (%)

	1997	1998	1999
Real deposit rates (1)	9	8	8
Real lending rates (2)	33	26	27
Spread (3) = [(2) - (1)]	24	18	19
Margin $\{[(3) - (1)]/(1)\}$	170	125	138
Inflation	6	1	2

Source: BM 2001 and KPMG 1999.

According to World Bank (1999), to be profitable banks need spreads of around 9%. KPMG (1999) shows that spreads in 1999 averaged 19%, down from 24% in 1997 (table 5.11).

KPMG's business confidence index shows that the performance of the banking system is the single most important determinant of the increasing business confidence, despite the facts that two thirds of the manufacturing firms have no access to credit and access to finance is the number one problem identified by manufacturing firms.⁸⁹ In spite of this, GOM/Statistics (1999) shows that industry is the single largest recipient of credit to the economy (26%).⁹⁰ Hence, it can be concluded that the domestic banking sector plays a marginal role in the finance of the economy. The evidence also suggests that the performance of the financial system, which has been praised, has not been successful with respect to the mobilisation and deployment of financial resources in guaranteeing productive investment.

⁸⁹ Biggs, Nasir and Fisman 1999 and KPMG 1999.

⁹⁰ This assessment should be qualified carefully. First, mineral resources and fishing are also included in the category "industry". Second, domestic trade, domestic consumption and housing between them receive 47% of domestic credit. Third, export related credit is almost zero. Fourth, lending by domestic banks represents a small proportion of total investment in the economy.

By 1998, the total sum of deposits in the domestic banking system was US\$ 707 million, of which only 16% were savings deposits.⁹¹ This sum is half of the initial capital costs of Mozal, and the savings deposits are equivalent to capital investment in the rehabilitation of two sugar estates. Given the high reserve ratios established by the central bank, domestic banks can raise autonomously approximately 16% of the credit demands of the economy. The remaining 84% come from foreign borrowing, FDI, grants and special credit lines established by multilateral and bilateral financial and development agencies. A very large share of commercial banks' credit operations consists on being the agency through which multilateral especial funds and credit lines are channelled.⁹²

Informal trade credit has been used in manufacturing: 50% of the firms have extended, and 69% have received trade credit. However, trade credit accounts for a small share of credit to manufacturing and business transactions. Only large firms with market power, or firms with long-term business or personal relations, extend trade credit. Market power and long-term relations act as a substitute for information.⁹³

Biggs, Nasir and Fisman (1999) argue that the inability of the financial system, formal and informal, to provide finance for development is caused by information failure. High interest rates, preference for short-term loans and heavy collateral requirements⁹⁴ are used by the financial system to price risk and substitute for information. Only a few firms, usually large and foreign owned, have access to credit on the basis of past performance.⁹⁵

The study identifies four main causes of information failure. First, the real side of the economy is not ready to receive credit because firms are untested, owners of privatised firms are inexperienced, management is deficient and most firms do not have adequate business plans and strategies. Second, the accounting systems are weak and unreliable, so that accounting and financial information about firms is either non-existent or very deficient. Third, the banks do not have yet a system of sharing information about credit-borrowers. Fourth, the costs of enforcing contracts are high because the systems are not in place and the

⁹¹ BM 2001 and KPMG 1999.

⁹² Interview with Manuel Figueira, Vice-President of BCI.

⁹³ Biggs, Nasir and Fisman 1999.

⁹⁴ All credit, even short-term loans, must be fully backed by collateral.

⁹⁵ For a critique of the information failure approach to the analysis of the financial system see Itoh and Lapavitsas 1999, and Aybar and Lapavitsas 2001. For the alternative view, which analysis the structure of the financial system in relation to information failure, see Sing 1992 and Stiglitz and Weiss 1981.

legal system is very deficient. Information failure, thus, arises from lack or unreliability of data and inadequate enforcing institutions.

The information failure based explanation is excessively simplistic and narrow. This does not mean that information is not an important issue, but that the study ignores several more fundamental aspects related with the structure and dynamics of the financial system and the way in which it interacts with manufacturing and the economy as a whole.⁹⁶

First, macroeconomic policies and targets shape the functions and possibilities of the financial system. A senior official of the central bank, who said that there is legal incompatibility between being a guarantor of monetary and economic stability and pursuing development objectives, confirmed this point.⁹⁷ For example, the imposition of tight constraints on domestic credit is a central economic policy instrument and objective within the framework of orthodox stabilisation policies. Therefore, credit constraints for productive investment do not result from market and information failures but are a fundamental component of current economic policy objectives. Under tight credit constraints, banks may be keeping high spreads in order to maximise their profitability and increase autonomous financial resources that may then be used in projects that are safer than manufacturing and yield higher returns.

Second, the study fails to address power and interests within the financial system, how these may shape the way finance is raised and deployed, may determine the financial markets, institutions and firms that are developed, and how finance interacts with the rest of the economy. The information failure analysis is based on the assumption that between lender and borrower information is asymmetric, and the borrower has more information and power over the relationships with the lender once a transaction occurs. Therefore, not lending is the lender's insurance. These assumptions abstract from the fact that the Mozambican financial system is highly concentrated and further rationalisation and concentration may yet take place, as at the moment banks are trying to hold to their position in the market, or expanded if possible, which may have already created overcapacity at least in Maputo. They also ignore the fact that the development of the financial system is dynamically linked, in a symbiotic way, with what happens elsewhere in the real economy.⁹⁸

⁹⁶ See Fine 1997b for a similar analysis with respect to financing of South African industrialisation.

⁹⁷ Interview with António Pinto de Abreu, member of the board of Banco de Moçambique.

⁹⁸ The expansion of Portuguese banking, for example, is associated with the strategy of internationalisation of Portuguese firms (interview with Manuel Figueira, Vice-President of BCI, whose majority partner is Caixa Geral de Depósitos, a large Portuguese financial institution).

Larger banks may be more interested in expanding market power and establishing stronger links with sectors of the economy and industry that may offer more profitable long-term prospects. This may explain why BIM (Portuguese) bought BCM and ABSA (South African) is going to buy Banco Austral, despite the fact that BCM and Austral have been running huge deficits for more than 3 years, and have been affected by huge corruption and criminal problems. It may also explain why credit is skewed towards larger, foreign owned firms, and why manufacturing projects where FDI is concentrated also absorb 72% of DDI and almost two thirds of bank loans. The ability of the banking system to keep high spreads also results from oligopolistic market power in the sector, not only from an opportunity created by macroeconomic policies. These strategies and actions do not result from information failure but from the internal interests and dynamics of the financial system and its interaction with the whole economy.

Third, there is a problem of strategic decision with respect to finance: there are no obvious sets of priorities, direction of investment and complementary measures to make investments viable. As discussed before, the industrial policy package is limited to setting rules and lists of intention. Industrial investors and banks alike are unwilling to take the risks that are associated with the absence of explicit policies and mechanisms of implementation.

Banking officials have argued that development credit for the manufacturing sector depends not only on the availability of funds, but most importantly it depends upon the existence of industrial strategies that enhance the viability of the projects, enable timely corrections and adjustments when necessary, take into consideration the real conditions of the market and adopt a long-term vision.⁹⁹ Selection of priority targets for finance can and has been determined differently from what is viable and important exclusively from the bank's profitability point of view, but it has to be done elsewhere through industrial strategy, not by banks.¹⁰⁰ In the sugar industry, for example, multilateral and commercial credit was made available on the conditions that investment priorities were defined and a pricing policy established. Investors' pressure forced the IMF to withdraw its demand for the liberalisation of the industry.

The simple rehabilitation of old, outdated and worn out equipment and technology does not attract financial resources from commercial banks because Mozambican firms, given the age and poor state of their capital stock, need innovative investment and modernisation to be

⁹⁹ See GOM 2000e.

¹⁰⁰ Interview with Manuel Figueira, Vice-President of BCI.

acquire competitive capabilities. Otherwise, investment may be wasted and industrial firms and banks will loose.¹⁰¹ Innovation and modernisation are determined by firms' capabilities, strategies and access to finance, and these three factors are strongly associated with market power or clear industrial strategies. This may partly explain why investment in new equipment and technologies is significantly more frequent in large and foreign owned firms than in privatised and small and medium domestic firms.¹⁰²

Fourth, the Mozambican banking system is clearly unable to finance the whole economy, even in the absence of information failure and policy constraints, because the Mozambican economy is highly dependent upon external aid. Autonomous finance covers less than 16% of investment needs,¹⁰³ and a significant share of credit operations involves domestic banks as agents through which especial multilateral and bilateral funds are channelled. Budget and import support grants are not directed at sectoral strategies and priorities, partly because donors and multilateral agencies have a record of not supporting state promoted industrialisation.¹⁰⁴ Special funds and credit lines are too small. For example, only 20% of the funds made available for the World Bank private sector support program (PoDE), US\$ 10 million spread over six years, are used for partial financing of short-term trade related credit to firms with good performance records.¹⁰⁵ FDI is the only large source of finance for manufacturing, and FDI financed projects have also attracted the largest share of DDI and loans invested in the manufacturing sector.

The stock market has been identified as a viable alternative to the banking system. This approach is based on the notion that the financial system operates efficiently if the right set of institutions and rules are introduced.¹⁰⁶ According to KPMG (1999), the stock market has several advantages over the banking system: creates new opportunities for savers, guarantees cheap access to finance, ensures that risks are shared between shareholders and provides much needed equity capital. Another economic advantage is that the risk of takeover provides incentives for firms to be profitable. The first assets to be traded in the stock exchange are treasury and banking sector bonds and shares of the largest 12 companies.

¹⁰¹ See GOM 2000e.

¹⁰² See Biggs, Nasir and Fisman 1999.

¹⁰³ Banco de Moçambique 2001, Biggs, Nasir and Fisman 1999, and KPMG 1999.

¹⁰⁴ See Haarlov 1997.

¹⁰⁵ World Bank 1999.

¹⁰⁶ For a summary of the theoretical debates about the relative merit and demerit of the stock exchange, see Itoh and Lapavitsas 1999, Aybar and Lapavitsas 2001 and Singh 1992. See also Fine 1997b for an analysis relative to South Africa.

There are some general and specific theoretical and practical problems with this analysis of the role of the stock market in Mozambique. Singh (1992) argues that stock markets increase the volatility and instability of LDCs' economies and exacerbate their vulnerability to external shocks that may easily be reflected in fast inflows and outflows of speculative capital through share trading. Aybar and Lapavitsas (2001) and Itoh and Lapavitsas (1999) argue that corporate takeover is mainly associated with corporate strategy. This has little to do with the profitability of the shares, but it is strongly correlated with the size of the company, its market share, technology made available, brand name, and network of suppliers and customers.¹⁰⁷

In more specific terms, there are several problems with the expectations about the stock market in Mozambique. First, BVM does not necessarily change the internal dynamics of the financial system, which is shaped by macroeconomic policies and targets, interest of the financial institutions, their relationships with the economy, absence of investment strategies and the heavy dependence of the economy relative to external finance.

Second, one of the causes of this dependency is the low level of productivity, income and savings by domestic firms and households. Thus, they are less likely to provide the savings for stock market transactions. Third, large traders, exchange shop owners and speculators control a significant share of the circuit of money and liquidity, but they are more likely to invest in bonds, which yield real rates of return more than three times higher than deposit real rates of interest.¹⁰⁸ Therefore, whereas BVM may attract speculative money, it may only do so for assets traded well above what returns on manufacturing projects can achieve. Fourth, given the structure and dynamics of the financial system, proceeds from banking sector and treasury bonds are unlikely to be used to finance small and medium manufacturing firms. Fifth, only the 12 largest companies are registered in the stock market; therefore, if anything, stock market transactions may divert financial resources away from other manufacturing firms and may concentrate such resources in corporations that already have market power and access to other sources of finance.

This analysis suggests that solving information failure – which clearly should be done – or building new financial institutions do not address the fundamental problems discussed because they are not caused by information failure or lack of institutions. The challenge ahead

¹⁰⁷ This is consistent with, for example, the privatisation of the larger state-owned commercial banks.

¹⁰⁸ Banking sector and treasury bonds have been sold with real rates of return between 22% and 29% (see Banco de Moçambique 2001).

is how to mobilise the financial system to support selective strategies that are credible,¹⁰⁹ and that promote diversification of the economic fabric and exports. Large projects are financed from abroad: multilateral agencies, commercial borrowing and parent firm finance. These are the cases of sugar, beer, soft drinks, cement, Mozal and other mega projects.

The problem seems to be with the financing of a diversified network of smaller firms and activities that strengthen economic linkages. These are the majority of the firms and any strategy of industrialisation must decide what to do with them, how to restructure them and upgrade and use their capacities. They are important to build the industrial fabric that links the different aspects of the economy, including the different mega projects, and to generate employment and industrial experience. One way of mobilising finance for these firms – amongst many other possibilities that should be investigated – is to identify and select firms and industries that are linked with the dynamic areas of the economy, and concentrate support to build their competitive capacities, namely: finance, technological innovation and training capabilities, standardisation of quality and certification, management assistance and innovation, etc.¹¹⁰ These firms may be linked with viable mega projects, programs of industrial and sectoral restructuring and rehabilitation, and significant export markets. This requires strategic intervention by the state, negotiations between the state, banks and industrial firms, better coordination between state departments, the definition of performance targets for supported firms, introduction of incentive mechanisms to encourage banks to participate collectively, and rationing of financial resources for non-priority firms and industries. At the moment, two thirds of the firms do not have access to finance; this “market-driven” rationing does not serve strategic economic objectives and has consolidated market and economic power.

4.3 Conclusions

This chapter has shown that industrial policies and strategies in Mozambique are marginal with respect to core economic policies. This results from a combination of factors: the focus of core policies on economic stabilisation and liberalisation; the constraints imposed by such focus on the content of industrial policy and strategy particularly because core targets are

¹⁰⁹ Harris 1997 discusses, with relation to South Africa, the role of credible growth and investment strategies in mobilisation of finance.

¹¹⁰ Making finance available is far from sufficient. A strategy is required to identify priorities, enhance the viability of the projects, define the actions and targets to be achieved, and establish mechanisms to mobilise participation, enforce implementation and guarantee monitoring and learning.

exogenously determined with respect to manufacturing, the belief that economic incentives are proportionally and directly correlated with stabilisation and liberalisation and the reactive and fragmented role of the state which creates policy inconsistencies. It has also shown that existing industrial policies and strategies are simple information devices about the intentions of the government, and are out of line with the real dynamics that influence and shape the development of the whole economy and the manufacturing sector. Finally, the chapter argued that the marginalization of industrial policy has underdeveloped the institutional capacity to formulate, pursue, implement, monitor and learn from industrial policy.

The chapter analysed five selected issues in industrial policy, namely linkages, private sector development, the role of market structure in policy-making, corporate strategy and finance. The analysis of these issues identified dynamics forces at work that result from the interplay between agents and linkages, and how they affect the pace, pattern and direction of economic and industrial development and allocation of resources.

Although these five issues were analysed individually, they are closely inter-related. In particular, the chapter argues that the dynamics and structure of markets and industries and the strategies, interests and actions of the different agents are part of the dynamic forces to take into consideration in the development and implementation of active and relevant industrial policies and strategies. They also influence the range of opportunities, the direction and patterns for linkages, private sector development and mobilisation of finance for productive investment.

The symbiotic relationship between linkages, private sector development, mobilisation of finance and industrial strategy calls attention to the fact that industrial strategies and policies may only make sense if they are integrated in the wider context of socio-economic development as a whole. Manufacturing development is not a sectoral matter, but reflects the process and dynamics of the industrialisation of the whole economy and society.

Chapter 6

Conclusions

This chapter summarises and brings together the main conclusions of the thesis based upon the analysis of chapters 2 through 5. In addition, it explores possible directions and future conditions of policy. The first section presents the aim of the thesis and the analytical framework adopted. This section, thus, provides a research direction and methodology or, in other words, defines what main aspects should be investigated in the process of analysis, formulation and implementation of industrial policy. It argues that the more adequate analytical focus for understanding industrial policy is the dynamics of linkages, agents and their relationship. Furthermore, it is also argued that industrial policy, which is an intrinsic part of any process of industrialisation, no matter how successful, is better understood in the context of the analysis of the fundamental socio-economic processes that affect industrial development and performance. Thus, the analysis of industrial policy should go beyond the mainstream discussion of protection and subsidies directed at selected targets.

The second section presents the main conclusions for industrial policy analysis in Mozambique, as well as a very brief outline of future directions for research and perspectives. These include a critique of the more influential studies of the manufacturing sector, as well as of the official industrial policy documents. This critique is intended to develop new lines of thought, debate and policy action that take into consideration the real dynamics of economic and industrial development in Mozambique; and that articulate the various elements of policy around the achievement of goals of socio-economic development. Another set of conclusions is concerned with addressing critical issues in industrial development in Mozambique, namely those associated with the acquisition of industrial capabilities, finance and the Southern African context of industrialisation.

6.1 Aim and analytical framework of the thesis

The general aim of this thesis has been the application of the linkages-agents analytical framework to the study of the process of industrialisation in Mozambique. More specifically, the thesis has discussed the role of industrial policy in the Mozambican economy, and how to

address the task of developing coherent industrial policies and strategies that take into account the structural characteristics and the dynamic socio-economic pressures that shape industrial progress. Thus, rather than recommending specific policies the thesis has tried to identify the dynamics of industrial accumulation and its implications for industrial policy. In other words, the thesis has tried to explain how the Mozambican manufacturing sector functions within the economy as a whole, and why it functions as it does, so that policies can be based upon the understanding of the socio-economic relations and pressures that characterise the process of industrialisation in Mozambique.

The linkages-agents framework analyses socio-economic development processes by focusing upon the study of linkages, agents and the dynamic relationship between the two (see chapter 2). Linkages refer to the process by which one economic activity or pressure (for example, the creation of large and systematic domestic demand for a given imported consumer or investment good) leads to another activity or pressure (for example, substitution of imports by establishing local productive capacities). Agents are those who make, or not, linkages happen. Linkages may result directly from economic pressures or from strategy and planning. In either case, it is necessary that agents have the ability to anticipate the linkage opportunity and the entrepreneurial capacity (managerial, organizational and financial capacities) and political will to take advantage of the perceived opportunity.

This has all been well documented in the development literature, including the literature focused specifically on industrialisation and industrial policy. As discussed in chapter 2, most of this literature, despite the very wide variety of themes that it discusses, can be organised into the economics (or linkages) or the political (or agents) literature. The first, which takes agents for granted, is concerned with the analysis of how and which economic processes lead to new pressures and activities and in so doing generate growth and change. The second, which takes linkages for granted, is focused on the analysis of the agencies, namely market mechanisms, individuals, firms, and the state and other non-market institutions. Hirschman (1958 and 1981) discusses both agents and linkages and, in doing so, makes agencies and linkages to relate through a process by which pressures resulting from unbalanced growth necessarily result in agencies to develop and linkages to happen. He acknowledges that social structures may constraint the development of agencies and linkages but, in his work, agencies and linkages have no political and social content – they are either adequate or not, but do not involve social and economic interests. In his discussion of the relationship between linkages and agents, the latter become another linkage that emerges from developmental pressures, in line with his assumption that the demand for agencies resulting from the need to take advantage of linkages creates its supply.

The linkages-agents framework adopted in this thesis is different from the mainstream analysis of linkages and agents in various ways. First, it recognises the socio-economic and political context in which agents and linkages emerge and operate. Agencies reflect social interests, often conflicting and not necessarily coherently articulated, which may determine not only whether linkages are implemented but also the perception and definition of the important linkages to materialise and how to do it. Second, it introduces the analysis of the dynamic relationship between agents and linkages and how they influence each other. Therefore, this framework consists of three components: agents, linkages and their dynamic relationship. Third, it acknowledges that not only are agents and linkages dynamically related with each other, but also they cannot be adequately understood if studied separately. This means that agents are not, cannot and need not be autonomous from economic conditions and pressures, which in turn are not independent of social and political interests. This analysis also reveals the inadequacy of the "state versus markets" debates about public policy by showing that states work through markets and both states and markets are subject to similar socio-economic pressures and interests.

The adoption of this analytical framework is not the original contribution of this thesis. The fundamental basis of the framework is discussed in the literature and can be traced back as far as Marx's discussion of the symbiotic and dynamic relationship between productive forces and relations of production in the process of socio-economic and political change and development. A more applied and recent linkages-agents analysis in Fine and Rustomjee (1996) discusses the political economy of South African industrialisation (in which they also apply the method to the analysis of the South Korean experience of fast industrialisation). The original contribution of this thesis is to extend the application of this method to the analysis of industrialisation in Mozambique.

The linkages-agents framework has several major implications for policy analysis. First, it provides a research method to understand why the economy functions in a particular way through the analysis of the fundamental aspects of economic development, namely agents, linkages and their dynamic relationship. As a result, second, the framework does not have to take agents or linkages for granted as, on the contrary, it can and needs to explain them in relation to each other. Third, it puts policy analysis and advice in the context of the political and socio-economic forces and pressures that shape the process of development and, therefore, draws policy conclusions from the underlying political and economic relationships that govern specific processes of industrialisation. Thus, contrary to neo-classical and "developmental state" approaches, this thesis does not need to make claims about an inherent

superiority of markets or states in the process of development to analyse the relevance and effectiveness of industrial policy. The analysis of industrial policy involves research into how development goals, which reflects the relationship between interest groups and socio-economic pressures, are defined and implemented. Thus, in order to be effective and relevant industrial policy cannot be and does not need to be autonomous from interest groups and economic pressures, and has to be implemented through the market.

In addition to, and as a result of, the application of the general analytical framework, the thesis also argues that irrespective of its degree of coherence, industrial policy is an intrinsic part of any experience of industrialisation no matter how successful it is (see chapter 2). This results not from any inherently hypothetical comparative advantage or disadvantage of the state or markets, or from market imperfections, but from the fact that economic development affects and is affected by socio-economic structures and conditions of accumulation which, in turn, reflect interests of groups and agencies that act through and influence both governments and markets. Therefore, the relevant issue are not whether industrial policy should be adopted or whether it is, or can be, superior to markets, but who drives industrial policy, in which direction, how coherent it is with the goals of industrialisation and broader socio-economic development, and how efficiently it deals with existing socio-economic pressures and interests. This implies that there is no rationale for or against industrial policy outside specific political and socio-economic conditions and pressures. The thesis, therefore, focuses upon the research of the fundamental relationships that shape industrialisation in Mozambique and how they are influenced by, and influence, industrial policy, and avoids being trapped in an abstract attempt to demonstrate whether state policy or the market are more efficient.

The intrinsic role of industrial policy in any economic process is better understood through the analysis of the underlying political and economic processes involved in industrial development. This implies that the analysis of industrial policy needs to go beyond the level of protection of domestic markets and subsidisation of individual firms and activities, to include long-lasting state businesses relationships; allocation of property rights, control and competition regulation; the organization of finance; the interaction between the state and corporate strategy; industrial organization and vertical and horizontal relationships between firms and industries as part of general competitive conditions; investment codes; private sector development programs; labour market policies; technology policies; and other aspects of economic policy that affect directly the process of industrialisation.¹ Beyond general and

¹ See Aybar and Lapavitsas 2001, Amsden 2001, 1997 and 1992, Bayliss and Cramer 2001, Cramer 2001 and 1999, Fine 1998a, 1997a and 1997b, Fine and Rustomjee 1996, and Roberts 2000.

abstract concepts, the definition, content and role played by industrial policy depend fundamentally on the specific socio-economic context and the interests and pressures that act upon the state and the process of industrialisation.²

The thesis does not suggest that all policies should be classified as industrial policies as long as they have some, no matter how remote, impact on industrial development. However, the thesis suggests that policies adopted with the specific purpose of affecting industrial development, or that have a significant impact upon industrial performance, are better identified and understood when they are analysed within the context of capital accumulation and economic policy as a whole.

For example, it has been argued, by businesses and analysts alike, that in Mozambique there is no public industrial policy apart from reactive and fragmented measures that respond to conflicting pressures from different groups of capital (see chapter 4 and 5).³ This argument is based upon the observation that official policy and specific government support to industry are not strategically based, are almost always determined by how strong the agents involved in individual industries are, and are not in line with the actual developments that occur in the economy as a whole, and the manufacturing sector in particular. However accurate this argument might be in describing the inadequacy of the official policies and actions of the government towards industry, it fails in two aspects. On the one hand, the argument seems to imply that "good" industrial policy does not result from pressure and influence exerted by different interest groups upon the state; in other words, the state would have to be "autonomous" from social interests, or "developmental", in order to formulate and implement adequate policies. This is a peculiar idea since what businesses are complaining about, when they criticise the defensive and reactive nature of state intervention, is that the state does not react equally well to all interest group pressures, including theirs. On the other hand, the argument does not explain why the state is defensive and reactive, and why it reacts differently to various industries, markets and industrial conditions. In this context, the argument misses three fundamental points.

First, the government has adopted legislation that sets principles and intentions of industrial policies and strategies. The fact that these policies and strategies are inadequate and largely irrelevant is not mainly a signal of absence of policy and strategy but rather an indication of other problems, such as: (i) the dominance of stabilisation and liberalisation policies,

² See Fine and Rustomjee 1996.

³ For example, GOM 2000d and 2000e, and interviews in Cometal-Mometal, Kanés and BCI.

particularly their impact upon finance and industrial organisation, and the inability of the state to coordinate intra- and inter-sectoral strategies and to respond strategically to the main economic pressures; (ii) the combination of the conflict between fractions of capital, economic pressures and the defensive response by the state; (iii) the pressure exerted by larger foreign corporations, which are also seen as alternative sources of finance and industrial capabilities; (iv) conflicts between different fragments of the international, multilateral system of technical assistance – for example, UNIDO recommends interventionist public policies to support small and medium firms, and the World Bank and the IMF pressurise to keep the focus of policy on stabilisation and liberalisation; and (v) the huge limitations in the capabilities of the state. Thus, the issue is not whether there is a strategy or not, but whether the strategy responds to the major development processes and pressures.

Second, the content and direction, relevance and effectiveness of public policies and strategies have varied significantly between industries, largely because of: differences in industrial structures and dynamics; corporate organisation, strategy, and influence; conditions of competition; conditions in the labour market; economic importance of the industry; state's leverage in policy determination and sensitivity of the industry to state policy; capital and technology requirements; and sources of finance. In each industry, the state has responded to short-term industrial and other pressures. When the pressure from the industry is fragmented (as in the case of the cashew industry), the state's response may be inconsistent with the goal of industrial development, but is almost certainly consistent with the interest of the stronger interest group in the industry (in the cashew case, large traders) and short-term interests of accumulation. When the pressure from the industry is coordinated and strategic (such as in the cases of sugar and aluminium industries), the state's response is consistent with the development of that particular industry. However, policies adopted under these circumstances may be coherent with the conditions of a specific industry and/or interests of powerful interest group, but are unlikely to be consistent with each other and with the overall goal of industrialisation and development.

Third, the government's perception that industrialisation is a matter for the private sector has been pursued in a more or less consistent manner. Although this perception of the government reflects the dominant neo-liberal paradigm applied to economic policy reform in Mozambique, it does not mean that the government does not implement policies aimed at affecting, directly, the performance of industry. The dominant forms of effective industrial policy pursued by the state over the past decade have been privatisation of productive assets, financial liberalisation, labour market de-regulation, adoption of a liberal and very generous investment code that has been reinforced by the approval of FIZ legislation, and introduction

of liberal entry, exit and licensing legislation. It might be that these policies have not led to the achievement of the main goals established by the legislation on industrial policy. However, these policies have been coherent with the core economic stabilisation and liberalisation programme and reflect the pressures and interests that act upon the government and shape its political will and ability. This does not mean that there are no alternatives, but it rather emphasises that alternatives have to be drawn from the accurate understanding of the conditions of industrial accumulation and interests and pressures that influence policy. The critique of current industrial policies requires a more general critique of the process of economic development in Mozambique.

Besides, the goals defined by the legislation on industrial policy are inconsistent with the actual dynamics of economic and industrial accumulation. Real pressures that act upon actual practices of economic policy have played a far more important role in shaping industrial development than the official industrial policy documents, no matter how well intentioned they are. These documents are removed from reality, and therefore largely irrelevant, to the point that not even public officials, not to speak of private entrepreneurs, care much for what they say.

Thus, the issue is not whether the government has a strategy or not, but which strategy, how it is determined, how consistent and coherent it is, and how the socio-economic pressures and forces (agents, linkages and their dynamic relationship) are taken into consideration and incorporated into the framework of a development strategy. The merits of industrial policy cannot be evaluated only according to whether it selects specific firms and technologies for public support, or by its degree of neutrality with respect to factor intensity and trade orientation. More important are how the economy is organized to promote and nurture industrialisation, how industrial progress is shaped for the entire economy to benefit. This requires that industrial policies are internally coherent, and consistent with each other, with overall economic policy and with the goal of industrialisation. It also requires that industrial policy is not only formulated but that it is viable, credible, adopted, implemented and monitored, which needs account be taken of the different socio-economic pressures and interests that influence policy decisions and implementation, as well as of the practical details and data demands for adequate implementation, evaluation and learning.

6.2 Critical issues in industrial policy in Mozambique

This section summarises the main analytical and policy conclusions that have resulted from the study of the characteristics of the manufacturing sector in Mozambique (chapter 3) and of the recent experience of industrial policy (chapters 4 and 5). It also discusses possible future directions and conditions of industrialisation. The section is organised in five parts: a critical discussion of studies about the manufacturing sector; an assessment of official industrial policies in place; a discussion of the pattern of industrialisation and the role and limits of a FDI driven strategy; a summary of the main steps and issues to consider in the process of addressing the critical problems of industrialisation in Mozambique; and a brief discussion of future directions for research and speculative view into the future.

Approaches to the manufacturing sector in Mozambique

The analysis of industrialisation and industrial policy in Mozambique, particularly over the past decade, has been focused on linkages and has moved too easily into detailed policy recommendations, while paying very little attention to agencies, the dynamic relationship between agencies and linkages, and the overall economic context of industrialisation (see chapter 4). Most studies lack deep knowledge and understanding of the historical processes of economic and industrial development in Mozambique, of the pressures and forces that shape the manufacturing sector, and how the sector is integrated into the economy as a whole (see chapters 3, 4 and 5). Moreover, the main studies are often based upon very partial or short-term data and, therefore, fail to capture the dynamic characteristics of the manufacturing sector and how it relates with the economy as a whole.

The more influential of such studies are the World Bank trio and the UNIDO duo (see chapter 4). The World Bank studies attempt to make manufacturing growth and change not only consistent with, but also dependent upon, privatisation, liberalisation and stabilisation. Their policy conclusions, which are centred on the need for deeper and further liberalisation and privatisation, are often inconsistent with the data they present, are not supported by evidence or by a detailed analysis of the private sector and of how manufacturing and the economy as a whole work. Furthermore, their analytical framework is often based upon static and flawed methodologies, such as domestic resource cost (DRC), technical efficiency and total factor

productivity (TFP).⁴ The UNIDO studies are focused on institutions and policies to nurture the development of infant industry based upon small and medium enterprises and domestic resources, without any serious discussion concerning the very entrepreneurship they expect to be supporting, nor an analysis about the implications of the policies they advocate for the dominant, core stabilisation and liberalisation economic programme. Both sets of studies also abstract from the impact of the dynamics of capitalist accumulation in Southern African, particularly in South Africa, upon the Mozambican economy. They refer to the region as a market opportunity and/or a threat, rather than as a process of accumulation that has the power to shape and reshape the patterns of development in Mozambique. Whether market or institution oriented, these studies are limited to the national dimension of policy, which is inadequate and contributes to making policy irrelevant for dealing with the real dynamics of investment, growth and change, particularly when these are so closely associated with regional economic processes and inflows of FDI. In brief, the mainstream studies of the manufacturing sector in Mozambique are based on inadequate analytical frameworks and, although influential, provide ill advice to public policy.

The linkages-agents framework has allowed for a different type of approach to the manufacturing sector. By drawing conclusions for industrial policy from the underlying relationships and characteristics of industrialisation in Mozambique, the thesis has argued that industrial policy should be developed in such a way as to utilise the knowledge about the existing socio-economic characteristics, pressures, forces and conflicts in order to influence the direction of industrialisation, and the shape of the relationship between agents and linkages, the state and the market and the manufacturing sector and the economy as a whole. Therefore, the policy conclusions in this chapter are based upon the characteristics of, and pressures that act upon, the manufacturing sector in Mozambique, which are discussed in chapters 3, 4 and 5.

Official policy, industrial conditions and policy disarticulations

The official, general industrial policy legislation reflects the conflicting and inadequate lines of thought mentioned above. On the one hand, the legislation prioritises the development of domestically owned, small and medium private enterprises, emphasises the importance of diversification of production and exports, and refers the need of import substitution of

⁴ See Chapter 4 for a critique of these methodologies and for the inconsistency of the results and interpretations that arise in this type of analysis.

intermediate and capital goods and use of natural resources. On the other hand, in the legislation it is defined that the implementation of industrial policy is a matter for the private sector, and no implementation and monitoring mechanisms are established. The role of the state is to facilitate and not interfere with private sector decisions, in practice being restricted to announcing what the state wishes would happen. Therefore, the objectives and targets defined in the legislation would be implemented if the private sector (not well defined, let alone discussed) so decides.

Industrial policy legislation has also been drafted and/or approved for individual industries, namely sugar, textiles and paper.⁵ The legislation for textiles and paper industries are copies of the general legislation and operate within the same principles and limitations. Therefore, there has not been any significant progress in implementation. The policy legislation for the sugar industry differs from the previous ones in that it is based upon an analysis of the conditions for industrial rehabilitation, takes into consideration the competitive conditions in the industry, and responds to direct demands of private investors. Apart from ideological opposition by the World Bank and the IMF, and difficulties in controlling smuggling of cheaper sugar from neighbouring countries, there have not been other very significant obstacles to implementing the sugar policy.

With respect to sugar, the state has mainly performed static coordination, namely: coordinating competing investment, production and exports; helping the development of an association of sugar producers that is replacing the state as the coordination mechanism; transforming static private investors' demands (for instance, the sugar price policy) into legislation; and participating in the negotiation of the sugar regime within SADC. This industry has an oligopolistic structure, and is dominated by international sugar corporations that compete for market power in the Southern African region but are willing to cooperate at national level once investment decisions have been made. These characteristics of the industry have been key elements in guaranteeing that the sugar industrial policy is consistent with the interests of private investors.

Given the way the state operates in the economy at the moment, the coherence of its policies depends very strongly upon the power and coherence of private sector interests at industry level. This was demonstrated by comparing the different fates of the sugar and cashew

⁵ By the time research for this thesis was concluded, attempts were being initiated to produce industrial policy legislation for the cashew and the cooking oil industries. A detailed study of the cashew sector was under way, but no fundamental strategies had yet been developed or implemented. Meanwhile, the cashew processing industry collapsed and the cooking oil industry was on the verge of not being able to restart production.

industries (chapter 5) – the fragmented private sector interests in the cashew industry were associated with very incoherent policies from the point of view of the industry as a whole; as opposed to the conditions in the sugar industry.

On the other hand, the fundamental forces and processes that are shaping significant segments and the whole structure of the manufacturing sector in Mozambique are not even discussed or mentioned in the official industrial policy documents. The most evident of these forces and processes is the increasingly dominant role of FDI, mega projects and impact of restructuring and expansion of South African capitalism upon the structure and dynamics of manufacturing in Mozambique (see chapters 3, 4 and 5).

Finally, many fundamental elements of active public policy with direct and substantial impact on industry are not integrated in, or made consistent with, official industrial policy documents. Amongst others, these elements include investment codes and incentives, free industrial zone (FIZ) norms and incentives, legislation that govern the establishment and licensing of businesses, patents, standards and metrology, research, organisation of the financial system, management of trade negotiations, as well as labour and industrial relations legislation. There is a high degree of disarticulation between these activities and the goals and priorities defined in industrial policy documents. This is due to several factors, the most important of which seem to be: (i) the fact that official industrial policy is way out of line with reality; (ii) the impact of adoption of liberalisation as a panacea; (iii) institutional capability constraints that partly result from the marginalization of industrial strategy and policy in economic policy making; and (iv) the different pressures and interest groups that act upon different government departments and contribute to increase policy fragmentation.

Patterns of industrial development and FDI in Mozambique

This section focuses on two fundamental characteristics of the development of the manufacturing sector in Mozambique – its increasingly narrow specialisation and long-term instability; and the weight that FDI is acquiring as one of the dominant forces shaping the pattern of development of manufacturing. Apart from the fact that these two issues have emerged very clearly from the evidence presented in chapters 3 and the debates in chapters 4 and 5, they also capture the fundamental dynamics of the pattern of economic growth and industrialisation in Mozambique. These two issues are also an effective and more focused way of discussing the major themes in industrial policy in Mozambique, namely linkages,

domestic private sector development, market structure and competitive conditions, corporate capabilities and strategies, incentives and finance.

Narrow specialisation, long-term sustainability of industrial growth and FDI

The output and exports of the existing manufacturing sector are narrowly specialised and very unstable. These two characteristics are linked in two ways. On the one hand, narrow specialisation increases the chances of boom and bust in output and exports because of the reduced ability to even out businesses and product cycles. It also minimises the opportunities for innovation and acquisition of competitive capabilities, particularly when output and exports are concentrated in low value end industries and semi-processing of primary products for export, which restricts the possibilities of sustaining periods of positive growth. In this connection, narrow specialisation increases the vulnerability of the entire economy to variations in economic conditions of particular industries, and also increases the volatility of exports earnings. On the other hand, narrow specialisation is associated with weak intra- and inter-industrial linkages and high import dependence of production, such that expansion of output results in unsustainable (in the absence of foreign aid) balance of payment pressures that lead to periodic and significant downward adjustments of the level of output and employment. Thus, industrial policy in Mozambique has to address the problem of narrow specialisation and long-term sustainability of industrial growth and transformation.

Current industrial policy documents refer to these problems but say very little about how to solve them, apart from suggesting that implementation of policy is a matter for the private sector. The documents do not discuss why the private sector has not addressed these problems, apart from implying that the business environment needs to be still more liberalised, and red tape eliminated. However, the evidence, which is not discussed in the mainstream studies and policy documents, shows that liberalisation has not helped to reduce import dependence of production or to diversify investment, output and exports (chapter 3). Besides, liberalisation could only have helped diversification and strengthening of economic linkages if: (i) narrow specialisation and weak linkages were the result of market imperfections created by repressed markets; and (ii) liberalisation was to lead to perfectly competitive markets. Because none of these two conditions holds, liberalisation has reinforced the dominant economic dynamics rather than change it (see chapters 3, 4 and 5).

Increasingly narrow specialisation of production and exports cannot be argued to be the result of improved market driven efficiency in resource allocation. With the exception of sugar,

industrial output and investment are concentrated in industries that are not particularly labour intensive relative to other industries in Mozambique, or resource based. Biggs, Nasir and Fisman (1999), one of the World Bank studies, argue that the industries around which output and investment are becoming increasingly concentrated are not the ones with relatively higher technical efficiency and/or facing better market opportunities (see discussion in chapter 4).

Businesses have indicated that lack of access to cheap investment and trade related finance, unfair competition and low level and volatility of demand are the most important problems faced by small and medium, domestically owned firms. These problems, which constrain the ability to acquire new industrial capabilities and diversify the production and export base of manufacturing, have partially been created or reinforced by liberalisation of the financial system and goods markets (Biggs, Nasir and Fisman 1999).

On the other hand, foreign owned and large firms, which have market power and privileged access to finance, argue that their major problems are poor provision of industrial services and infra-structures, red tape and the need to ensure that a basically non-interventionist government (made to be so through liberalisation) is responsive to business demands.

The evidence suggests that the direction of industrial policy in Mozambique – with its focus on privatisation, liberalisation, investment incentives and FIZ code – is more in line with the needs and demands of foreign corporations than with the conditions for the development of a linked industrial network in the domestic economy. The facts that international firms are more powerful, have stronger connections with the financial world (including international, multilateral financial institutions) and exert more influence upon the host government may partly explain the direction of industrial policy.

However, there are other, at least equally important, factors at play. One is the overall direction of the economy which, in addition to being dominated by stabilisation and liberalisation programs inspired by the Washington consensus, has combined with the low surplus and levels of skill and worn out capital stock to create two fundamental pressures for manufacturing development: (i) the need to cheapen investment and trade related finance; and (ii) acquisition of industrial capabilities – production skills, technology, ability to adapt and innovate, managerial capabilities, access to markets, etc. (chapters 3 through 5). A simple increase in aid inflows would, at best, address the issue of finance if aid were made available for financing industrial programmes and strategies. However, industrial capabilities result from industrial experience, as well as education and training. FDI inflows seem to be an alternative that addresses both problems by bringing finance for investment and industrial

capabilities, which come together with foreign corporations and investment. Moreover, most FDI projects are not dependent upon significant financial support from the Mozambican government. Also, they either do not need protection (or other "anti-liberalisation" type of policies),⁶ or can argue for protection on the basis of world market imperfections directly with the major multilateral organisations without necessarily compromising the official, pro-Washington consensus position of the Mozambican government.⁷ Therefore, FDI not only seems to solve the financial and capabilities constraints, but also seems to be compatible with liberalisation and stabilisation policies and, when it is not, foreign corporations are strong enough to negotiate specific agreements within the overall program.

Another factor that explains the direction of industrial policy is the integration of Mozambique within the area of influence of South African capitalism. Most FDI inflows in Mozambique are derived from, or associated with, the expansion of dominant capitalist interests in the region – these are, for example, the cases of the minerals-energy complex, sugar, cereal milling and beverages. In essence, regional economic dynamics have been adjusted to incorporate significantly less migrant labour and significantly more FDI. A finance and capability starved economy, like the Mozambican, would try to benefit from this change in regional economic dynamics.

The financial system in Mozambique discriminates in favour of large projects with market power and access to finance elsewhere, because these projects are more likely to succeed and generate positive financial returns. Even if they do not succeed, these projects are more likely to be rescued by foreign banks and being covered by international insurance schemes.

How adequate is the FDI driven growth strategy?

The pertinent question now is whether a FDI driven growth strategy in Mozambique is likely to successfully address the problems of narrow specialisation, weak linkages, import dependence of production and long-term sustainability of fast industrial growth and diversification. Empirical evidence, presented and discussed in chapter 3, shows that inflows of FDI to Mozambique have been largely narrowly focused – 94% of FDI inflows into manufacturing have been allocated to Mozal and Motraco (more than four fifths), sugar, cement, beer, soft drinks, cereal milling and textiles. With the exception of sugar and cement,

⁶ For example, Mozal, steel and iron.

⁷ For example, sugar, beer, soft drinks.

which are supplied with cane sugar and some of the basic minerals, respectively, from domestic sources, these industries are heavily dependent upon imports of material inputs. With the exception of Mozal, which exports all of its output, the remaining industries listed produce mainly for the domestic market. With the exception of Mozal, with its considerable positive net contribution to the balance of trade, and Motraco, which supplies energy to Mozal, the industries mentioned have not developed particularly strong positive links within the Mozambican economy, even though sugar and cement have also been utilised by other industries as inputs.

A case-by-case analysis of each FDI driven project would reveal a wide variety of characteristics.⁸ However, it can be safely concluded that on the whole the bulk of FDI projects is concentrated in low value added, end product industries, has not helped diversification and import substitution in the sense of linkages developing from final consumer goods into intermediate and capital goods, diversified and better quality goods, industrial services, etc. As a result, FDI has not intensified intra- and inter-industry linkages nor reduced import dependence of manufacturing production.

It should be noticed, however, that Mozal is making a significant contribution to exports and to reducing the huge trade balance deficit (see discussion in chapter 5 and tables 5.5 and 5.6). Other mega projects of the same type, in the pipeline,⁹ may have a similar impact. Thus, FDI driven mega projects may be an alternative to increase exports quickly and help to sustain industrial development.

However, concerning exports there are three fundamental problems with the mega project strategy. First, exports may increase very quickly but they will also become even more narrowly based. On its own, operating at close to full capacity, Mozal (aluminium) will generate approximately two thirds of Mozambique's total exports of goods, and five sixths of

⁸ For example, Salvador Caetano, a subsidiary of a Portuguese group, is a plant established and expanded over the past decade. It assembles motor vehicles for the domestic market and exports to neighbouring countries as well. The parent company is considering moving part of the business to South Africa because this market is significantly larger and South African based firms enjoy huge scale and industrial policy related advantages. Despite the fact that this company introduced some diversification into the manufacturing sector in Mozambique, it is too small to make a significant difference. Metal engineering, which incorporates motor vehicles industries, has received less than 3% of FDI and approximately 5% of total investment in manufacturing over the past decade, and its share of MVA and manufacturing exports is small and declining.

⁹ For example, Maputo Iron and Steel Project (valued at US\$ 2 billion); Sands corridor (heavy sands to produce metals of the platinum group, valued at US\$ 1.4 billion); Pande, Temane and Beira natural gas reserves and refinery (valued at over US\$ 2 billion). All of these projects are associated with the minerals-energy complex of South Africa.

manufacturing exports. Thus, the sustainability of economic and industrial expansion may come to rely upon what happens in the world aluminium market, in particular the Asian car industry, which will make the Mozambican economy highly vulnerable to changes in the world economy that affect the demand of one product, aluminium. Second, high fixed costs and economies of scale associated with Mozal and other mega projects do not allow for easy adjustment of output according to changes in demand without generating job losses and significant reductions in export earnings. Third, very large, international corporations, such as Billiton and Mitsubishi (the two major partners in Mozal), follow worldwide, rather than national, corporate strategies. Billiton, for example, is the world's largest aluminium producer and owns alumina mines and smelters all over the world. The decisions this corporation takes about closing down mines and smelters, expanding production, prices and markets, vertical integration, horizontal diversification, research, innovation, etc, reflect their capabilities and corporate strategies; strategic behaviour of competitors, countries of origin and host countries; as well as global economic conditions. Such decisions may have little to do with what individual host economies expect and need, and yet they have strong impact on those economies and are taken by corporations that may hold significant economic power and political influence in host countries. Thus, the long-term prospects of a FDI driven export strategy depend upon agencies, capabilities, strategies and conditions largely situated outside government influence and not necessarily determined by national characteristics.

There are other problems with a FDI driven growth strategy in Mozambique. First, such strategy may not be sustainable in the medium and long run because FDI inflows may start to slow down. Southern Africa is a very marginal location for FDI from outside the region, and evidence shows that the FDI boom of the mid 1990s has run out of steam. Downward adjustments in FDI inflows to developing countries are affecting LDCs more severely than other countries.¹⁰ FDI inflows into Mozambique are mainly determined by, or associated with, South African corporations and groups, and their capabilities and strategies. These corporations and groups operate in partnership with investors from outside the region, which often finance most of the investment. The intention of South African based corporations to globalise makes them more sensitive to what happens in the global economy. Therefore, it is likely that the global pattern of South African FDI outflows is increasingly influenced by the global FDI pattern. This may imply that some of the pipeline mega projects may not be

¹⁰ See, for example, UNCTAD 2001, 2000a, 1999a and 1999d for data on the evolution of FDI inflows. The argument from these publications is that the slow down of inflows of FDI to LDCs, more pronounced than to other regions, is explained by the conclusion of the process of privatisation of large corporations, as well as uncompetitive infrastructure and human capital, overall lower production efficiency and labour productivity, small markets, institutional inefficiency and shortage of adequate local partners and investment opportunities.

implemented. In addition to slow down of FDI inflows, the absorptive capacity of the Mozambican economy is very limited – as a matter of comparison, the total sum of expected investment associated with recently implemented and pipeline projects for the next five years is more than two times larger than current Mozambique's GDP.

Second, the FDI dependent strategy has concentrated financial resources around FDI driven projects. Although most of these projects obtain their finance from the parent firm or international financial institutions, they have attracted most of the resources made available by other sources of investment finance, DDI and loans. DDI associated with FDI is mainly from large public utilities, government and one large private firm, Coca-Cola. Therefore, although three quarters of DDI are invested in FDI driven projects, the links between foreign and domestic private investors are very weak. This allocation of financial resources is explained not only by the power of FDI projects but also by the interests of the financial system. The fact that only 19% of total investment approved in the past decade has been applied in non-FDI projects indicates how limited the opportunities and capabilities are to broaden the productive base of the Mozambican economy.

Third, FDI driven projects, with the exception of sugar, have been generally not labour intensive. In Mozal, for example, the initial capital costs per direct job is 20 times more expensive than the average for the manufacturing industry. This project has absorbed about 47% of total investment and less than 2% of labour in manufacture. In all other major FDI projects, the initial investment strategy has involved modernisation and labour rationalisation, because these projects have to acquire competitive advantages and capabilities well above the average level of the Mozambican industrial firm. Here, the point made is not that FDI should be more (or less) labour intensive, but that to address the growing unemployment crisis in Mozambique a much broader development strategy, relative to what is on offer, is required.

Fourth, the potentially positive role played by FDI depends not only on the amount of FDI inflows, but also on a series of other factors. These are: (i) investment complementarities with domestic firms, such that gross investment increases not only by the amount of FDI but also by the amount of domestic investment encouraged by the presence of FDI projects; (ii) linkages with domestic firms, which is one of the basic condition for investment complementarities to occur on a systematic basis; (iii) increase in export revenue beyond what domestic and other established firms would be capable of doing, which is another condition for investment complementarities; (iv) introduction of new technologies, capabilities and industries, or improvement of existing activities beyond what could have been done in the absence of FDI; (v) minimisation of entry in already competitive industries in order to avoid

displacement of existing businesses and jobs; (vi) provision of finance and industrial capabilities not available without FDI.¹¹ Each of these factors depends not only on what foreign firms do, but also on the established capabilities in the economy. Furthermore, FDI's contribution to innovation and productivity growth is usually internalised by FDI driven projects – the firm or industry developed through FDI may benefit from innovation via productivity increases but this may not be passed on to other firms in the economy unless strong vertical and horizontal linkages are developed. Thus, the development of domestic capabilities over and above what FDI may do is crucial to maximise FDI's contribution to economic growth and transformation. This means that FDI cannot be used as a substitute for a broader development strategy and action, but should rather be part of it.

Finally, to attract FDI the Mozambican government has introduced an extremely generous and liberal investment code, which has been reinforced by the FIZ legislation (see chapters 4 and 5). The code is implemented irrespective of market conditions, and capabilities and strategies of participating foreign corporations. Mozambican officials believe that inflows of FDI are mainly associated with the degree of incentives, despite strong evidence that FDI has been essentially driven by the capabilities and strategies of the investing corporations and often benefits from incentives given by the country of origin. Thus, investment incentives may be unnecessarily expensive for the Mozambican economy, so that it renders FDI excessively costly and minimises its net positive contribution.

This section has attempted to emphasise the limits of an FDI driven growth strategy and to explain why it may not be sustainable and effective in the absence of a broader and coherent development strategy. The main critique regards the fact that policies and government practice seem to be more concerned with attracting larger amounts of FDI than with the social costs and structural and dynamic impact of FDI. The section has not denied the important role FDI may be able to play in the development strategy, particularly because of strong industrial capability and financial constraints faced by the Mozambican economy. Moreover, given Mozambique's integration in the area of economic influence of South African capitalism, it is very likely that the shape, pace and direction of development of the Mozambican manufacturing industry (and economy as a whole) would be strongly influenced by the operation of international corporations in the region (South African based or associated with South African corporations) irrespective of Mozambique's degree of openness to FDI. Thus,

¹¹ See, for example, Agosin and Mayer 2000, Aitken and Harrison 1999, Borensztein, Gregório and Lee 1995, Chang 1998b, Chuang and Lin 1999, Weiss 1980.

the issue is not whether FDI has a central role to play, but how to maximise the net socio-economic benefits of FDI in the process of industrialisation.

It is understandable that the Mozambican authorities would prefer unguided and narrowly focused FDI to no investment at all. It is also clear that Mozambique cannot wait until a perfect development strategy is developed before it starts accepting FDI. Besides, since this thesis argues that strategies and policies emerge from the underlying socio-economic processes and relationships that exist, it does not make sense to think about a stable and perfect strategy in isolation of the different problems to be solved and influential forces. However, the question remains that the positive role played by FDI depends on how it helps to increase investment rather than substitute for, or displace it; create new capabilities; diversify the production and export basis and strengthen the links in the economy, within the context of regional economic dynamics.

Addressing critical issues in industrial policy and industrialisation

This section is concerned with the fundamental issues to address in the development and implementation of industrial policies in Mozambique. It is organised into four parts: propositions, role of industrial policy, directions in industrial policy and final considerations.

Propositions for industrial policy

There are three initial propositions that play a central role in the process of developing and implementing relevant industrial policies and strategies. The first proposition is that given the current dynamics of the Mozambican economy, economic and industrial expansion and economic stability are not consistent with each other. As a result, economic expansion is not sustainable and stabilisation is growth constraining, unless significant increases in aid inflows take place.

The second proposition, which is closely related with the first, is that the dynamics and direction of growth, not only the rate of growth, matter for sustainability and long term socio-economic development. Therefore, the process of resource mobilisation, the allocation of investment and the coherence with which investment strategies are developed and coordinated are important determinants of long-term growth patterns and prospects.

The third proposition is that the dynamics and direction of growth, including public policy and strategy, are strongly influenced by economic conditions, capabilities, interests and strategies of agents, and the dynamic relationship between economic conditions and agents. Therefore, public policy is not the only influence acting upon the development of industry, nor is it autonomous from other sources of influence as the same forces and pressures that act upon the market influence public policy. To be relevant, public policy has to be related with, and be able to coherently and strategically respond to, those forces and pressures, rather than autonomously designed by a team of efficient technocrats.

Once these propositions are acknowledged,¹² the relevance and role of industrial policy begin to be revealed.

Role of industrial policy

The analysis suggests that the general role of industrial policy and strategy is to guarantee that the knowledge of the economic and competitive conditions, the negotiation between different interests and intended strategies, and the mobilisation of different capabilities and resources, combine to result in coherent development goals and industrial and investment decisions and actions, which are consistent with the overall goal of rapid and sustainable industrialisation of the Mozambican economy.

More specifically, industrial policy and strategies may help to achieve several concrete objectives. First, they may help to mobilise resources in the domestic economy by providing clear targets, enhancing the viability of investment projects and providing incentives for commercial banks to participate collectively in the financing of a broader development strategy. Second, they may help to maximise the economic benefits from FDI, namely by promoting exports and setting priorities for the productive investment of trade gains accruing to the economy, as well as by intensifying the links between FDI projects and the rest of the economy. Public policy and strategies may provide the framework that helps to choose the FDI projects that are desirable for the economy, to select the projects that should develop through joint ventures, technical assistance or should be allowed to develop on their own, and to identify how to make potential positive externalities from FDI (like indirect job creation, multiplier effect on domestic investment, etc.) materialise.

¹² See data and debates in chapters 3, 4 and 5 for the derivation of these propositions.

Third, industrial policies and strategies may also work as a device to coordinate a wide range of policies and policy instruments that have significant and direct impact upon industrial performance, and to make them consistent with defined development goals. In the case of Mozambique, these include the investment incentives code, legislation on FIZ, licensing and establishment of businesses, standards and metrology, patenting, export promotion activities, regional trade negotiations, local industry support programs, private sector development programs, legislation concerning the labour market and industrial relations, training, special funds for industrial development, general financing of investment and other industrial support services and activities. At the moment, these different policies, instruments of policy and activities are developed in a fragmented and uncoordinated way – each one follows its own priorities and direction depending on the pressures that act upon the respective agencies and how much aid or multilateral support they receive (see chapter 4). However, they form part of a network of agencies, policies and activities that constitute the fundamental building blocks of an active industrial policy.

Fourth, industrial policy may be a catalyst for improving government capabilities, efficiency and coordination, and to overcome the burden of fragmented tutelage of different industries.

In this connection, fifth, industrial policy and strategies could be a dynamic factor that accelerates capacity building through training, experience, monitoring and evaluation and establishment of information systems that provide the data necessary for improving the process and quality of policy making.

Sixth, industrial policy and strategies may also perform a fundamental role in helping to coordinate inter-industry and inter-sectoral strategies that help to maximise existing and new industrial capabilities. For example, the agricultural strategic program and/or a large rehabilitation program for an industry may be coordinated in such a way as to maximise domestic linkages that may trigger or support the rehabilitation and development of other industries. Such coordination would involve not only input-output linkages but also investment complementarities.

Seventh, industrial policy and strategies could also help to minimise rent seeking, reduce the defensive character of state intervention and facilitate and guide the negotiation of contracts with investors.

Directions in industrial policy

The analysis of the characteristics and patterns of industrial development in Mozambique calls attention to the fact that rapid and sustainable, long-term industrialisation requires not only inter- and intra-industry horizontal diversification, but it mainly demands a process that explicitly substitutes imports through linkages and increases exports (see chapter 3). The evidence suggests that if investment decisions do not prioritise efficient import substitution through and export growth, the long run prospects of industrial growth would be jeopardised by short run macroeconomic pressures. Import substitution is also required to diversify the export base (see debate in chapter 2).

There are different ways and activities through which import substitution and export growth can be pursued. It is important to collect and analyse data, on a systematic basis, about external trade, existing industrial capabilities, prospects for, and characteristics of, large investment projects (associated with sectoral or industry strategies, or individual mega projects), existing competing firms in the region and their standards (level of output, quality, costs, reliability, finance, incentives, etc.). These data could provide information about opportunities for import substitution and the standards that have to be achieved, as well as short term opportunities for export growth. It should be noted, however, that export incentives in the short run operate at the margin – only when productive capacities expand and diversify, and standards improve significantly will it be possible to expand and diversify exports rapidly and in a sustainable way. Efficient import substitution and export performance are associated.

Other agencies, policies and activities can be called upon and coordinated through industrial policy to help to achieve efficient import substitution and faster export growth. FDI may be encouraged to invest mainly in exporting industries, or in industries that provide quality and cheap inputs and technology for exporting industries. Export and other trade related financial arrangements could be negotiated with the banking system to help expand and diversify exports in a sustainable way and encourage investment in new capabilities that strengthen linkages and substitute imports. Special funds can be created to facilitate export operations in an automatic basis. Incentives could be used to discriminate between degrees of priority in resource allocation and impose standards and performance targets. Quality, standards, metrology and certification would have to be a central component of the policy and strategies and requirement for licensing. The performance and relevance of private sector development programmes could be significantly improved if the support is focused according to policy and strategies of industrial development, rather than based on loose criteria and entirely on what individual firms may be capable of doing. Research agencies and capabilities could also be

called upon to accelerate and support technological change and development of the productive capacities. Business networks and associations could be helped to develop in order to improve the quality of strategy and management, reinforce standards, minimise information asymmetries, and look for, and negotiate with, potential foreign, mainly regional, partners that may be able to bring new finance and industrial capabilities and experience.

Considerations about industrial policy in Mozambique

The formulation and implementation of industrial policy is also a process of capacity building. In Mozambique, the capabilities of public institutions in charge of industrial policy formulation are low, partly because there is no significant and relevant experience of industrial policy. Therefore, it is important to balance the degree of pressure that such agencies can take – on the one hand their capabilities are limited, but on the other hand it is only through experience that their capabilities could improve significantly. There are various ways in which this problem could be addressed. Perhaps focusing on a small set of issues at a time might be one of the more practical solutions. For example, MIC could try to identify all actual and potential, established and occasional exporters of manufacturing good, assess what is necessary to do to improve their export performance, and negotiate, with the banking system, the establishment of special support funds for exporters. MIC could also coordinate with CPI, INNOQ and the banking system, and re-direct the private sector development programs to develop and implement a strategy to rapidly upgrade domestic firms that may be able to supply Mozal and other mega projects with inputs, or to develop a selective import substitution strategy to take advantage of opportunities identified through the analysis of external trade. Given the standards required by Mozal and the fact that all of its output is exported, linkages with this corporation would qualify as import substitution (thus increasing the positive net contribution of Mozal to the balance of trade) and export growth. These are only examples of ways of starting to build industrial policy capabilities. They do not cover everything and do not add up to a complete vision and strategy for industrial development. However, they are a starting point to achieve some results, create capabilities and increase the confidence of the organizations and personnel involved.

No matter what the state does to begin its industrial policy project, there are several issues that have to be addressed. The first is the development of a database system and capabilities to collect and analyse information that is necessary to formulate, implement and monitor industrial policy, and evaluate and guide the patterns of industrialisation. These would involve not only periodical and static industrial surveys and census, but also continuous

collection and analysis of data about patterns of production, trade and investment, financing of investment, existing capabilities, technology development, ownership and competitive conditions, impact on the trade balance, industrial relations and labour market dynamics, etc. Above all, it is necessary to know what is going on in each industry and in the manufacturing sector as a whole, because this knowledge forms the basis for industrial policy. Information collection and analysis should also be extended to the region, international corporations operating in the region and worldwide economic and technological conditions in each industry. For public policy to play any relevant role in promoting economic and industrial development, the state cannot be blinded by ignorance due to lack of data.

The development of the ability to produce and use data at this level will take time, as capabilities have to be created, information systems constructed, sources identified, civil servants have to learn how to collect and use the data, management mechanisms have to be developed that take decisions based on the best information available rather than only on individual wish or instinct. Data work must serve an analytical and/or policy purpose, and has to be at the very top of the priorities in the construction of policy capabilities.

Second, it is important to coordinate the various agencies, policies and activities that have a significant role to play with respect to industrial performance. This does not have to involve the construction of a super-bureaucracy. Most important is the coordination of approaches, objectives and priorities around the central goals of industrial policy. In this connection, it is also important to revise the mechanism of tutelage of different sectors by government departments, which was inherited from bureaucratic planning and fundamentally reinforces the fragmentation of policy and state activity.

Third, it should be acknowledge that there are very significant differences between the various regions of the country with respect to industrial opportunities. These differences are influenced by the state of the infrastructure, established productive and services capabilities and the size, integration and competitive conditions of local markets. They are also strongly determined by the economic dynamics in Southern Africa. Nacala and Beira corridors (mainly associated with Malawi and Zimbabwe) are far less dynamic than Maputo corridor (mainly associated with South Africa). Most FDI accruing to Mozambique is intra-regional rather than flowing from outside Southern Africa; hence, Maputo is much more likely to benefit from large investment projects than any of the other provinces because of the influence of South Africa. Access to finance, import and export markets provided by the South African economy (which is larger than the rest of Southern Africa put together) are very important for Mozambican industries; but significantly more difficult and expensive for industries located

in the Centre and North of the country. Therefore, the pressures, needs and opportunities faced by industries and firms differ significantly also according to territorial location. These differences, which should be considered in industrial policy, have long-term influence in the pattern of industrial and regional development and differentiation.

Fourth, industrial policy also has to address the issue of finance on a systematic way to be able to act as a catalyst of resource mobilisation. Banks are more likely to finance investment if the viability of the projects is enhanced through policy, if there are clear priorities for investment and simple but effective and relevant performance targets and standards, and if development strategies of firms and industries are oriented at the modernisation of their capabilities rather than simple rehabilitation of existing, outdated and worn-out capital stock, technology and methods of production and management.¹³ A viable and credible growth strategy is likely to attract the interest of the financial system.¹⁴

Fifth, industrial policies, to be relevant and viable, have to take into consideration the conditions of different industries and the capabilities and strategies of the firms. On the one hand, policies and strategies operate through the market and are influenced by, and should address, the pressures that act upon the market. It is not enough to react defensively to private sector lobbies, as this makes policy entirely dependent upon how strong the lobbies are.¹⁵ It is important that competitive conditions, industrial capabilities, access to finance and trade opportunities are properly assessed to provide the basis for policy. On the other hand, investment and other decisions by firms depend strongly on their capabilities, the competitive conditions they face and their strategies. Thus, in order to influence corporate decisions positively, industrial policies and strategies should also be based upon as much knowledge as possible about the participating corporations and potential investors. Incentives and other aspects of policy may be made redundant and socially costly by inadequate evaluation and knowledge about corporations and industries.¹⁶

¹³ See GOM 2000e. The same point of view was discussed in an interview with Manuel Figueira (BCI).

¹⁴ See Harris 1997.

¹⁵ See the comparative study of cashew and sugar industries in chapter 5.

¹⁶ See the discussion about Mozal and corporate strategy in chapter 5.

Future directions for research and perspectives

Generally, most studies about industrialisation and official industrial policy in Mozambique are based upon an inaccurate specification of the Mozambican economy and manufacturing sector with respect to their structures and dynamics, as well as the class relations that develop around, and constitute the basis of, such structures and dynamics. This is partly associated with an inadequate empirical analysis of the Mozambican economy, but also with a misunderstanding of the relations between and within capital and labour and how they evolve and change over time.¹⁷ The proposition that a particular strategy (e.g., mega projects or SMEs; export or inward oriented) is good or bad for different fractions of capital and/or labour depends on one's empirical knowledge about the dynamic and structures of the economy and the manufacturing sector, but also on how one understands the relationships between and within capital and labour, and how these relationships and associated interests change and are likely to change under specific political and economic pressures. This analysis opens a few directions for further research and future perspectives.

Research about industrialisation and industrial policy in Mozambique is embryonic with respect to its empirical and theoretical foundations. Socio-economic studies are mainly focused on agriculture and rural development, monetary and fiscal dimension of macroeconomic policy and poverty. Irrespective of the merits or demerits of these studies, it is important that industrialisation and industrial policy become a central focus of analysis in addressing issues like rural development, poverty reduction and macroeconomic policy. The Mozambican economy as a whole has been organised around three dynamic "poles" of accumulation: semi-processing of primary products for export, limited diversification of internationally uncompetitive production for the domestic market, and providing the Southern African region with transport services and migrant labour. Over the last decade or so, migrant labour, which had been declining since the late 1970s, has been replaced by inflows of FDI as a new form by which the South African MEC shapes the Mozambican economy and manufacturing sector. The sectoral organization of production and trade, labour market conditions and dominant forms of capital are associated with these "poles".

This simplified characterisation of the centres of accumulation of the Mozambican economy may provide a useful initial structure for further research about the manufacturing sector. Empirically, it is necessary to construct longer-term time series and cross-section data sets that are more accurate, comprehensive and structured. It is also necessary to attempt different

¹⁷ See Fine and Rustomjee 1996 for a similar analysis with respect to South African industrialisation.

directions in terms of organization and analysis of the data. For example, instead of using the structure provided by the ISIC methodology, as in this thesis, it could be useful to organise the data and analysis around the centres of industrial accumulation – semi-processing for export and limited diversification for the domestic market – and around the impact of the MEC on the structure, dynamics and class relations in the manufacturing sector.

This overall picture of the manufacturing sector should be combined with a more profound and detailed knowledge of what is going on in each industry and different firms. Two possible directions of sectoral research would be the agro-industry and the metal-engineering industry. Agro-industry is important from the point of view of rural industrialisation, inter-sectoral linkages, employment, diversification of production and trade, and balance of the class interests that influence the manufacturing sector. Metal-engineering is important because of inter-sectoral linkages, productivity growth, starting the development of domestic technological capabilities and also taking advantage of potential linkages with mega projects and strategies of sectoral rehabilitation.

Some of the fundamental research themes associated with the two sectors mentioned are technological change and acquisition of industrial capabilities; labour market characteristics and conditions, how they have been established and change, and how they affect overall performance of the industry; motivations, characteristics and role of FDI (and other forms of participation of, and cooperation with, foreign capital), and its inter- and intra-sectoral linkages; impact of internationalisation of firms and processes of production; cross firm and industry linkages. Other fundamental, more general, research themes are the organization of the financial system from the point of view of financing of industrial investment; the development of domestic economic groups, their relationship with the financial system and foreign capital, and diversification and expansion (horizontal and vertical) strategies; a detailed and accurate analysis of what has happened to firms that have been privatised; and the dynamics of industrial restructuring in Southern Africa and how it affects the Mozambican industry.

It is one argument of this thesis that the linkages-agencies analytical framework provides a more adequate basis upon which to investigate the structures, dynamics and associated class relations that characterise the process of industrialisation in Mozambique. This framework can be applied to the analysis of any of the research themes and directions already outlined. Nonetheless, in each area of research there is a large literature that should, itself, be studied in more detail with a view to illuminating the analysis. The point is to benefit from the ongoing international research, keep in touch with it and improve the quality and soundness of the

debates and studies about Mozambique, rather than imposing theories and frameworks that are ill suited to the characteristics of the Mozambican economy.

Future perspectives are dependent upon what happens to FDI and other inflows of foreign capital that sustain current investment rates and levels of imports. In Mozambique, FDI is narrowly focused and inflows are likely to slow down soon. The precise characteristics and life-time of current high rates of FDI inflows depend on the capabilities and strategies of South African MEC corporations and associated international firms. Other inflows of foreign capital (e.g., aid, commercial loans) are not likely to increase so that the Mozambican economy may start to stagnate because of financial and industrial capabilities constraints.

Mozambique needs to address this issue in various ways: diversify the sources of FDI, develop domestic capabilities and mobilise the domestic financial system. This will require industrial policies and strategies that promote diversification, linkages and creation of new capabilities. The experience shows that FDI dissociated from South African corporations and MEC can be more diversified and willing to invest in areas that promote technological development, import substitution and linkages, such as metal-engineering.¹⁸ This also results from the fact that South African FDI has pushed other foreign investors away from the traditional MEC sectors and other associated industries (e.g., sugar and beer). The experience also shows that the banking system is more willing to finance policy-targeted projects that area credible, and domestic firms have capabilities that have not been developed and adequately explored.¹⁹ The development of adequate strategies and policies, that respond to political and socio-economic pressures, take account of conflicting interests, but provides a coherent working framework requires a close relationship between policy-making and systematic and quality research.

The more acute problem that the formulation and successful implementation of any industrial policy and strategies will face is the formation of the political, social and institutional capacity to carry it out. The solution to this problem has to be endogenous to the process of policy formulation and implementation, as it results from the political and socio-economic pressures and interests that act upon the state and the market.

¹⁸ For example, Cometal-Mometal, whose main shareholder is the Indian international corporation Tata. This firm produces a variety of metal products, including industrial metal structures and smelting furnaces. Another example is Salvador Caetano, owned by a Portuguese firm of the same name, which assembles motor vehicles mainly, but not exclusively, for collective transport of passengers.

¹⁹ See, for example, the case of Kanés (chapter 5).

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